UPDATE OCT 2023

WHAT HAPPENED TO FRANCIS ROSE’S FLORA OF KENT?

Photo by Owen Davis
This Flora reconstruction began with transcribing copies of fragments of the manuscript from various sources. However, since then, three of the four volumes of the original manuscript for the species accounts have come to light, and it has been possible to pursue a more complete transcription. This transcription begins with a surviving section from the missing first volume which Francis Rose revised quite fully, and then continues with the fragments (which will be eventually be replaced by a full version where subsisting). At present, the second volume (which begins with *Viola*) and the fourth and last volume (Monocotyledons) are given here as complete transcriptions, together with part of the third volume. The manuscript transcription has been re-ordered in the sequence of the second edition of Clive Stace’s *New Flora of the British Isles*, as Francis Rose latterly appeared to have intended.

Contents:

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What happened to Francis Rose’s Flora of Kent?</td>
<td>P1</td>
</tr>
<tr>
<td>The writing of the Flora and its disappearance</td>
<td>1</td>
</tr>
<tr>
<td>The planned contents of the Flora</td>
<td>4</td>
</tr>
<tr>
<td>Botanical districts</td>
<td>4</td>
</tr>
<tr>
<td>The surviving species accounts</td>
<td>13</td>
</tr>
<tr>
<td>How to read the species accounts</td>
<td>14</td>
</tr>
<tr>
<td>Flora of Kent transcription</td>
<td>17</td>
</tr>
<tr>
<td>Ferns and fern allies</td>
<td>17</td>
</tr>
<tr>
<td>Conifers</td>
<td>27</td>
</tr>
<tr>
<td>Dicotyledons</td>
<td>29</td>
</tr>
<tr>
<td>Monocotyledons</td>
<td>[ ]</td>
</tr>
<tr>
<td>List of abbreviations</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

WHAT HAPPENED TO FRANCIS ROSE’S FLORA OF KENT?

Between the Victoria County History (1908) account of the Kent Flora by E.S. Marshall (which may be regarded as a summary of the Flora of Kent (1899) by Hanbury and Marshall) and the Atlas of the Kent Flora (1982) by Eric Philp, there is a long gap without an overview of the Kent Flora. This gap would have been filled by Francis’s Rose’s Flora of Kent, but this work was never published and the manuscript only came to light some years after his death, in 2006. Even then, the surviving manuscript is incomplete.

In consequence, we have had no published full county Flora which deals with the transformation from Victorian Kent – a period of major habitat changes in the countryside with increased mechanisation in agriculture; the beginnings of use of herbicides in quantity; the extension of cultivation in wartime and subsequent abandonment; and the effects of development generally, tempered by the introduction of town and country planning. Francis Rose undertook very extensive botanising in the 1940s, when there were still many areas of habitat with native flora which have since disappeared. However, although some record of these is maintained through his herbarium specimens (some 10,000), since absorbed into the Maidstone Museum herbarium, the unpublished status of the Flora means that we have been deprived of the benefit of the views of an ecologist of considerable national standing. The Flora would have been of much more than just county significance; and we lack the acuity of many of his observations which would have been contained in it as regards the occurrence and distribution of species, their relationship to ecological factors and their wider significance in terms of the British and Continental flora.

What can be reconstructed of the Flora is given below.

The writing of the Flora and its disappearance

Francis Rose would have been the person to provide Kent’s Flora: ‘I know Kent intimately – I have done much work there from my youth (first field trip 1936!) and I lived there for 28 years, more or less, from 1941-1969.'
So I have a vast background of knowledge on Kent. However, the project was begun before all this knowledge had accumulated, when he was only 20. In 1949, Francis Rose gave an address to the Botanical Section of the South-Eastern Union of Scientific Societies at the 1949 Congress at Canterbury. He said:

‘since 1942 I have been engaged with Mr. J.B. Marshall and others too numerous to mention here, on the preparation of a new County Flora of Kent.... It was hoped at one time to complete the Flora in time for the Canterbury Congress, but this proved quite impossible. Help is earnestly requested from everyone interested in the subject who can supply information on Kentish botany, whether past or present, from any aspect. The Flora is intended to be ecological in approach, with an emphasis on the details of plant distribution considered scientifically. There will be a series of descriptive ecological articles on the various botanical districts of the county, in which typical areas of different vegetation types, such as heaths, downs, woodlands, etc., will be considered in detail. It is hoped to illustrate the Flora with about forty half-tone photographic plates of vegetation, and of interesting Kentish plants in their natural surroundings. It is not possible to give definite figures yet as to price or date of publication, but it is hoped to keep the price down to about two pounds or less by eliminating much material often included in local floras which is of interest only to very few people, such as very detailed historical notes, and excessive detail on critical groups.

It is hoped, too, to publish within three years from now.’

These aspirations proved to be optimistic in the extreme. Although by 1950 there had been contact with printers, some of the distribution maps had been prepared, the dots being ‘sketched as accurately as can be judged by eye from the one-inch Ordnance survey map’, fieldwork was still in progress. However, in 1954, he considered that fieldwork was almost complete, and that the manuscript might be ready for the press by about 1955; and, indeed, in that year he was outlining publication proposals and describing some of the interesting features of plant distribution and preferences which had been revealed in the course of Flora preparation. Nevertheless, by 1960, he could only say that the manuscript was, after many delays, about half completed. In 1963, subscription forms were being issued. Subscribers were essential, due to the absence of any capital for immediate payment for printing (other than £200 from Kent Field Club, who were to act as joint publishers and the prospect of a grant from the Royal Society). Advanced discussions with T. Buncle & Co. as printers seem to have been by the wayside in July 1963; he was also corresponding with Kent Arms Printing Works who provided sample proofs; and later that year an approach to the Ray Society to publish came to nothing. Work on the Flora, however, continued and in the mid-1960s, he was sending out ‘wants lists’ for 10km ordnance survey squares, generating much correspondence over incoming records.

The mapping aspects were clearly on his mind, with progress shown at the 1965 BSBI annual exhibition meeting which he illustrated with Cardamine bulbifera, Caltha palustris, Cardamine pratensis, Cardamine amara, Agropyron caninum, Paris quadrifolia, Allium ursinum and Anemone nemorosa. By 1966, he is quoted as being in the process of reducing the book – then running to nearly 1,000 pages – to 600 pages, although surviving papers do not show evidence of this. It was always going to be a problem reducing the amount of material which had been assembled. Ted Lousley wrote (in litt., 1963), when approached for suggestions as regards covering aliens: ‘The difficulty, as I see it, is that your Flora will run to an immense book with the

---

1 In litt. to Rosemay FitzGerald, 15 May 1985.
2 As regards those (unnamed) others, Clive Stacey mentions that, from comments made by Francis, it seems that J.R. Wallis, an accomplished Lamberhurst botanist (1917-1944), might well have have ended up collaborating over researching and writing the Flora, but for the latter’s early death.
7 Unsourced newspaper cutting.
material you have already. If you take maps and diagrams in the text into account, I would be very surprised if you can get it into 550 pages, while if you cut down the Flora proper by much it will cease to serve its purpose’. Peter Wilberforce remembers being shown the manuscript in Francis Rose’s work room in the late 1960s: ‘This consisted of thousands of foolscap sheets with hand-written notes scattered all over the place, together with herbarium sheets. To me it was in total chaos, but Francis seemed to know where everything was!’.

In 1969, the Rose family moved to live at Liss in Hampshire, which would not have incentivised completion of the Kent project, quite apart from the distraction of Francis Rose’s prodigious production of papers and contributions to publications on other subjects which he continued to sustain. Around that time the first steps were being taken by Eric Philp and the Kent Field Club towards production of an Atlas of the Kent Flora based on tetrad mapping and this was published in 1982. Eric Philp renewed surveying in 1991 and this developed towards the production of a second Atlas (the surveying period closed in 2005, and publication took place in 2010). It was therefore awkward in some respects that the prospect of completion of Francis Rose’s Flora arose at the same time, although the two Floras would have been very different, and in some respects complementary – the Atlas being a survey directed towards tetrad mapping with relatively little species comment, but including all aliens; while Francis Rose’s Flora would have been more ecological in scope, with vegetation studies and examination of significant species at greater length. There had been many other projects to engage his attention, not least in that between 1985 and 1995 the preparation of a Hampshire Flora gathered pace, and Francis Rose was one of the three principal authors. In 1986, he wrote to Rosemary FitzGerald that ‘I have a manuscript flora of Kent (which I intend to use for a book – much abridged – when other more urgent jobs are completed)...It occupies four looseleaf foolscap files!’.

By the late 1990s, he was seriously considering the revival of the Kent Flora. He began working on the manuscript again and secured the help of Owen Davis in having it typed up. Supposedly, the Introduction was put into type (although this has not been found) and a start was made on revising the main part of the Flora, the species accounts. These in their original manuscript form have a feel of a 1940s/1950s Flora, and Francis Rose evidently took much trouble over revising in conjunction with the typing up: many of the records in the manuscript were jettisoned, particularly for more common species, in favour of a more stream-lined approach. Although he had visited Kent on many occasions since moving to Hampshire, he recognised the need to update as regards current distributional status, particularly where plants recorded at old sites had not been seen for many years but there was a prospect of their survival. He accordingly circulated to Kent botanists in 2000 a list of plants and sites for following up. This resulted in more current data becoming available. However, the typing arrangements with Owen Davis were discontinued, in order to reduce the complications of liaison over a distance as regards typing and corrections; and it was intended that Francis Rose would obtain help nearer home. He died in 2006, and nothing has been found which demonstrates that the updating continued after 2000.

It was then believed that the Flora was missing, perhaps lost. After an initial attempt to reconstruct the Flora was undertaken from copies of some of the species accounts which had been made during Francis Rose’s lifetime, it was found that much of the original manuscript still survived. It had not followed his main written archive, which had been deposited with the National Museum of Wales, but had remained in his study where two of the four folders of species accounts were found in 2017 by David Streeter and Andrew Rose; a third folder was located by Anna Rose in 2019. All in all, nearly 90% of the species accounts are extant. The earlier sections of the Flora, essays on the characteristics of the vegetation of the county, have not been traced other than a few skeletal draft elements; although they are largely covered by papers published by Francis Rose 1946-72. The surviving manuscript and its related revisions and copies are described below (‘the surviving species accounts’).
The planned contents of the Flora

“Kent is still one of the loveliest of the English counties, with a variety of scenery and wild life unique in the British Isles. Its flora is remarkably rich, both in number of species and in interesting plants. On a conservative estimate, Kent has still 1,200 species of native or established vascular plants; only Hampshire and Sussex have more. This total includes 30 species of orchids (only Hants. and Oxford have as many) and eight of our ten British broomrapes.”

The Flora was planned to be some 550 pages long, with an emphasis on ecological and historical aspects, and a three-page synopsis was circulated from time to time over many years⁸. From this, we have a clear understanding of what it would have covered.

After a preface with acknowledgements, the introduction was to set out the scope of the Flora and contain sections on the county and vice-county boundaries with some statistics¹⁰; on climate; on the geology and geomorphology of Kent; and on its soils. There was to be a brief historical sketch of earlier work on the Kent flora (apparently not to the same depth as had been undertaken in the 1899 Flora).

The Flora was then to contain a description, with boundaries, of 16 botanical districts based on natural regions of Kent, with some statistics of each district. This was a standard method of dealing with accounts of plant distribution before detailed mapping against overlays of geology or habitat types became the norm: the 1899 Flora has ten districts based on geology.

Botanical Districts

---


⁹ Retyped by Owen Davis c.2000 with changes made then by Francis Rose, which are reflected in the following description.

¹⁰ A note by FR with the Flora papers shows some gathering of statistics: ‘Kent ninth largest county, nearly 1,000,000 acres, 1,555 sq miles...N. Foreland – London 64 miles, N. Foreland-Dungeness -38 miles...[1947] 144,300 acres Woodland, 8,300 F[orestry] C[ommission], 136,000 private: 29,000 hardwood high forest: 7000 conifer high forest, 8000 mixed, 69,000 coppice or c[oppice] w[ith] s[ tandards].’

---
The identity of the 16 botanical districts is likely to have been indicated in the reconstruction above, namely (1) the Eocene soils of north-west Kent, west of the River Darent; (2) the alluvial marshes and coastline of the estuaries of the Thames and Medway, including the Isle of Sheppey and the lowlands between Watling Street and the Swale; (3) the wooded Eocene country north and east of Canterbury, usually known as the Blean, including the woods east of Canterbury as far as the Little Stour Valley at Littlebourne; (4) the alluvial marshes of the lower Stour from Canterbury to the coast at Sandwich and east of Reculver; (5) the Chalk west of the Darent; (6) the Chalk between Darent and Medway (in some cases a separation of the eastern element was recognised: (6E)); (7) the Chalk between Medway and Stour; (8) the Chalk between the Stour and the coast; (9) the Isle of Thanet; (10) the Darent basin above Dartford (excluding the chalk); (11) the basin of the non-tidal Medway, as far south as the northern edge of the Hastings Beds; (12) the basin of the non-tidal Stour, above Canterbury; (13) the Hastings Beds of the Medway Basin (the Forest Ridge); (14) the Hastings Beds of the Rother Basin about Tenterden; (15) Romney Marsh (including Dungeness); and (16) the channel terrace, draining to the Channel, from Bilsington to Folkestone. The numbers of botanical districts are used in the species accounts, in order to group records together. The reconstruction is set on a map with current local authority boundaries. No map has yet been found with Francis Rose’s district boundaries superimposed, but the accompanying sketch of the eastern district boundaries is taken from one of his notebooks.

From that notebook, comments on the botanical districts would have included (although needed to be updated in nomenclature and plant occurrences):

1. 2nd for heath plants – the light soils near London. Soil: Eocene sands, clays, gravels, alluvium. Best localities: Keaton Common; HayesCommon; Chislehurst Common; Dartford Heath; Farningham Wood; N. of Bickley; SE of Bickley;

---

11 These are the same districts as given in Rose, F. (1949). A Bryophyte Flora of Kent I, Transactions of the British Bryological Society, 1(3): 202-210. They are also given in a notebook (c. 1946-8) associated with the MS Flora papers together with lists of special vascular plant species for each district, under the following names: (1) The Metropolitan District, (2) The Thames-Medway Estuary, (3) The Blean, (4) Stour Marsh, (5) Chalk west of the Darent, (6) Darent-Medway Chalk and other Hills (6E), (7) Medway-Stour Chalk, (8) Stour-Channel Chalk, (9) Thanet, (10) Darent Basin, (11) Medway Wealden Basin, (12) Stour Wealden Basin, (13) High Weald of Medway, (14) Rother High Weald, (15) Romney Marsh, (16) Channel Terrace. These districts had to be decided upon before the MS Flora was begun to be assembled, as this is laid out with records under each species in their relevant district. While the district names are reasonably descriptive, boundary limits are given for some in the Flora notebook. The Metropolitan District is defined as follows: N. — the Thames from Deptford to Crossness. E. — Lessness Manor Way (L.C.C. b[ound]ar[y] to Abbey Woods Sta[tion]. — N. Kent Line to Crayford Mills: up to Met-Vickers to leave out Barnes Cray Marshes: Down to join A.206 on E. side of Marsh: by A.206 to Bull Hotel, Dartford: by A225 to “the Folly”, Farningham: by track to W for ¼ m. And S.E. edge of Farningham Wood and Orchard to Farningham Hill Farm: by A.20 to Swanley…: by B.258 to Crockenhill: by road to Skeet Hill and Well Hill: by E. edge of Holows Wood to join Timberden Lane at 550627: due S. of W. ½ m along S. wood edge to A.224 at Badger’s Mount: by A224 to Chelsfield Ch[urch]: to Gilmans Brimstone — to Worldsend and Green St[ree]t: Green: to Farnboro’ by A21 and B2158: by path to Lower Hook: S. edge Holwood P[ar][k]: Keston Ch[urch]: lane NW to Baston Manor: Cony Hall: A232 and B268 to Co[unt]y B[oun]dy).


The Blean district is defined as follows: N. — Sea from Seasalter Post Office to Reculver Towers: W. — Kent Coast Road from Brenley corner to Seasalter+, then NW by road to sea: S. — by road thro’ Boughton Church to Upper Ensign — from there by a track N. of Chalk to A28 ½ m in W of Chatham [where cliffs meet the road]. By A.28 from ½ m W of Chatham to Milton Bridge — by S[outhern] R[ailway] to E. of Chislehurst. E. — Edge of the Upland from Reculver Towers by Chisleth to the S[outhern] Railway: thence to Cangterbury. The identity of the 16 botanical districts is likely to have been indicated in the reconstruction above, namely (1) the Eocene soils of north-west Kent, west of the River Darent; (2) the alluvial marshes and coastline of the estuaries of the Thames and Medway, including the Isle of Sheppey and the lowlands between Watling Street and the Swale; (3) the wooded Eocene country north and east of Canterbury, usually known as the Blean, including the woods east of Canterbury as far as the Little Stour Valley at Littlebourne; (4) the alluvial marshes of the lower Stour from Canterbury to the coast at Sandwich and east of Reculver; (5) the Chalk west of the Darent; (6) the Chalk between Darent and Medway (in some cases a separation of the eastern element was recognised: (6E)); (7) the Chalk between Medway and Stour; (8) the Chalk between the Stour and the coast; (9) the Isle of Thanet; (10) the Darent basin above Dartford (excluding the chalk); (11) the basin of the non-tidal Medway, as far south as the northern edge of the Hastings Beds; (12) the basin of the non-tidal Stour, above Canterbury; (13) the Hastings Beds of the Medway Basin (the Forest Ridge); (14) the Hastings Beds of the Rother Basin about Tenterden; (15) Romney Marsh (including Dungeness); and (16) the channel terrace, draining to the Channel, from Bilsington to Folkestone. The numbers of botanical districts are used in the species accounts, in order to group records together. The reconstruction is set on a map with current local authority boundaries. No map has yet been found with Francis Rose’s district boundaries superimposed, but the accompanying sketch of the eastern district boundaries is taken from one of his notebooks.

From that notebook, comments on the botanical districts would have included (although needed to be updated in nomenclature and plant occurrences):

1. 2nd for heath plants – the light soils near London. Soil: Eocene sands, clays, gravels, alluvium. Best localities: Keaton Common; HayesCommon; Chislehurst Common; Dartford Heath; Farningham Wood; N. of Bickley; SE of Bickley;
An account of this botanical district was worked up in a notebook, but there is nothing comparable for other districts, so that it is

12 Does not look promising to an outside botanist. Purposefully left out wider chalk, to show richness of area, history very long.

1) The real Beach flora (Grain) — Eryngium, Glaucium, Card[uus] tenuiflorus, Salsola, Cakile, Crithmum, A[triplex] lacinata, 


1) Coastal strip — Salicornia parviflora, Myrica gale; V[ery]

2) The Eocene Beds — Reading, Woolwich, Blackheath, London Clay — Woodland and dry or deep common.

3) The chalk massif, n. of the great E-W valley.

1) a) The real Beach flora (Grain) — Eryngium, Glaucium, Card[uus] tenuiflorus, Salsola, Cakile, Crithmum, A[triplex] lacinata, 

2) Saltmarshes: v[ery] extense: 3 kinds:

2) a) The real Beach flora (Grain) — Eryngium, Glaucium, Card[uus] tenuiflorus, Salsola, Cakile, Crithmum, A[triplex] lacinata, 


1) a) The real Beach flora (Grain) — Eryngium, Glaucium, Card[uus] tenuiflorus, Salsola, Cakile, Crithmum, A[triplex] lacinata, 

3) Chalk: H[ordeum] marit[imum], 14 clovers in Grain, Marrubium, Mariana [lactae], G[rasesved] and Sho[ne], C[entarea] 

calci trapa, Lactuca saligna, Onopordum.

2) Brackish marsh — ditches, etc. 2 rare Rumex, Eleocharis uniglumis, C[arex] divisa, Chenopus podium botry[oides], Sis[ymbrium] 


1) a) The real Beach flora (Grain) — Eryngium, Glaucium, Card[uus] tenuiflorus, Salsola, Cakile, Crithmum, A[triplex] lacinata, 

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:

b) Saltmarshes: v[ery] extense: 3 kinds:
(6) Very rich in var[jeties] of chalk plants and others on overlying soils. [Special plants listed, species confined to (6) were Althaea hirsuta, Silene italica, Ranunculus parviflorus.]

(7) Fair chalk flora - not distinctive. [Special plants listed, species confined to (7) comprised Senecio campesistris.]

(8) Div[sion] of most interest, other than local – for splendid chalk and cliff flora. [Special plants listed, species confined to (8) were Cirsium eriophorum, Euphorbia cyparissias, Thesium humifusum, Rubia peregrina, Brassica oleracea, Silene nutans subsp. smithiana, Ophrys arachnitis, Epipactis leptochila, Rosa agrestis, Matthiola incana.]

(9) Poor. [Special plants listed, species confined to (9) comprised Falcaria vulgaris.]

(10) Fair. [Special plants listed, species confined to (10) were Potamogeton lintoni.]

(11) 1st inland waterways and dry heaths – finestwoods on clay. [Special plants listed, species confined to (11) were Arabis perfollata, Oenanthe silafaolia.]

(12) Richest in variety of species and of greatest veg[eta]tion types – clay/sand, limestone, local interest. [Special plants listed, species confined to (12) were Carex canescens, Orobanche major.]

(13) The heathy forest division – best for “atlantic” species. [Special plants listed, species confined to (13) were Illecebrum, Anthemis nobilis, Mentha reiqueni, Elatine hexandra.]

(14) Very poor? [Special plants listed, species confined to (14) comprised Cyclamen hederifolium.]

(15) Fine marsh and coastal flora – follows (4) in this respect. [Special plants listed, species confined to (15. were Dryopteris cristata, Carex serotina, Raphanus maritimus, Sium latifolium, Crepis foetida, Littorella lacustris, Carex diandra.]

(16) Fair only. Little known today: better known in past (G.E. Smith’s hunting ground). [Special plants listed, none confined to (16).]

The history of the flora and vegetation of Kent since Late-Glacial times was to be described, including the problem of re-immigration of plants\(^{13}\); the forest maximum; the fate of the open habitat species; early man in Kent; the historical period (including the use of old maps to show decline in heathlands and downland); and changes at the (then) present time. The most recent changes would presumably be those outlined by him in 1962\(^{14}\): the pressures of development and modern methods of farming and forestry. Farming changes had almost wholly eliminated the old permanent pastures of heavier soils, replacing them with leys; and had entailed the ploughing up of chalk downland slopes, the drainage of bogs and heathland, the loss of hedges with enlargement of fields or needless replacement by fences. Forestry had been affected by the old coppice-with-standards system becoming uneconomic, and at that time the old woods, except on chalk, were being replaced by pure chestnut coppice or dense conifer plantations. Francis Rose made some outline notes for this section, kept with his Flora papers, as follows:

The history of the vegetation of Kent since the Ice Age.

There is little purely local evidence. Information on this subject has been largely obtained from pollen analysis data, and to a less extent from macroscopic remains in alluvial deposits (peat, river gravels, lake muds, marine deposits). In Kent, we have few sites where damp peat beds of great age occur; Ham-Hackling fen — loved by Godwin, never published. Hothfield Common — very shallow liquid peat — very recent. Medway — not studied. Some data from Thames side (Roman, Pottery) and Thanet (Bronze age coastal sites). Picture derived from general English studies, mostly in E. Anglia, also in New Forest, Southampton, etc.

Give diagram of pollen zones (Epilogue).


Flora much as now; Cromer Forest Bed, Decid[uous] forest.


This paper suggest that the chalk cliffs of East Kent may have provided a treeless open habitat for calcicole grassland species during the forest maximum, until Bronze Age clearances north of Dover enabled re-spread to occur. Galium pumilum, Falcaria vulgaris, Euphorbia cyparissias, Silene nutans, Thesium humifusum and Cirsium eriophorum as given as possible examples; also a pale form of Polygala calceata in the Dover area. On the other hand, orchids and broomrapes may well have colonised by wind-blown seeds from the Continent, after the British Isles had become separated.

Full glacial: arctic flora, e.g. Lea Valley Middx, and Cambridge. Arctostaphylos uva-ursi, Betula nana, etc. (see list in Rose, Lond. Nat. 36, p30, 1957.15

but also some maritime (Silene maritima)

some marsh species: Carex pulic[aria] Pot[entilla] palustris

Damasonium [alisma] Vicia sylv[atica]
Eriophorum ang[ustifolium] Salix rep[ens]
Menyanthes [trifoliata] Pot[amogeton] obtus[ifolius]

Ice not nearer than 100 miles then.

Thus ... Max. of Ice Age.

Hence flora like arctic tundra of Lapland or Iceland, or m[oun]t[a]in tops in Scotland today — no woodland — open scrub-heath — some present day bog plants still with us. We can assume therefore that the woodland flora of Kent of lowland species had almost completely disappeared during the Ice Age — had to re-emigrate except for a few heath and marsh species and aquatics.

Birch woods of Allerød.

Recessions:

Birch pine pre-boreal IV.


VI, Pine – Hazel.

VIIa Atlantic mixed oak forest, warmest period.

VIIb Sub boreal drier, cooler, dry. Neolithic – Bronze Age – lime pollen at Addington.

VIII Sub atlantic – much cooler and wetter, bogs grow faster.

Holes [Holocene?]

Post glacial period — v[ery] open — (see Piggott & Walters 1954). Many common weeds of today v[ery] common, also chalk grassland, open habitat species, e.g. Helianthemum.

Neolithic period — much forest cleared in E Anglia (Hockham Mere etc.) no doubt in Kent too: where?

late Neolithic 1800 BC. Kits Coty, Coldrum; prob[ably] same period: Giants Grave, Juliberry’s Grave. Clearances in Medway Valley and at Wye. Many chalk spaces may have spread then.

Bronze: heaths on Greensand; and on E. Kent chalk plateau. Prob[ably] heaths formed later on land cleared then.

Iron age — more forest cleared. Hornbeam common and Beech commoner.

Romans — Caesar prob[ably] wrong about Fagus absent in Kent. He prob[ably] didn’t explore the forested areas.


Elizabethan Maps — Woods essentially as today; but more ... e.g. Blean, Mereworth (Wild Boar), Kings Wood, Ham Street, Chalk plateau.

Historical period: Botanical study.


Turner – 1548 Names of Herbes

John Gerarde 1597, Herbal

Thomas Johnson 1633 Gerard emaculatum 1629 Iter ) 1st accounts of botanical rambles in Kent.

1632 Descriptio )

give details from MS.

Parkinson Theatrum 1640

C. Merrett Pinax 1666

Ray, several records taken up

E. Jacob —1st local flora in Kent, 1777.


G.E. Smith.

H. Cowell – 1840.


My own work

15 Rose, F. (1957). Vegetation History and Environmental Factors in the London Area. London Naturalist for 1956, 36: 29-40. This paper, at least as far as the Iron Age, follows closely the notes given here, albeit adjusted as applicable to the London area.
Nearly half of the flora, excluding the species accounts, was to be devoted to an account of the remains of the natural vegetation and habitats of Kent up to the end of the mid-20th century, dealing with natural and semi-natural vegetation and with weed communities dependent upon man. Judging from Francis Rose’s published work on similar topics for Sussex and Hampshire, this would have been a landmark description. It is unclear whether it was ever completed, but it may well have intended to be an expanded version of the habitat descriptions given in the county Bryophyte Flora, although there would of course have been a different emphasis in relation to the vascular plant flora and it was not to follow that work in being structured closely against the botanical districts.

The vegetation account was to cover ten different aspects, as follows.

It was to begin with the vegetation of the county coastline and estuaries. For the Thames-Medway estuary, consideration was to be given to its salt-marshes; the tidal marshes of the Upper Medway; brackish marshes and the effect of inning; sea-level changes; shell-sand beaches; and the clay cliffs of Sheppey. Examples of each were to be cited and discussed in detail. Then the Stour estuary was to be dealt with, and its salt marshes and brackish marshes were to be compared with those of the Thames/Medway. The sand dune system of Sandwich and the shingle beaches of north east Kent were to be described and comparison made with other British dune systems. The Romney Marsh region would be mentioned for the Romney-Lydd dune system; and the development and vegetation of the largest shingle tract in Europe, Dungeness.

The second aspect of the account was as regards the habitat of the sub-littoral fresh-water marshes and fens, and their former conditions. This involved the drained alluvial flats of the Kent coast and the aquatic vegetation of their dikes; the relict fenlands of East Kent (Ham, Wingham, Preston, Stodmarsh and Dungeness Open Pits); and the small inland spring fens of the chalk and ragstone springs.

The vegetation of the Eocene tracts of Kent would have covered the London clay areas of north west Kent with the heaths of the lower Eocene (Keston, Hayes, Chislehurst) and the old woodlands (Joydens Wood, Farningham Wood, Darenth Wood, etc.), their vegetation in relation to land use history. Also, the Hoo Peninsula and its soil-vegetation complex; the brickearths of the Swale plain; the Isle of Sheppey; making comparisons with south Essex. The vegetation of the Blean district was to be compared as regards its resemblances and differences to that of the High Weald; and general consideration was to be given to the cultivated lands of the Eocene and their weed flora.

The vegetation of the chalk country of Kent would probably have provided a lengthy section. It was to begin with comment on the structure of the chalk country, noting the dry valleys with their valley-floor deposits and the presence of varied drift cover. The history, structure and flora of the chalk grasslands (being a sheep-adapted plant community) were to be considered as a whole, with mention of what Francis Rose described as the calcicole problem. Then there were the chalk woodlands, beech forest and other woodlands, with issues of succession and the scrub communities; and the chalk woodland communities of East Kent were considered in some respects to be unique. The account would address what was the original pre-Neolithic climax forest on chalk soil; variation in the vegetation of the chalk country from east to west, with the spread of the chalk grassland flora probably originating from three centres after forest clearance; also attention would be given to the drift-free chalk plateau of north east Kent and its

---

19 It is unclear how this would have fitted into the Flora as described in the synopsis, but one of the surviving items which Francis Rose had typed out, probably around 2000, was headed ‘Flora of Kent: orchid-rich downlands’. This consists of a list of 18 locations, with the orchid species and varieties known for each, ranging from 5 to 21 in total.
vegetation, Thanet being compared with the South Downs. The vegetation of the drift-covered chalk plateau was to be related to its varied soils: clay-with-flints and Pliocene sands. Then there were the plant communities of the coastal cliffs and the arable weeds of the chalk lands. Francis Rose made some notes, kept with his Flora papers, which may indicate how part of this section was to be approached:

**The Chalk Woodlands of Kent**

Geological map — clay with flints — bare chalk plateau...old woods form a “fringe” to summit of scarp and dry valley slopes. Much of downs — open sheepwalk on scarps, ± continuous E. of Watling Street and in Thanet.

Woods have undoubtedly spread.

1) Scrub of Cornus, Viburnum lantana, Sorbus aria, Taxus, Rhamnus cathartica, Euonymus, Betula pubescens (local), Crataegus monogyna on deeper soils esp., Rosa spp., Corylus, Fraxinus, Acer campestre.

2) Sorbus aria — Betula pubescens Taxus on S.aspects; Fraxinus — Corylus wood on north aspects.

3) Fagus woodland + Taxus, Sorbus aria — Daphne laureola, Helianthus foetidus, Cephalaria damasonium, Sanicula europaea, Mercurialis perennis.

Variations:

1) Many dry valleys — modified to coppice and standards or pure coppice. In mid Kent (Wichling, Bredhurst etc.) Corylus Viburnum Fraxinus coppice: + Fraxinus, Acer, Quercus robur standards, Fagus local.

2) In Kent E of Canterbury folkstone Road; Fraxinus - Acer - Quercus robur Woods; Taxus rare; Fagus rare; Corylus — Fraxinus — Acer — Cornus coppice.


Loams — Allium, Paris, Adoxa, Cardamine pratensis, Ranunculus auricomus, Saxifraga granulatula, very local.

Pliocenes — acid soils: Luzula sylvatica, Blechnum, Soroathmus, Convallaria, Quercus petraea, Rubi.

The Gault clay belt and its damp oakwoods would prompt discussion as to the extent of their modification, resulting in the (then) present vegetation. Pasture and ponds would also be noted, and comparison made with the Boulder-clay woods of East Anglia.

The next aspect of the vegetational account would relate to the Folkestone Sand belt of Kent, its heathlands now lost or destroyed; its former vegetation and present relics: oakwood, heath, grass heath and valley bog. Hothfield Common is the best remaining example of the semi-natural vegetation of the Folkestone Sand; and it would be compared with the Thursley area of Surrey and with West Sussex. Then consideration would be given to the Folkestone woodslands of the Wrotham-Sevenoaks area; and to the Sandgate and Bargate Beds (to be compared with the Surrey Bargate Beds woodlands). It is likely that the changes in vegetation over time would have received detailed treatment in relation to Willesborough Lees, Brabourne Lees and Charing Heath, against the background of what is still known to occur on the Folkestone Sands belt in west Sussex, remaining very rich.

---

The Hythe Beds escarpment provides Kentish ragstone scarps and acid drift soils; and the effect of lithological changes westward would be noted; the sessile oak woods on head deposits over the Hythe Beds. The calcareous Kentish ragstone vegetation would be examined: ash-elm woodland, grassland and scrub and the effects of cultivation. The drift soils vegetation of the Hythe Beds plateau would also form part of this account, involving the West Kent ‘Highlands’ and changes over the Surrey border.

Coming to the Low Weald, there would be an account of the vegetation of the woodlands, pastures and ponds of the Weald Clay, and of the influence of river gravels, etc. on the vegetation.

The High Weald might be expected to generate an account of considerable interest, in view of Francis Rose's researches over a long period. It would have dealt with the remarkable atlantic flora of the High Weald of Kent and Sussex, associated with the microclimate of the sheltered wealden ‘gills’, many of which appear to demonstrate long-term continuity of woodland presence from a period of warmer and wetter climatic conditions. The vegetation of the acid plateau woodlands on Tunbridge Wells and Ashdown Sands would be described; as also that of the sandrocks of the Weald and the Wadhurst clay woodlands.

The final element of the vegetation account was to be the freshwater rivers of Kent, comparing their vegetation with that of the dikes and canals of the alluvial marshes and with other English rivers.

The Flora was then to include a comparison of the vegetation and flora of south east England (Kent and Sussex) with that of north France (Pas-de-Calais, Nord, Somme, Normandy, Brittany), with a discussion of factors that may be responsible for differences. The findings would presumably have reflected other publications by Francis Rose on this subject.

There would be a numerical comparison of the flora of Kent with that of Surrey, Sussex, Essex and north France, with a discussion of geographic elements in the flora, considering both ‘native’ and ‘alien’ species.

The next part of the Flora would relate to types of species distribution patterns, with reference to dot-distribution maps given with the species accounts. It may be that this would be an expansion of the following notes, held with the Flora papers:

The types of distribution occurring in Kent plants

---


24 Cf. the section in the Flora of Hampshire (1996) entitled ‘A Comparison of Hampshire’s Flora with those of some other southern counties’. Some preliminary work was done, however, towards a comparison between Kent, Surrey and Sussex. Francis Rose prepared a MS note listing species in Kent only; in Surrey only; in Sussex only; and in Surrey and Sussex, but not Kent.

25 These notes would appear to be drafted early on, not least from the older versions of plant names used (Bentham & Hooker, rather than CTW, 1952 edition); and some of the insights which emerged from the Flora work are not reflected, e.g. such as are mentioned in Rose, F. (1955). The New Flora of Kent. Presidential address to the Botanical Section. The South-eastern Naturalist and Antiquary 60: 9-19.
Main features botanically are: The chalk downs; Woodland areas; Alluvial flats; coastline, The Forest ridge; The Folkestone Sands.

A. Widespread spp where phys[ical] character of ... is ... feature, wayside spp “weeds”
3) Universal in woods on heavy soil. Carex pendula (non-calc[areous]).
4) On all areas of heavy soils (geleys and brown earths) wooded or not. Pulicaria dysenterica.

B. Chemo-Edaphically det[ermine]d distribu[tion]s, confined largely to local soil types.
8) Strict calcicoles — localised to ± aborig[inal] turf in drier places; Asperula, Hippocrepis, Gent[janella] amarella.
12) Weald clay only — C[arex] vulpina.
14) Coastal: (Alluvium —H[elicotrichon] pratense, C[arex] divisa
(shingle — L[athyrus] maritimus, Crambe, R[umex] [crispus] trigranulatus
(sand — Eryng[ium] [maritimum], C[ampanula] s[alicornia], Phragmites australis, C[arex] tenuiflorus [sic], + chalk. all beachy, Glaucium

C. Climatically det[ermine]d distribu[tion]s, v[ery] local
16) Oe[nanthe] silaifolia, Oe[nanthe] fluv[ialis].
18) Heaths —...
19) bogs
20) fen.

Symbols and abbreviations cited would be explained in a section, the plan of the Flora.

The main part of the Flora, originally estimated to comprise some 200,000 words and then amended to 100,000, was to be the species accounts – a systematic section with data on the distribution of the species ‘given in such detail as appears justifiable’, including up to 100 dot-distribution maps. Sample maps are included below: they would not necessarily be restricted to Kent. In 2000, he said that the maps would be for limited selected species at 10k square level, or finer. The original intention was to include marine algae and bryophytes as well as vascular plants, but none of the former accounts has been traced. In any event, as regards bryophytes, Francis Rose published separately a Kent bryophyte Flora in three parts over the period 1949-51. Also in 2000, he was contemplating the incorporation of a check-list of names of ‘all plants recorded
for Kent’. He was undecided as to whether this would be a separate section or would be combined with the species accounts so that, in effect, all the named species would be listed in systemic order (as in Stace and Kent25), but only those which were covered in more detailed ‘case studies’ (a term which appears to be equivalent to the concept of a species account) would receive more than brief mention. Casual aliens would be in a different font.

The Flora would have ended with a bibliography, a list of contributors and (according to earlier versions of the Synopsis) a list of subscribers, plus an index. Of these, only a set of bibliographical references (in no discernible order) appears to survive. The present Flora reconstruction incorporates at the end a list of contributors with other abbreviations which has been put together by the editor: there is no manuscript version by Francis Rose, although some contributor initials are taken from Rose (1960).26

The surviving species accounts

The surviving original manuscript starts (in what would have been the second folder) with Viola hirta through to Hedera helix; then (third folder) Hydrocotyle vulgaris through to Hieracium lanatum; and then (the fourth folder, after a missing page or pages) from mid-way through Alisma plantago-aquatica to the end of the species accounts (i.e. virtually all of the Monocotyledones). The accounts were written on foolscap paper, which had been assembled into ring binders. The standard format gave a heading with the Latin name and authority for the taxon, followed (in most cases) by a note of which Kent vice counties (15 and/or 16) it had been recorded in, the English name and the total numbers of 10km Ordnance Survey squares in which it had been known. Most taxa were then given a short commentary and then records were listed under the relevant botanical districts 1-16. The records were evidently added on an ongoing basis, and the result was sometimes messy, even near-indecipherable. At a later stage, it appears that, instead of just relying on citation of a botanical district, six figure grid-references were added to many records and a further grouping into the relevant 10km square was begun, often with annotated clusters of 10km square numbers to show how mapped distribution might appear (as well as smaller clusters as working notes to remind how the records in one or more botanical districts would contribute to the fuller mapped distribution)27.

While the initial part of the species accounts’ original manuscript has not yet come to light fully, it is nevertheless (for ferns and fern allies especially) the most up-to-date section, as this was typed up by Owen Davies and revised by Francis Rose in 1999. Some of this section exists both as an interim typing and a re-type, in addition to photocopies of the underlying manuscript. The revisions were quite extensive, adding and removing material, as well as re-structuring the accounts. Items removed included some historical data, multiple sites for relatively common species and (from the headings) the numbers of known and extinct locations and the numbers of Ordnance Survey map squares where present or extinct. The later species accounts apparently did not advance beyond manuscript, and many of these bear extensive crossings-out and interpolations. At least some accounts seem not to have advanced since c. 1960.28

A number of accounts were preserved as photocopies taken by Rosemary FitzGerald in the mid-1980s, when the species accounts were lent to her for survey work on rare plants in South East England. These extracts, as well as copies from other sources, have helped fill in some of the content of the missing first folder.

27 Where the 10km squares were laid out in the manuscript to show county distribution, these have in this transcript been superimposed on a gridded outline of the county.
28 For example, that for Euphorbia platyphyllas is laid out on the original framework: a short introduction and then a listing of all 16 botanical districts for records to be filled in (mostly blank in this case). The proportion of old literature or herbarium records is high, and there are no modern records after 1956.
The manuscript gives accounts more or less in the order of Clapham, A.R., Tutin, T.G. & Warburg, E.F. (1952) *Flora of the British Isles*. In this transcription, the accounts have been re-ordered and are laid out below in the systemic order of Stace (second edition) and Kent, as mentioned above, as though the revisions started in 1999 had been carried through then. It is assumed that Francis Rose would have adopted the approach which he was considering, of incorporating a check-list of Kent plants, so that where names of plants are set out here, they are taken from the check-list so far as it goes (unless otherwise indicated). The check-list was being compiled in 2000, starting from Eric Philp’s *Atlas of the Kent Flora* (1982), with additions from the Kent Field Club Bulletins. Less than half of the check-list, however, survives. This is as a version typed up by Owen Davis in 2002 (annotated as ‘To accompany “The Flora of Kent”’) as far as the end of Aceraceae; the original manuscript also exists for this. Nomenclature of plants which would presumably have been in the rest of the check-list is in this transcript given in accordance with Stace (second edition), noting where the manuscript differs.

It was not Francis Rose’s intention to cover everything: ‘My book will not contain much detail on alien species except for those that form part (or are now beginning to form part) of the permanent flora. I have little taste for rubbish-tip or wool shoddy aliens which mostly do not persist (except for those that become importantly established!’.

**How to read the species accounts**

Some of the conventions used in the species accounts are familiar in many Floras, such as exclamation marks for records seen by the author; square brackets around species which are doubtful or extinct, and these are also used for records for locations where the species now appears extinct. As regards other conventions:

- The references to numbers which group records together (sometimes as plain numbers; sometimes with a bracket following, and in the manuscript enclosed in a circle) are to the botanical districts 1-16 (see above, ‘The planned contents of the Flora’). They are not to be confused with two-figure numbers which appear occasionally within the records, to identify the 10km Ordnance Survey grid squares – these, often in red ink, appear to have been added to the manuscript as the author began to consider species distribution in terms of hectads and began to include tables of hectad numbers, probably for working convenience rather than inclusion in the final version of the Flora. These hectad numbers are presented here in small, bold type at the end of records for a botanical district. While Francis Rose often grouped them as a mini-map, no attempt has been made here to present them in map format unless he put them together for a species as though there were an intention to provide a full map. In such cases, they are here mapped onto a background outline map of Kent supplied for the purposes of this transcript.

- As a separate approach to including hectad numbers against records, Francis Rose sometimes gave marginal annotations with place-names that generally appear to be his names for those hectads. These may be regarded as working notes to help him understand distribution. They are transcribed here as lists in smaller font. Sometimes they include information by way of a date which is lacking from the main text, so their status is somewhat confusing.

- Grid references are given without any prefaced TQ or TR (except where supplied for non-transcript sections relating to district 15 – see below for highlighted grey text).

- The letter N in a species heading signifies Native; H is of horticultural origin; C colonist; D denizen.

- The appearance in the heading of a number followed by ‘/52’ (or by ‘/51’) – there seems to have been a change in mind as regards the total – indicates the number of Ordnance Survey squares in the

---

29 *In litt.*, 15 May 2000. Hence it is possible that where the check-list includes a alien plant name with a brief comment about it being naturalised or a garden escape, this may be the full extent of the species account which would have been given in the Flora. Where the comment is accompanied by a reference to E.P., the information is likely to have been derived from Eric Philp’s *Atlas of the Kent Flora* (1982).
county, where the species is present; this notation has been removed by Francis Rose in his most recently revised entries.

- A dagger symbol (‡) marks an introduced species.
- An asterisk denotes first Kent record.
- Square brackets (other than for species or records) have been added so as to fill out abbreviated words, or to add English names where presumed to have been intended. The context should show where this has been done, as distinct from Francis Rose’s square brackets which he used so as to show an extinct species or location. The added English names are taken either from Stace (second edition) or from Francis Rose’s *Colour Identification Guide to the Grasses, Sedges, Rushes and Ferns of the British Isles and north-western Europe* (1989).

- References to Maidstone Herbarium as M have been converted to the standard MNE; references to the Herbarium at the Natural History Museum have been converted to BM, where not already cited as this; TW becomes TLS; and Kew is K, all standard herbarium names citations. References to private herbaria remain unaltered (Hb. = herbarium [of]). Initials of contributors of records have been left; and so far as they have yet been identified, they are given in a key at the end.

- The species descriptions (as distinct from records) are given here in blue font for presentational purposes; they are not separately distinguished in the manuscript.

Thus, a typical entry should be interpreted as follows:


In botanical district 6 (chalk, from Darent to Medway) and in 10km square TQ77, it was present at Cliffe chalk pit, at ordnance survey grid reference TQ728766, recorded as abundant between 1945 and 1962. There is a specimen at Maidstone Museum herbarium. In 1962, David Lang recorded 100 plants there.

The manuscript itself, particularly as regards the parts later in sequence, presents some difficulties in interpretation, with numerous crossings out and additions. As the revisions appear to have been made on a cumulative ad hoc basis, there is often little consistency within an account, let alone between accounts. Colons and semi-colons are often difficult to tell apart; and even when obvious, they are not necessarily employed consistently. Underlining may denote italics, bold or divisions between parts of the text, or may place emphasis on some locations, and sometimes it seems without any logic. It is perhaps best ignored, as is done here, unless clearly intended to denote italics. Full stops are sometimes employed to excess, and these have been converted to commas or semicolons here when it would make it easier to tell where an entry begins and ends, and additional punctuation has been introduced for the same purpose.

The species accounts up to and including *Azolla filiculoides*, are taken from a typescript prepared by Owen Davies in collaboration with Francis Rose, and are a corrected draft revised by the latter in 1999 (the earlier typed draft also exists, in part, as also a copy of the manuscript). The format/layout reflects guidance given by Rose as part of the typescript preparation process. Obvious errors in the typescript introduced in the process of typing are corrected here, after comparison with the manuscript, but a failure to follow consistently the prescribed format/layout has not always been corrected. The process of revision pruned down many records, so that the manuscript is often a richer source of raw data than the revised version. This had long been the intention; Francis Rose wrote in 1985 of his intention to publish ‘in much shortened form’\(^{30}\) from the manuscript. In effect, he must have been regarding the manuscript (with his field note-books) as the equivalent of a card-index, from which the more representative records might be taken, without an intention.

\(^{30}\) In litt. to Rosemary FitzGerald, 15 May 1985.
to carry through all. Footnotes are given here to highlight some of the pruning changes between manuscript and revised version, but these are only a small proportion of the changes made in the revision. By far the greater part of the species accounts, however, never reached a typed or revised status, and so the full records are given in this transcription.

Some accounts (flagged accordingly, highlighted in grey) are not an exact transcript, but are taken from notes made in summary form by Owen Mountford in 1981, when consulting the manuscript in Francis Rose’s study. The information was extracted for use in relation to floristic change in the Romney and Walland Marshes and focussed on aquatic, wetland and grassland plants, disregarding information in the Flora outside botanical district 15 (Romney marsh including Dungeness). Tetrad details have been added by Owen Mountford. He also abstracted similar records from Francis Rose’s notebooks, and these would have been capable of amplifying the Flora considerably, but Francis Rose’s 1999 revisions show that he was more than likely to have reduced the number of records rather than adding to them. Indeed, the following transcription of the manuscript must be regarded as largely being the listing out of what amounts to a database of records, upon which Francis Rose would have drawn in order to produce a more succinct account. For the purposes of present-day botanists, however, it is all the more valuable for giving the complete records, rather than a summary.

Sample extract from manuscript
Lycopodiopsida

Lycopodiales

[Lycopodiella inundata (L.) Holub MarshClubmoss. [15, 16].

Wet heaths, always rare, as such habitats have never been extensive in Kent, and extinct since at least 1930. [N].


A declining species in Britain and Europe now, due to habitat change, and lack of grazing and peat paring on heaths, but still with strong holds in Hants and SW Surrey. Extinct as a native in E. Anglia since c. 1970, but it is now (1999) being re-introduced to some former Norfolk sites with proper management.

Lycopodium clavatum L. Common Clubmoss. [15, 16]. N.

Very rare now. Dry heaths, old sand-pits, and along rides in forestry plantations.

[1] Keston Mark (common?), Cooper Fl Met. 1836.]

10) Several sites found in rides between Kent Hatch on the Surrey Border, and a sandpit at Loughton Common 1948-1980, several records (see Atlas). Now declining and no longer to be found in most of the former sites: 4252 Goodley Stock; 4452 Halse Common; 4852 nr. Goudhurst; 5052 Whitley Forest; 5855 sandpit S W of Loughton, J. Felton 1948(!) (M) destroyed by run-off from a piggery close by, 1952. 6252 N. of Gover Hill, Mereworth Woods (E.P. Atlas). Oaken Wood, Barming, 1901, J. H. Allchin – not since.


L. clavatum had an extraordinary period of increase in localities in SE England between about 1948 and 1978, turning up mostly among Calluna in rides within conifer plantations, and also in a few sand and gravel pits. Since about 1985, it has gradually declined in SE England almost to the point of extinction. Its 19th century and earlier records were mostly from open Calluna heaths, many of which were planted up by the Forestry Commission, or private forestry concerns, from 1920 onwards. The majority of the sites, when examined today, are found to be covered with dense swards of Agrostis canina or A .capillaris, or with dense Molinia or Pteridium. Thus its phase of expansion suggests that, for establishment, it needs very open, sandy or gravelly skeletal soils. When natural succession occurs, the sites tend to become quite unsuitable for it and it is probably crowded out by competition and perhaps some degree of eutrophication, due to litter accumulation: it: seems essentially to be a colonist of open habitats. The story is much the same throughout the English

31 The typescript omits, presumably deliberately, an entry for a species of dubious status: [L. selago L. Reported at Sutton Valence in Fl. K., but this record is unreliable and most unlikely: it is extinct in Surrey, but still exists in one locality in the High Weald of E. Sussex!}

THE VASCULAR FLORA
lowlands. When the present crops of conifers (now reaching maturity) are felled, and bare ground is created in the process, we may see a new development of *L. clavatum*, a species clearly adapted to very open, inorganic acidic substrates, both in lowland and montane areas.

SELAGINELLACEAE

**Selaginella kraussiana** (Kunze) A. Braun. Krauss's Clubmoss. H.

Very rare. Naturalised in places, e.g. in 13) in a shrubbery, Ferndale, Tunbridge Wells, 1958 C AS. Surely elsewhere in and near gardens on acid soils.

**Equisetopsida**

**EOUISETACEAE**

*Equisetum hyemale* L. Rough Horsetail.

Formerly N, not seen for c. 150 years. "I have specimens from South Kent, sent me by Rev. G.E. Smith" - W. Borrer, *Phytologist*, (1853) V, p. 45. Smith lived at Sandgate, and suitable habitats (boggy flushes), still exist in that area, but it has never been re-found. It occurred in a wooded flush on Fairlight undercliff in VC 14, until at least 1939, H. P. Sargent in a similar place at Wanborough Wood in Surrey, VC 17, until 1850: and still occurs in similar habitats near Crondall VC 12, and near Southampton, VC 11, so it may yet be re-found in Kent.[].

**E. fluviatile** L. Water Horsetail. 15, 16. N.

Swamps, shallow lake margins, and marsh ditches, in waters of a wide range of pH and nutrient content. In places an important primary swamp colonist in the hydroser. Widespread and locally common, but absent from the chalk districts 5) - 9). Commonest in the Low Weald, and in the Marsh districts 4) and 15). Over 70 sites known.

Locally common in similar habitats in the adjacent counties: likewise the Pas de Calais and Flanders.

**E. arvense** L. Field Horsetail. 15, 16. N.

Roadside, rough fields, bare or waste open ground: common generally but very rare on chalk, except for a few sites on disturbed soil.

Ten sites in 8). Common in all adjacent counties and in N. France.

**E. sylvaticum** L. Wood Horsetail. 15, 16. N.

In acidic flushes or on spring-lines in woodlands, especially in Alder carrs, on weakly acid, very wet, sandy or peaty soils where there is some horizontal movement of water.

Scattered in some ten sites in the High Weald 13) and 14), from Speldhurst E to SE of Biddenden, in one site in the Blean 3), and (formerly) on the Eocene strata SE of London 1).

This beautiful species has a largely northern distribution in Britain, where it is often in quite open situations, including railway banks: scarce in the southern counties

1) Charlton Wood, Merrett, 1666; Chislehurst, Ray.). [ 2) Near Oare Mill, Jacob, 1777].

3) Flush in Hunstead Wood N.R., Chatham Hatch, 097568, 1956-97 MNE. [Other old records for 3].


14) Sandpits Wood, Biddenden, 855305 1963 **MNE**. In the Boulonnais and elsewhere in N. France.

---

32 Listed or summarised according to district in the earlier manuscript.

33 This sentence seems inappropriate; the ubiquity of the species is such that it serves limited purpose to single out the number of sites in botanical district 8. The manuscript does not include this; but refers to the plant growing 'mainly on clayey or sandy soils'. 166 modern localities. *"1629: Grain to Cliffe. Johnson, Iter, p.8.'*

34 The attribution in the manuscript of this find to J.R.W. in alder carr has been omitted in the typescript.

35 1897 in manuscript.
E. palustre  Marsh Horsetail.  15, 16  N.
  Fens, wet peaty meadows, marsh dikes, dune slacks, in alkaline or weakly acid waters: common\textsuperscript{36} in the alluvial districts 2), 4) & 15) and in the Holmesdale river valleys of 10), 11), 12) & 16) though now reduced by “improvements”. Rarer in the Low Weald, more frequent in the High Weald 13) & 14). Absent from the chalk districts, except by the R. Dour above Dover. Frequent in the adjacent counties and in N. France and Belgium, but diminishing everywhere today.

E. telmateia  Ehrh.  Great Horsetail.  15, 16  N.
  In flushes and along spring-lines, where pervious water-bearing strata overlie impervious strata (e.g. clays) especially where the pH is high. Absent from dry strata (chalk and sands) and from uniform areas of little relief. Hence rare or absent in 5) to 9) and in 15); very local in 2), 3) and 4): fairly shade-tolerant.
1) Rare; Ravensbourne, Catford; Scadbury Park, Pond Wood and Petts Wood, Chislehurst, on Eocene spring-lines.
2) Local; osier beds by the Medway: abundant in flushes on the slipping clay cliffs on the N. coast of Sheppey.
3) Occasional on the spring-lines on the south of the central Blean plateau.
4) Here and there on spring-lines at the junction with chalk or Eocene strata, not on the flat alluvial areas.
10) to 14), 16). Locally abundant along the foot of the chalk and Ragstone scars, and scattered in undrained places in the High Weald. Locally common through S E England and in N. France.

Pteropsida

OPHIOGLOSSACEAE

Ophioglossum L.
O. vulgatum L.  Adder’s-tongue  15, 16  N.
  Dry or damp old pastures and meadows where unimproved, short-sward fens, old woodlands (especially on chalk); old quarries. Avoids acid soils. Still widespread but decreased in last 100 years. 90 sites \textsuperscript{37} in my records in all districts except 9. Occasional in adjoining counties and in N. France in unimproved sites.

Botrychium Sw.
B. lunaria (L.) Sw.  Moonwort  15, 16  N.
  Formerly in ancient pastures or grass-heaths in short turf, on clay or loam soils. Never common, even in earlier recording times, now apparently extinct\textsuperscript{38} (last record c.1960). [Greenwich, L’Obel*, 1570.
1) Blackheath; Chislehurst; SW of Dartford.
2) Graveney, Blackstone.
5) Hill Park, Westerham; Chevening Park, c. 1930.
7) Small pasture on clay-with-flints, S. side A 249, top of Detling Hill, 1938, J.B.M. 1946-47! MNE (with Orchis morio and Ophioglossum etc.) Not refound since!
11) Coxheath, Gerard.
12) Ashford Warren, Miss L. West, before 1939 E.S.
Spores of this species were found in a peat-deposit SE of Wingham (Bronze Age) (Godwin). It would probably have been common in late Devensian and early Flandrian times, when there was much open terrain in Kent. Not recently seen in England E. of N. Hants and S. of the Suffolk Breckland, but still in Sussex, Castle Hill W. of Lewes (1965)! Frequent in N and W Britain; very rare in N. France now.

OSMUNDACEAE

\textsuperscript{36} Manuscript states 97 localities known, but does not list them; var. polystachion is said to be not infrequent.
\textsuperscript{37} Manuscript says 91 in all districts except 9 and 10. Records (or totals) are cited in the manuscript for each district and reference is made to Late Bronze Age spores found near Wingham.
\textsuperscript{38} Assessed in manuscript as extremely rare, and intermittent in appearance.
Osmunda L.

O. regalis L. Royal Fern. 15, 16. N, H.

As a native, this fern was formerly widespread in S.E. England, but the Victorian “Fern Craze" largely wiped out the native populations in most places, as *Osmunda* was a special favourite to grow in conservatories as well as water-gardens. All this activity has long ago died away, and *Osmunda* (and most other ferns) have recolonised very widely in the 20th century. What however, we cannot be sure of, is whether existing large plants of *Osmunda* in natural-looking sites (wet carrs less acid bogs, pond margins, etc.), especially in former ornamental estates are 1) relict natives, 2) old 19th century plantings, or 3) more recent invaders from elsewhere; but today the question is a rather academic one! The simple facts are that *Osmunda* is recolonising suitable habitats in some parts of Kent.

The most likely natural sites are in boggy woods (it is moderately shade-tolerant), and the possibly natural re-invasions of damp walls and rocks, especially around Tunbridge Wells.

1) Keston Common, H&M: SE corner of Lower pond, Keston Common 1947 and since, MNE; Holwood Park estate, 1948-54 and to the present, MNE — possibly relict here in part; Ravensbourne estate, Keston, 1956 MNE; abundant by stream, Danson Park 39, Wellings, GMB.


4] Strangely it has never been recorded in the fens and marshes between Sandwich and Deal.

[10] Rose Wood, Lightham Common, 1870, B. Harrison: not recorded since.]

12) 9835 Longrope Wood, Orlestone: (loc. plentiful), E. Smith

13) 553414, wall, Speldhurst Church, KEB; 5840 railway cutting N of Tunbridge Wells station, CAS; 5639 Rusthall Common Rocks, 1949 KEB; 5740 Culverden Glen, 1947 FR; 6142 Pembury Woods, M. McFarlane; 7233 Bedegury Pinetum, 1947-50, MNE.


16) 1635 Ditch by old railway, Saltwood, 1955, LJM.

Scattered in the Surrey and Sussex Weald, where most present localities may be due to earlier landscape gardening, but certainly native though rare, in Ashdown Forest, Sussex, and Thursley Common in Surrey. Frequent and native, however in New Forest bogs, and locally abundant still in carrs in the French Boulonnais.

ADIANTACEAE

Adiantum L.

† A. capillus-veneris. Maidenhair Fern 15, 16. H.

On damp stonework or old walls: alien in Kent, derived by spores from gardens or greenhouses, etc: very rare.


2. In an old well, Scotney Castle, 1960, KEB.

This is native in Britain as far east as Dorset only.

PTERIDIACEAE

Pteris L.

† P. cretica L. Ribbon Fern. 15, 16. H.

Old walls, etc. As an escape from cultivation at: 4857 Chevening; 5466 Farningham, and 3042 Dover (EP in Atlas) (from S. Europe).

MARSILEACEAE

Pilularia L.

[P. globulifera L. Pillwort. 15 - very doubtful.

Reported in H&M (p.429) from 11) Sutton Valence (Mrs. Petley), but this is unconfirmed in that area and almost certainly an error, as no suitable habitats for it have existed in that area for a very long time. It could have occurred by acid water ponds in the past in the Weald (as in Sussex).]
HYMENOPHYLLACEAE

Hymenophyllum Smith

*1688 — found by Mr. Dare, ‘circa Tunbrigiam’, Kent 41. This probably refers to its former occurrence on the High Rocks (in Sussex) where it has not been seen since c.1875, but it is almost certain that it formerly occurred on the Hungershall Rocks in Kent on the opposite side of the road to the High Rocks, and possibly elsewhere nearby in Kent, but no localised Kent specimens are known to exist. Forster (Fl. Tonbr.) only gives Sussex localities by name, but adds “and most of the other rocks” in the neighbourhood (p.121). Jenner (Fl. Tunbridge Wells) likewise only names Sussex localities. It was however, reported from Penshurst (in H&M) by Mr. John Cox.

Every sandrock outcrop of any size in the Kent High Weald has been searched for it over the last fifty years, but it has not been found. It is still, however, (1998) in eleven Sussex sites, the nearest being at Eridge Green Rocks and Saxenbury Hill. Westward, the nearest localities now are in the Quantocks and near Porlock in Somerset. It is also still S. of Cherbourg in Normandy. To the east today it persists at one site in Luxembourg. It is a plant that requires damp, lightly shaded acidic sandstone rocks to survive but it can occur on the lower parts of tree trunks rarely, in sheltered woodland. It is quite widespread in moist tropical forests, and in Britain it is presumably a relic of the extensive forests of the Atlantic period in pre-Neolithic times.

(Trichomanes speciosum Willd. (Killarney Fern) has been discovered in recent years on the Sussex sandrocks, but only as the gametophyte generation. This could be found on the Kent sandrocks; the gametophyte looks rather like a filamentous green alga, and is very easily overlooked. 42)

POLYPODIACEAE

Polypodium L. 43
P. vulgare L. Common Polypody. 15, 16. N.

As the aggregate, this is widespread in Kent. The segregate P vulgare s. str. occurs mainly on tree boles or branches in woodland or on sheltered lane sides or hedgebanks in the Weald, and is rare or absent in the drier, less humid, north of the county and in the open flat districts.

P. vulgare x P. interjectum (= P. x mantoniae Rothm.).
In the Hawkhurst-Cranbrook area, rare, with both parents, E P in Atlas.

P. interjectum Shivas Intermediate Polypody. 15, 16. N.

This Polypody is found throughout Kent, mostly on walls and banks, but also in woodland. Many of the older churches and churchyards have it, especially on ragstone stonework.

P. cambricum L. (= P. australe Fee) Southern Polypody. 16. N.

Only so far reported in a wall at Penshurst Place; this very southern species may be found on more old buildings in the south of Kent, as it is scattered along the south coast into East Sussex.

DENNSTAEDTIACEAE

Pteridium Gled. ex Scop.
P. aquilinum (L.) Kuhn Bracken. 15, 16. N.

Heathland, open woodland, neglected grassland on well-drained, non-calcareous soil, also on damp walls and on waste ground. Abundant generally, except in the marsh districts 2), 4), & 15) 44: unknown on the Denge

41 It is unclear why Francis Rose thought it necessary to add ‘Kent’ here, since it is not in the original source (which he cites in the manuscript as Ray’s Fasciculatus, although there the record in given is English; in Latin it is instead in Ray’s Historia Plantarum).
42 A prescient observation, as it was recorded in two Kentish areas in 2016.
43 The Polypodium account has undergone major change from the earlier manuscript. This acknowledged that the Polypodium vulgare aggregate had ‘recently’ (giving literature references of 1961 and 1963, which afford some dating evidence for this part of the manuscript) been split into three species, ‘but my records for these are very incomplete as most of my field recording was done before the segregates were recognised in Britain’. However, the manuscript gives a large number of records or record totals per district for P. vulgare, both s. i. and s. str., and for P. interjectum, albeit that the P. cambricum (as P. australe) account is blank.
Beach on leached fixed dunes at Sandwich Bay and Lydd. An agricultural pest which has become commoner with the lack of grazing in many grasslands. It has taken over many former Calluna heaths, being encouraged by heath fires and cessation of grazing. Chain-harrowing greatly reduces its vigour. It can be eliminated by specific herbicides such as Asulox, but these are expensive to use. Common in all adjacent counties and in N. France.

THELYPTERIDACEAE

**Thelypteris** Schmedel.

*T. palustris* Schott Marsh Fern. 15, 16. N.

In fen and fen carr. Very rare and local now, but still plentiful at 4) Ham Fen, 11) by a pond E. of Edenbridge, 13) by lake in Angley Wood, Cranbrook, and 15) by the Open Pits on Denge Beach. Formerly in 7) North Cray, and in 4) at Wingham and Sturry.

**Oreopteris** Holub

*O. limbosperma* (Bellardi ex All.) Holub Lemon-scented Fern. 15, 16. N.

Damp heathy woodland rides on acid soils, and in boggy hollows in woods: frequent locally in the High Weald 13); also as follows:

1) [Joydens Wood, one large plant in valley floor, 1945], **MNE** [Blackheath, Newman].
11) Ryarsh Wood, very rare in ride, 1945 **MNE**: not since.
12) 037426 Willesborough Lees, CPSK, 1829: 1944-55! In peaty ditch across bog remnants **MNE**.
13) Locally frequent from Redleaf Rocks W. of Penshurst, E. to Chittenden Wood: 18 sites.
14) 8935 Knockheath, E. of Tenterden 1956 **MNE**, dump ride; 9535, Cole Wood, Woodchurch, ES.

Frequent over much of the High Weald of Sussex and on Lower Greensand in Surrey and Sussex. This is a "northern" species which is holding its own well in moist rides, etc., with intermittent horizontal water movement in the soil. Reported in the Atlas by EP in three sites in 8) on presumably acid superficial soils in plateau woodlands, but there is no very recent record in 8) since 1982 (grid refs. 1242, 1448, 1646).

ASPLENIACEAE

**Phyllitis** Hill


Woodlands, steep sheltered, shady, sometimes rocky banks, in humid but well-drained situations, on soils usually of fairly high pH; also on old walls and in wells. Widespread and locally common. In the drier N. and N.E. of county mostly confined to stonework, but in the ragstone [and] chalk valleys and scarpes abundant in ash, ash-maple, or ash-oak woods. Most plentiful on the ragstone scarp woods in 10), 11), and 16) in the chalk valley woods W. of Dover 8), and in Folkestone Warren 16), about Hythe and the Isle of Oxney, 14). Otherwise very scattered on old walls.

* 1632, near Faversham, Johnson, Descriptio. p.31. 116 localities recorded. Common in the High Weald gills and on the western wooded chalk scarp in Sussex; less common in Surrey, rare in Essex, very local in the Boulonnais and Pas de Calais. It is as plentiful in the suitable part of Kent as in S.W. England.

**Asplenium** L.

*A. adiantum-nigrum* L. Black Spleenwort. 15, 16. N.

On old walls: widespread but not really common. On shingle under bushes on Denge Beach. Most common on old ragstone walls, from Westerham to Ashford. 10), 11), & 12): rarer elsewhere. About 70 sites recorded.

---

44 In the manuscript, records are given for these areas of comparative scarcity, plus district 9) (Ramsgate). There is also a reference to *Pteris cretica* L. 'naturalised in a few places in N.W. Kent'.
45 In manuscript described as 'Fen on site of Tuckers Pond...1945-61, abundant!'.
46 The manuscript entry is 'Fen N.W. of Wingham, 1947 **MNE**; D.A.C.L. 1963'.
47 Sixteen given in the manuscript, viz. Redleaf Wood, Penshurst; Ferndale, Tun. Wells; Hayes Wood, Pembury; Furnace Pond, Horsmonden; N. of Lamberhurst Quarter; Furnace Wood; St Sandherst Wood; E. side Bayham Woods; N.E. of Kippings Cross; Kilndown Wood; Comwell Wood, abundant; Bedegbury Pinetum; Bedegbury Forest; Angley Wood; Old Park Wood; Sissinghurst Park Wood.
48 The manuscript lists, or gives districts for, many of these records.
mostly on old churches or in churchyards. Rare on natural ragstone outcrops on lane banks (eg Westerham and Sundridge), and on Wealden Sandstone (eg Cowden Furnace Pond).


[A. obovatum Viv. Lanceolate Spleenwort. [16]. Extinct N.
Formerly on 13) Hungershall Rocks at Tunbridge Wells, and possibly then on other rocks in Kent nearby: Forster, Fl. Tonbr. Recorded (Herb. Buddle) at Tunbridge Wells as early as 1700, but no county is specified, and this may have referred to the High Rocks on the Sussex side. WW Reeves (c. 1885), said it was extinct on the Kent side by then (due to tree felling) at Hangershall (sic) Rocks, though formerly plentiful, and still existed on the Sussex side (i.e. on the High Rocks). Not reported reliably since then in either Kent or Sussex. It is long extinct in Dorset, and the nearest sites now are in W. Somerset and Devon. These Wealden occurrences were strange ones so far east for this highly oceanic and maritime species, but are well authenticated by specimens from the Tunbridge Wells area].

[A. marinum L. Sea Spleenwort [15]. Extinct N.
Apparentley native formerly on the cliffs at Dover (*1633, Gerard emaculatus, T. Johnson, p. 1143.) No specimens are known to exist however. In H&M, Rev. C.H. Fielding reported it at Dover but it has probably been extinct for a very long time. The nearest sites today are in the Isle of Wight and on the E. Dorset cliffs.

A. trichomanes L. ssp. quadrivalens D. Meyer. Maidenhair Spleenwort. 15, 16. N.
On old walls; rather common, on old churchyard stonework, and on other walls in the ragstone belt in 10), 11), & 12). (49 localities recorded in these three districts): rare in the High Weald 13) & 14), Romney Marsh 15) and in N. Kent 2): scattered elsewhere: 86 localities known in total. Not seen recently on natural rocks in Kent. All the Kent specimens seem to be referable to the ssp. quadrivalens D. Meyer, ssp. trichomanes, a plant of more acidic rocks and walls, does not seem to occur in the S.E. of England, but in Wales and Cumbria.
*1597, Gerard Herbal, p. 985.
Occasional in Surrey, Sussex and Hants: rare in Essex and Pas de Calais.

A. ruta-muraria L. Wall-rue. 15, 16. N.
On walls, both of stone and brick, and on ragstone rocks by lanes (e.g. Boughton Monchelsea). Rather common throughout the county: abundant, especially on stonework in the ragstone belt: all districts. Only unrecorded in 51/36, 37, 61/07 & 61/02.
*1597: Dartford, Gerard Herbal, p. 983.
Frequent in the adjoining counties and in the Pas de Calais.

A. septentroniale (L.) Hoffm. Forked Spleenwort. 15. N.
One plant found on a brick bridge at 15) Brenzett by Mrs. B. Burt c. 1983; (1984): no longer present in 1990. No doubt of natural origin from a spore which must have travelled a long way, but far beyond its normal western and northern range in Britain: a remarkable find by Mrs Burt.

Ceterach Wild.
C. officinarum Willd. Rustyback. 15, 16. N.
On old walls; rather frequent on the ragstone belt in mid Kent, and in 8), rare elsewhere: 34 sites recorded in 1), 4), 6), 8), 10), 11), 12), & 13). It can occur in non-calcareous walls with mortared joints.
Rare in adjacent counties, and in Pas de Calais on natural Devonian limestone (Vallée Heureuse, Rinxent).

WOODSIACEAE

Onoclea L.
O. sensibilis L. Sensitive Fern. 16. H
Alien, rarely naturalised in damp places.

Athyrium Roth
A. filix-femina (L.) Roth Lady-fern. 15, 16. N.
Damp or sheltered places in woodland, hedge-banks, fen carr: frequent to abundant as a whole S. of the chalk escarpment. Local in the Eocene woodlands of 1) and the S. part of 3); very rare in 2) and 4): in 15) only at the Open Pits on Denge Beach: absent in 9); scattered in valleys and in plateau woods in 5) - 8), especially where there are areas of acidic superficial soils: frequent in the damper woods on the Lower Greensand in 10), 11), 12) and 16), but scarce on Gault and Weald Clay except in sheltered valley woods: most abundant on the gills of the High Weald in 13) and 14). 124 localities recorded in total by me.

Frequent in suitable places in the adjoining counties and in Pas de Calais.

**Gymnocarpium** Newman

**G. dryopteris** (L.) Newman Oak-fern. 15. H or N?


It is well established now (1980)* in the valley in the conifer plantations here, on acid humus, and either introduced originally with young trees, or a long-distance colonist by a spore. Not yet found in any other county of S.E. England, nor in Pas de Calais: frequent locally in Wales and N. Britain.

**Cystopteris** Bernh.

**C. fragilis** (L.) Bernh. Brittle Bladder-fern. 15, 16. H or N?

Either native, or more likely of horticultural origin, on damp mortared walls: rare.


11) Ragstone walls, E Malling; Loose.

**DROOPTERIDACEAE**

**Polystichum** Roth

**P. setiferum** (Forsskala) Moore ex Woynar. Soft Shield-fern 15, 16 N.

Steep banks, rocks, slopes in sheltered, humid woodlands: shaded hedge-banks and sides of deep sunken lanes, on base-rich, humus-rich soils.

Widespread, except in the drier, flatter, more open parts of Kent, but very rare N. of the North Downs. *c. 1730: Holloway, E. of Chislehurst, Rand (BM). Locally frequent in 10) and 11) on ragstone scarps and lane banks, and in sheltered valleys and tracks in woodlands in the chalk valleys in 8). Local in 12) and 16). Occasional in the western High Weald in 13), commoner eastwards in 14). Locally common in Sussex, Surrey and Hants, rare in Essex and Pas de Calais.

**P. aculeatum** (L.) Roth Hard Shield-fern 15, 16 N.

In similar habitats to the last species, but usually in rather drier, better-lit situations, and often with it, but less frequent; occurs in less sheltered, less base-rich sites, and more often on churchyard walls and dry hedgebanks than the last (Map).


3) S. of Fordwich;

6) Lane above Otford;

7) N. of Westwell; 8) frequent in area W. of Dover;

10) Crockham Hill; ragstone scarp W. of Plaxtol;

11) Elmstone Hole; Hever; Frittenden;

12) W. of Great Chart; E. of Bilsington; Sellindge churchyard.

13) and 14) High Weald, frequent, 21 sites; 16) Hythe: Saltwood.

---

*This suggests that Francis Rose had taken the status from Eric Philp’s *Atlas of the Kent Flora* (1982) (‘now well established’), and was seeking to confirm what this meant in terms of dates. The manuscript pre-dated the finding of this species in Kent, but refers to the possibility of its being found in alderwood flushes or stream banks in the High Weald – whereas the eventual find was, as indicated, not likely to be related to long-term native survival.

50 The only record given in the manuscript is for 10) Darent Steps, Westerham, RAC.
A much more rigid and glossy fern than the last, with broader, more leathery pinnae curved towards the frond apex.

*1700 — about Tunbridge Wells- Doody and Dubois. In all the adjoining counties, and in Pas de Calais.

**Cyrtomium** C. Presl

*C. falcatum* (L.fil.) C. Presl

House Holly-fern. 15. H.


**Dryopteris** Adans.

*D. filix-mas* (L.) Schott

Male-fern. 15, 16. N.

Woodlands of all types, hedgebanks, scrub, and damp walls: very common throughout Kent. In flat, more cultivated areas it is largely confined to walls.


*D. filix-mas* x D. cristata?

A plant resembling this occurred with the supposed parents at Denge Beach Open Pits in 1952 (*MNE*).

*D. affinis* (Lowe) Fraser-Jenkins ssp. *affinis.* 15, 16. N.

The *D. affinis* complex is a series of hybrid forms derived from crosses between *D. oreades, D. caucasica,* and at least one other parent. The complex is variable, but has not been studied in depth in Kent. The complex is known through most of Kent, principally in sheltered woodlands on humus-rich soils: it includes, besides ssp. *affinis,* also ssp. *cambrensis* Fraser-Jenkins, and ssp. *borrerii* (Newman) Fraser-Jenkins. The complex is commonest in the High Weald, and is rare in 4), 5), and 9).

*D. aemula* (Aiton) Kuntze

Hay-scented Fern. 15, 16. N.

On steep, deeply-shaded banks on acidic sandy loam, or on sandstone rocks, in 13 localities in the gills of the High Weald in 13) and 14); usually on N or NW aspects; rare and local, but sometimes locally abundant.


This very interesting extreme oceanic (or Lusitanian) species attains its eastern European limit in the High Weald of Kent and Sussex, where it is now known in over 100 sites, mostly in deep gills, or on sheltered sandrocks on Tunbridge Wells or Ashdown Sand and also (much more rarely) on steep slopes in woodland on

---

[^1]: The manuscript gives a full-length entry for *Dryopteris borreri,* as a plant of 'Woodlands, on moderately acid soils in sheltered, fairly humid situations: uncommon as a whole, though widespread, but locally very abundant in the gills of the High Weald in 13) and 14) where it is often more abundant than *D. filix-mas.* 63 localities. *1952, Dungeness, J. Pugh & F.R. Locally frequent in Surrey, common in the High Weald of Sussex, very rare in Essex and Pas de Calais. The truncate pinnules, shaggy rachises, and black spots beneath the pinnae at the junction with the rachis, distinguish this fern from *D. filix-mas.*' [Records or record totals are listed.]

[^51]: The manuscript gives a full-length entry for *Dryopteris borreri,* as a plant of 'Woodlands, on moderately acid soils in sheltered, fairly humid situations: uncommon as a whole, though widespread, but locally very abundant in the gills of the High Weald in 13) and 14) where it is often more abundant than *D. filix-mas.* 63 localities. *1952, Dungeness, J. Pugh & F.R. Locally frequent in Surrey, common in the High Weald of Sussex, very rare in Essex and Pas de Calais. The truncate pinnules, shaggy rachises, and black spots beneath the pinnae at the junction with the rachis, distinguish this fern from *D. filix-mas.*' [Records or record totals are listed.]
D. cristata (L.) A. Gray  Crested Buckler-fern.  [15].  N.

In scrub on fen peat on one of the Denge Beach Open Pits only.  One plant was found here, 1952-62 MNE.  J. M. Cannon tells me he also found c. 12 plants in another fen in the Open Pits area in 1952.  A very rare species now in Britain. 52

D. carthusiana (Vill.) H. P. Fuchs  Narrow Buckler-fern.  15, 16.  N.

Alder and Willow carrs, flushes in woodlands, flushed sphagnum bogs, fens, lakeside swamps, wet woodland generally, occasionally in drier woodlands.  Frequent locally in suitable habitats in 1), 3), 12), 13), and 14), especially in the High Weald and on Folkestone Sand: present but rare elsewhere in 4), 5), 8), 10), 11), and 15).  92 sites known.


Locally frequent in much of S.E. England but rare in Essex and Pas de Calais.

1) Holwood Park; Keston Bog; Ravensbourne Estate, Keston; Petts Wood; North Cray; Joydens Wood.

3) Frequent in the southern part of the Blean Woods.

4) Near Preston church.

5)54 Valley bottom, Bombers Farm woods, Cudham: P. Greenfield; and N.W. of Westerham Hill on clay.

6) Very rare.  5660; 5862, Woodlands, Knockmill, Church Wood plateau gravels.


11) Dike E. of Tonbridge; SE of ‘Woolpack’, Yalding, by pond; Starvecrow Hill Woods; Sandway Bog, Lenham.

12) 6 localities, Hothfield to Gibbons Brook.

13) 44 localities.

14) 12 localities.

15) Fen on Denge Beach.

D. dilatata (Hoffm.) A. Gray.  Broad Buckler-fern.  15, 16.  N. (map)55

Woodlands, hedgebanks and ditches.  Very common except in the most open, dry and treeless areas; in all districts but most abundant in hilly, wooded areas.  Common in all adjoining counties and in N. France.  Best distinguished from D. carthusiana by the more triangular frond outline, convex pinnules, and acute dark-centred rachis scales.

52 The account as revised by Francis Rose omitted details of sites.  In view of the interest of such details, these are reproduced below from the unrevised manuscript.


53 The manuscript adds that ‘It was rediscovered by me in a fen in the Somme Valley near Abbeville in N. France in quantity in 1958; it had not been recorded in N. France before this since about 1864.  The Kent plant may have been derived from a spore blown over from the Abbeville colony.  The Kent habitat resembles some of the Norfolk ones in being fen that is acidifying and becoming invaded by Sphagnum squarrosum, possibly an incipient raised bog stage in succession.’

54 At this point, the typed text becomes somewhat garbled, with the wrong district numbers assigned to this entry and the next, whose number (6) is not mentioned in the earlier lists where present.  The account then stops.  It is unclear why the records stop here, as this does not appear to be part of a revision to pass over areas where the species is common.  Accordingly, the rest of this entry has been supplied here from the manuscript.

55 No map has been found.
BLECHNACEAE

Blechnum L.
B. spicant (L.) Roth Hard-fern. 15, 16. 31/52.
Native. Woodlands of oak, beech, birch or pine, on acid or less podsolised soils, where humidity and soil moisture are relatively high but drainage good. In the drier districts on sheltered sites such as N. slopes, valleys, or stream banks: most abundant on steep banks, often with Vaccinium, Calluna, Deschampsia flexuosa, Mnium hornum or Dicranum majus. Abundant throughout the High Weald of 13) and 14) in at least 106 localities. Common on the plateau drifts over the Hvthe Beds and on the Folkestone Sand in 10 and the western part of 11), becoming much rarer to the E. and in 12). Very rare in the chalk districts, but present in a few woods on Pliocene loams and Eocene gravels in 7) and 8). Now rather rare in 1); common in S.W. of 3), on the Eocene gravels and sands of the Blean. Almost absent on heavy clay soils and in the marsh districts 2), 4), and 15), except for one locality in acid fen on Denge Beach. 174 localities recorded.
*1725: Shooters Hill, Herb. Dill. Common throughout the High Weald and Lower Greensand areas of Surrey and Sussex: very rare in Essex (? six localities now). Very local in the forests on the Wealden strata in the Pas de Calais. A species of western tendency in S. Britain.

(map)56

AZOLLACEAE

† Azolla Lam.
† A. filiculoides Lam. 15. 4/52 H.
2) Pond and dike near R. Medway, below Aylesford, E.G. Philp, MNE.

Pinopsida57

PINACEAE

[Pseudotsuga menziesii (Mirb.) Franco, Picea abies (L.) Karst, P. sitchensis (Bong.) Carrière, and Larix decidua Mill. are all widely planted in Kent, but none appears to have yet become naturalised (from self-sown seed).]

Pinus L.
P. sylvestris L. Scots Pine. 15, 16 D, (Natl.)
Possibly some populations are of native origin, though most are planted; the species is however thoroughly naturalised and common now on the acid sandy and gravelly soils in 1), 10), 11) (about Wrotham Heath, Platt, and Mereworth Woods), 13), and 14). Elsewhere it occurs widely as planted groups of trees, and more and more, as planted forests.

---

56 No map has been found.
57 From this point, there is no longer any revised typescript available, so the text given is taken first from Francis Rose’s check-list intended for use in or with the Flora; and then the corresponding text from the manuscript which continues as a whole up to and including Taxus baccata. After then, the surviving manuscript is incomplete but included in check-list sequence, as far as this goes. Pseudotsuga menziesii etc. and Tsuga heterophylla, however, are not given in the check-list.
The first evidence from Kent is from peat deposits near Frogholt (Newington) and Wingham, in which the pollen is fairly abundant between horizons dated by Radiocarbon dating between about 1700 BC and 200 AD (Godwin, *Sonderdruck aus den Veröffentlichungen des Geobotanischen Institutes der Eidg. Techn. Hochschule, Stiftung Rübel, in Zürich*, Heft 37). It is clear that it occurred as a native in Kent until at least Roman times; Godwin suggests that the bulk of the pollen in these sites may have come from the acid sandy country of the High Weald. Some of the High Weald Populations of today may well be descended from native stock, but it now seems unlikely that the situation there can be fully sorted out, as so much planting has occurred over a long period. Abundantly naturalised, and possibly in part native, on the Sussex High Weald and the Sussex to Surrey Lower Greensand, and on the Bagshot Beds and Lower Greensand in Surrey, certainly not native in Essex or Pas-de-Calais. Seen in all districts except 2), 9) and 15).

**Tsuga heterophylla**

13) a few small plants, apparently self-sown from a plantation, Kilndown Wood, Goudhurst, 1960, FR & CAS.

**CUPRESSACEAE**

**Juniperus L.**

J. communis L. subsp. communis 15, 16 12/52  N  Juniper

Native. Old chalk grassland and scrub, dry acid heathland. Formerly very common and widespread on the downs and heaths of Kent, this species has become much rarer this century, in numbers both of localities and of individuals, and since 1944 it has been seen in only 23 recorded localities (21 on chalk, 2 on heathland on acid soils). In most of these it is unhealthy and appears to be dying out, and may before many years have passed be extinct in the county, unless effective conservation measures can be found and implemented. Its disappearance from heathland habitats is probably partly due to cultivation and repeated heath fires; on the chalk, spread of coarser grasses and scrub on cessation of grazing, with consequent failure of regeneration, as well as fire, are undoubted contributory causes. At present, however, the senescent or dying condition of nearly all the remaining small colonies, and their failure to regenerate or even to produce much seed or even cones, can be correlated with the abundant presence of the parasitic fungus *Lophodermium juniperinum* on the bushes; but whether this is cause and effect is not yet definitely proved. The bushes on the seacliffs, though stunted, possibly by exposure, appear to be still healthy and free from any obvious disease. *1562: “growth most plentifully in Kent” Turner, *Herball*, pt. 2, p.25.

It is still locally plentiful at a number of sites on the chalk in Surrey and W. Sussex, but in these counties the colonies are similarly senescent in appearance for the most part and do not appear to be regenerating effectively. It is now very rare indeed on the Surrey heaths, and has apparently now become extinct in Ashdown Forest, its only recent E. Sussex locality. It has long been extinct in Essex. In Pas de Calais and elsewhere on the N. French chalk downs it is still abundant and appears to be fairly healthy and regenerating well. It is worth noting that two Hertfordshire colonies near Hemel Hempstead are still healthy and apparently still fit for regeneration: these are not far from the main line to Birmingham and the local gas works; is it possible that chemicals present in the fumes from these sources have a toxic effect on the *Lophodermium*, or whatever other pathogenic organism may be killing the plants elsewhere? The matter needs much more close study.


13) Southborough Common! 33 healthy bushes, 8 dying, 10 dead, all infected, 1960, C.A. Stace.

---

58 Authority and status not given; not in check-list, but if it had been, then Stace 2nd edition (applicable when check-list was prepared) would have placed it before *Pinus sylvestris*.
Old records for the Juniper Pug moth (*Eupithecia sobrinata* Hubn.) exist for 1) Blackheath; 6) Shoreham; 7) Westwell; 8) Crundale; 11) Wateringbury; 14) Sandhurst. It is still found at Shoreham, Westwell and Crundale, so I understand.

**TAXACEAE**

**Taxus** L.

*T. baccata* L. 15, 16 38/52 (as a native, or probably so) Yew. Native. Woodlands on well-drained soils on chalk, sand, or sandy loam; abundant on the chalk as far east as the Wye area, on which stratum it forms pure woods about Otford, Snodland, Borley, and Crundale, and an important colonist of chalk grassland and scrub in many places: also common as a sub-dominant beneath the beech canopy in chalk woodlands; much rarer and scattered E. of Wye and possibly not native east of the Canterbury-Dover road, although not uncommon in plantations: quite common on the Lower Greensand in 10) and 11), both on the ragstone escarpment and on the podsolised soils on “head” on the Hythe Beds plateau: rare on the Folkestone Sand. Common in the High Weald of 13), in gills and on steep rocky banks on sandstones, much rarer in 14). It occurs quite frequently even in woodlands on the Gault and Weald Clay as scattered trees, but probably always where patches of lighter drifts or seams of sandstone occur. Not uncommon on the Eocene Sands and Gravels in 1), 3) 5)–8), 10)-14), and very much at home in Kent: but equally certainly planted in many places. The churchyards of Kent contain many huge specimens, no doubt originally planted: those at Ulcombe and Newington near Folkestone are noteworthy. It is common on the chalk of west Sussex and of Surrey, forming pure woodlands as at Kingley Vale and about Boxhill, but rarer on the eastern South Downs. It is common on the Sussex High Weald, especially in gills on the sandstone, and in many localities on the Lower Greensand in both those counties. In Essex and East Anglia it does not appear to occur except as a planted tree. It is unknown today, surprisingly, in Northern France, in spite of the extensive chalk areas, north of the Seine Valley cliffs about Rouen. Only apparently natural localities are listed below, unless stated.


2) Self-sown on ruins, S. of Oare Mill Pond. Love Lane, Minster, OD; probably planted.

3) 16 Church Wood: 04 Holly Hill, Dunkirk: 05 W. of Radar Stn., Dunkirk: 26 Shelvingford Wood.

5), 6), 7) Very common, forming pure woods in places.


10) 45 N.W. Slope of Toys Hill. 55 Scarp, Hubbards Hill. Rooks Hill; Wilmott Hill. Bitchet Common.


W. Wood on Weald Clay 2m N. of Tonbridge. Underriver.

12) Park Wood, Bilsington.

13) Frequent: 22 localities.

14) 73 Robins Wood, Cranbrook; Parsonage Wood, Netterhall Gill, Benenden and Babbs Gill, Benenden. 83, 93.

**Magnoliopsida**

**MAGNOLIIDAE** (Dicotyledons)

**LAURACEAE**

**Laurus** L.

‡ *L. nobilis* L. (Garden outcast). Bay. H. [no surviving account]

**ARISTOLOCHIACEAE**

---

59 Not in check-list.

60 In error for [TR]06.

61 Queried in text.
Aristolochia L.  
‡ A. clematitis L. Birthwort. D.  
Is naturalised at Mayfield in Sussex.  
11) formerly on walls of Allington Casstle, Dr. Fielding (in Memories of Malling, by his son, C.H. Fielding 1893.)  
‡ A. rotunda L. Smearwort. D.  

NYMPHAEAECAE

Nymphaea L.  
N. alba L.62 White Water-lily. N.  
Localised records for district 15:  
Royal Military Canal at Hythe (tetrads TR13M and/or 13S) [L.J. Margetts]; Royal Military Canal, Kenardington (tetrads TQ93Q and/or 93V) [E.S.]; Appledore (tetrads TQ92P and/or 92U)  

Nuphar Smith  
N. lutea (L.) Smith Yellow Water-lily. N.  
Localised records for district 15:  
Surprisingly rare in this district and not recorded for the main Marsh area. Recorded: west of Appledore (tetrads TQ92I and/or 92P); southwest of Small Hythe – possibly same record as "west of Wittersham" in 1955 and 1956 (TQ888296).  

CERATOPHYLLACEAE

Ceratophyllum L.  
C. demersum L. Rigid Hornwort. N  
Localised records for district 15:  
Largely replaced by C. submersum in this district:  
TQ82: levels northwest of Wittersham toward Small Hythe in 1958 (tetrads TQ82U and/or 82Z)  
TQ83: dykes east of Friezingham (tetrad TQ83Q)  
TQ92: east of Appledore in 1946 (tetrad TQ92U)  
TQ93: ditch by Royal Military Canal, Kenardington (tetrads TQ93Q and/or 93V) [E.S.]  
TR01: Long Lake, Dungeness in 1950 (TR0818) [MNE]  
TR02: west of Dymchurch (tetrad TR02Z); and 2) disused swimming pool, St Mary's Bay [tetrad TR02Y]  
TR03: Orgarswick in 1946 (tetrad TR03V); dyke south of Aldington Knowle in 1958 (tetrad TR03) [MNE]; and Royal Military Canal at Ham Street (tetrad TR03B) [Clive A. Stace]  
TR13: dyke, Palmarsh (tetrad TR13G) [L.J. Margetts]; and Royal Military Canal west of Hythe in 1935 (tetrad TR13M) [MNE].  

C. submersum L. Soft Hornwort. N  
Localised records for district 15:  
Often filling the dykes where the water is periodically brackish:  
TQ82: ditches by the Windmill Channel east of Rolvenden in 1959 (tetrad TQ82U)  
TQ93: Dyke by lane 1 mile south-east of Kenardington Bridge in 1959 (tetrad TQ93V)  
TR01: Dungeness, Hoppen Pits and gravel pits in 1946 (tetrad TRO1U etc)  
TR02: Ditch west of New Romney in 1945 and 1950 (tetrad TR02M?); ditch north of Ivychurch (TR031281); and moat north of Old Romney (TR033254)  
TR03: Dykes south of Aldington Knowle in 1958 (tetrad TR03S); and 2) Orgarswick (tetrad TR03V?).  

62 Given in checklist, but no account in manuscript.  
63 This account – as with all the following highlighted accounts – is not a transcript, but it is taken from notes made from the Flora, and is limited to botanical district 15. See p.7.
RANUNCULACEAE

Caltha L.
C. palustris L. Marsh-marigold. N. [no surviving account]

Helleborus L.
H. foetidus L. Stinking Hellebore. N [no surviving account]
H. viridis L. ssp. occidentalis (Reuter) Schiffner Green Hellebore. N. [no surviving account]

Eranthis Salisb.
† E. hyemalis (L) Salisb. Winter Aconite. H. [no surviving account]

Aconitum L.

Consolida (DC.) Gray
C. ajacis (L) Schur Colonist formerly, now †. Larkspur. C. [no surviving account]

Anemone L.
A. nemorosa L. Wood Anemone. N. [no surviving account]
† A. apennina L. Blue Anemone. H. [no surviving account]

Clematis L.
C. vitalba L. Traveller’s-joy. N. [no surviving account]
† C. flammula L. Virgin’s-bower. H. [no surviving account]

Ranunculus L.
R. acris L. Meadow Buttercup. N. [no surviving account]
R. repens L. Creeping Buttercup. N. [no surviving account]
R. bulbosus L. Bulbous Buttercup. N. [no surviving account]
R. sardous Cranz Hairy Buttercup.
N Localised records for district 15: Probably in marshes at Fairfield (tetrad TQ92T). Also at the Midrips (TR0018) and west of Hythe (TR03 or TR13).
R. parviflorus L. Small-flowered Buttercup. N. [no surviving account]
R. arvensis L. Corn Buttercup. N. [no surviving account]
R. auricomus L. Goldilocks Buttercup. N. [no surviving account]
R. sceleratus L. Celery-leaved Buttercup. N.
Localised records for district 15: Surprisingly infrequent and only listed for Appledore, by the canal (tetrad TQ92P?); Shirley Moor (TQ93); Sandhurst Levels (TQ82); Small Hythe (tetrad TQ822); and west of Hythe (TR03 or TR13).
Localised records for district 15: in all the Hoppen Pits (TR0718) and natural fens of Denge Beach, locally abundant in 1962 (!) and previously noted in 1956. Also in shingle workings near the Old School, Dungeness in 1961 (TR01).
R. flammula L. Lesser Spearwort. N.
Localised records for district 15: surprisingly very rare, [though Francis Rose stated the account was incomplete] - mainly off the Romney and Walland Marshes proper, at Hexden Channel in 1954 (TQ82); ditches southeast of Rolvenden (tetrad TQ83Q); and shingle pits near Old School, Dungeness (TR01).
R. ficaria L. Lesser Celandine. N. [no surviving account].
R. ficaria L. ssp. ficaria N. [no surviving account].
R.ficaria L. ssp. bulbifer Lambinon N. [no surviving account]

R. hederaceus L. Ivy-leaved Crowfoot. N. [no surviving account]

Localised records for district 15: Royal Military Canal at Appledore (tetrad TQ92P) [R.G.W. – recent]; Ham Street (off Romney Marsh?) [E.S. Marshall]

R. omiophyllus Ten. Round-leaved Crowfoot. N. [no surviving account]

R. trichophyllus DC. Three-lobed Crowfoot. N. [no surviving account]

R. baudotii Godron Brackish Water-crowfoot. N.

Locally common in district 15:

TQ92: Appledore in 1947 (!) [E.S. Marshall]

TR01: Dungeness in 1947 (!) [det. R.W. Butcher – MNE]


TR03: South of Bilsington (tetrad TR03L); and Newchurch (TR05319)

TR13: Royal Military Canal west of Hythe in 1880 (tetrad TR13M) [A. Bennett – BM]; and Palmarsh pits in 1956 (tetrad TR13G) [L.J. Margetts det. R.W. Butcher as forma marinus]

R. trichophyllus Chaix Thread-leaved Water-crowfoot. N.

Unlocalised record for TR03; otherwise, localised records for district 15: at;

TQ82: Small Hythe (TQ894298) [David McClintock]

TQ92: west of Appledore in 1949 (tetrad TQ92J and/or 92P) [P.R.B. and F.R. det. R.W. Butcher – MNE]

TR01: Dungeness

TR02: in ditches northeast of New Romney in 1946 [det. R.W. Butcher – MNE]; ditches at Brenzett in 1945 (TR02D) [F.R.]; gravel pits on Romney Warren in 1959 (TR02S); dyke at St Mary’s in 1946 (D.H. Kent); and ponds south of lychchurch (tetrad TR02I)

TR13: Dyke south of Lympe (tetrad TR13B and/or 13G)

Subsp. drouetii recorded: gravel pits on Romney Warren in 1945 (TR02S); and ditch near Selby Farm, south of Lympe (TR1033)

R. aquatilis L. Common Water-crowfoot. N.

Localised records for district 15: fairly common, with sites at Northeast of Romney (TR02) [Flora of Kent (1899); R.G.W. in ca 1950]; east of Hythe (TR13) [Flora of Kent (1899)]; west of Hythe in 1958 (TR03 or 13)]; north-east of Brenzett in 1958 (tetrad TR02D and/or TR02E); west of Old Romney (tetrad TR02H); northeast of Old Romney (tetrad TR02H); Ham Street (TR03B) [C.N.P.]; and east of Appledore station in 1956 (tetrad TQ92U and/or 92Z).

R. peltatus Shrank Pond Water-crowfoot. N. [no surviving account]

R. penticillatus (Dumort.) Bab. ssp. pseudofluitans (Syme) S. Webster Stream Water-crowfoot. N. [no surviving account]

R. fluitans Lam. River Water-crowfoot. N. – to refind in Medway. [no surviving account]

R. circinatus Sibth. Fan-leaved Water-crowfoot. N.

Localised records for district 15: locally frequent;

TQ82: Sandhurst Levels in 1954 [det. R.W. Butcher – MNE]

TQ92: 1 mile east of Appledore in 1954 (!) (tetrad TQ92U) [Flora of Kent (1899)]; and northwest of Fairfield (tetrad TQ92T)

TR03: Shirley Moor

TR01: Hoppen Pits, Denge Beach (tetrad TR01U)

TR13: South of Lympe in 1958 (tetrad TR13B and/or 13G) [det. R.W. Butcher – MNE]

Adonis L.

A. annua L. Pheasant’s-eye. 15, 16 5/52 C.
Colonist. Cornfields and waste ground, mainly on chalk soils; formerly common in 6), and frequent in 1), 5), 7) and 8); recorded also for 2), 3), 4), 9) 10) and 11). Now very rare and confined to a few localities in 2), 5), 6) and 8). It is pointless to cite the many old records in detail: only recent ones are quoted.


8) St Margaret’s Bay, Radar Station, E.S. N. of Charlton Wood, Bishopsbourne, 1942, B.J.B. & F.R. Kingston, 1950, L.W.W.

Myosurus L.
M. minimus L. Mousetail. 15, [16] 1/52 N, C

Native. Damp arable fields, mostly on sandy soils, and damp sandy or loamy banks near the sea: formerly widespread and locally frequent along the north Kent coastal plain, and recorded for numerous localities in 1)-4), 7)-9), 11)-13) and 16); now extremely rare and only recently recorded in 3) and 4). Similarly rare and decreasing in Surrey, Sussex and Pas de Calais, but still known at a number of places near or along the coast in Essex. *1670; Deptford to Eltham, Ray, Cat. Angl., p. 210.

Recent records:
3) Sandy arable field, Highams Farm, Fordwich, 1950, R.E. Wood; 1951! MNE.
4) Deep sandy hollow of dunes near Downs Farm, Sandwich, 1960, Mrs. E. Carlton; not refound in spite of several searches and subject to some slight doubt in the absence of a specimen.

Aquilegia L.
A. vulgaris L. Columbine. N, H. [no surviving account]

Thalictrum L.
T. flavum L. Common Meadow-rue. N. [no surviving account]
T. minus L. Lesser Meadow-rue. H. [no surviving account]

BERBERIDACEAE

Berberis L.
‡ B. vulgaris L. Barberry. D. N? [no surviving account]
‡ B. darwinii Hook. Darwin’s Barberry. H. [no surviving account]
‡ B. x stenophylla Lindley Hedge Barberry. H. [no surviving account]

Mahonia Nutt.
‡ M. aquifolium (Pursh) Nutt. Oregon Grape. H. [no surviving account]

PAPAVERACEAE

Papaver L.
P. orientale L. Oriental Poppy. H. [no surviving account]
‡ P. atlanticum (Ball) Cosson Atlas Poppy. H. [no surviving account]
‡ P. somniferum L. ssp. somniferum Opium Poppy. H. [no surviving account]
P. rhoeas L. Common Poppy. N or C. [no surviving account]
P. dubium L. ssp. dubium Long-headed Poppy. N or C. [no surviving account]
P. dubium L. ssp. lecoqii (Lamotte) Syme C. [no surviving account]

P. hybridum L. Rough Poppy. C.

Colonist. Cornfields and waste ground on chalk: not uncommon in parts of 6), 7) and 8), rare in 5) and 9), a very rare casual in 4) and 11). Local on chalk in Surrey and Sussex, rare in Essex, local in Pas de Calais. *1597: Southfleet, J. Gerard, Herbol, p. 300.

4) Sandwich Bay, Miss J. Moore. 5) [Nr. Swanley, 1877, J. Groves (BM).] Chalky track N. of Franks, Horton Kirby, PCH. W. of Sutton-at-Hone, WCRW.

6) Frequent in the N. part: 11 localities recorded from Darenth to Snodland.
8) 19 localities from Chartham and Bridge to Mongeham and St. Margarets, but not in the S.W. half of district.
9) W. of Cleve Court, Minster, 1963. Northdown, L.W.W. [old records at Ramsgate and Margate].
11) Hadlow, 1877, W.E. Shrivell [TLS].]

P. argemone L. 64 Prickly Poppy. C.
Colonist. Arable land and waste ground on chalky and sandy soils: widely but thinly distributed and rather uncommon.
Locally common in Sussex and Essex, rather common in Surrey and Pas-de-Calais. *1597: Southfleet, J. Gerard, 
Herbal, p.300.
1) Eltham: Orpington, W.C.R.W.
2) Faversham.
4) Sandwich Bay: N. of Deal.
6) 11 localities.
8) 8 localities, all in E. half of district.
9) Westgate: Birchington, L.W.W.
14) Tenterden Station: Dungeness, near Lighthouse, Mrs. B.D.

Meconopsis Viguer
† M. cambrica (L.) Viguer Welsh Poppy. H. [no surviving account]

Glaucium Miller
G. flavum Crantz Yellow Horned-poppy. N [no surviving account]

[The checklist continues through FUMARIACEAE, PLANTANACEAE, ULMACEAE, which includes:]
Ulmus L.
U. glabra Huds. Wych Elm N, H 65

[Then from MORACEAE to CANNABINACEAE, which includes:]
Humulus L.
H. lupulus L. Hop. N
Probably absent as a native and very rare as an introduction. In district 15: in a hedge at Maytham Wharf in 1958 (TQ867277)

[The checklist continues through URTICACEAE, JUGLANDACEAE, MYRICACEAE, FAGACEAE to BETULACEAE, which includes:]
Alnus Miller

64 This account is taken from a typed copy, probably made in the 1980s and extending to no more than this.
A. glutinosa (L.) Gaertner Alder. N

Localised records for district 15: Very rare, if not gone, from the Romney and Walland Marshes. Recorded for Shirley Moor in 1955 (TQ940320).

[The checklist continues through the rest of BETULACEAE, PHYTOLACCACEAE, AIZACEAE, as far as:]

CHENOPODIACEAE

Chenopodium L.
C. ambrosioides L.66
11) Shoddy field, Wrotham Station, 1960, DMcC MNE.

C. pumilio R. Br.67
11) Shoddy field, Wrotham, DMcC, 1961, MNE.

† C. cristatum (F. Muell.) F. Muell.68
Alien Australia.
1) “Shoddy” fields, Stonehall Green, Hextable, 1950, D.McC, Hb. L., teste J.P.M.B.
4) field (sh[oddy]) Sandwich, 1960, DMcC MNE.
11) Shoddy field, Wrotham, 1960, DMcC.

† C. capitatum (L.) Aschers.
Casual alien in cultivated land, rare.
8) 1 pl[ant] in carrot field, Patrixbourne, 1957, R. Gorer MNE.
11) vegetable field, near Langley, D. McClintock (sh[oddy]). Chart Sutton 1950, DMcC, det. JPMB.

C. bonus-henricus L.
Good-King-Henry D 15, 16 26/52
Denizen. Roadsides, village greens; widespread but rather rare. Formerly grown as a pot-herb; it closely resembles spinach when boiled.
1st record, 1632: Nash to Quex, Johnson, Descriptio, p.20.
1) [47 Mottingham, 1906, L.C.C. Bot. Unit.] 46 Keston, 1933, PHC. 47 near Lessness Abbey Farm, 1936, PHC;
1948, R.A.B. 46 Green Street Green near Farnborough, G.M.B. 36 Near Coney Hall, Hayes, GMB. 36 Elmers End, 1915, Hb Davis MNE.
2) 06 Faversham.
3) 16 Sturry, path near R[ai][wa]y, 1962, Miss M.E. Millward.
4) Deal, Miss J. Moore.
5) Roadside between Farnborough and Down, 1904, WHG. 46 Pratts Bottom, 1940: f.R. Browning.
6) 56 Mr. Knatts’ Farm, Maples combe, 1905, WHG. 57 Green Street Green, 1957, P.C. Hall. 56 W. of Longfield, A. Beadell.
65 Meopham Green, KEB.
7) 86 Bredhurst village, 1944. 86 Hill Farm, Stockbury, 1960, E.Phill MNE. 95.
55 57 RAC. 55 lghtham Village, KEB.
11) W) Yalding, A.H.W.D., 1934. 55 E. Malling, 2 places. 65 Offham Village Green. 65 1942; 1956 MNE. 65
Red Hill, Wateringbury. 66 S of Birling. 65 Mereworth. 65 Leybourne H Lamb 1883 MNE.
E0 75 Maidstone Road, Boxley, 1881, E. Bartlett, MNE; 1960, E.P. 75 W. Farleigh Green. 84 Sutton Valence 47
DMcC. 75 Tovil, B. Carter. 75 Loose, B. Carter. 85 Sandpit, Burham, B. Dodds.

66 Not in check-list.
67 Not in check-list.
68 Not in check-list. There are two entries for this species, in different parts of the manuscript, and these have been combined here to produce one account.
C. glaucum L.  
Oak-leaved Goosefoot  
NI, C  15, 16  10/51  
Possibly native on the coast; a casual, sometimes becoming established inland. 
1st record, 1793: Deptford, etc., Milne & Gordon, p.444.  

1) Formerly about Deptford, Lee, and Charlton: long extinct.  
3) 16 Wraik Hill, Seasalter, 100641, on manure heap, one plant, H.M.W., 1958.  
7) 95 Eastling, C. Turner.  
10) 55 Kemsing Station sidings, 1946, D.McC., MNE.  
11) Borough Green Station, 1960, DMcC. 44 Edenbridge (waste ground at Falconhurst, Crouch House, etc.) G. Talbot & CE Salmon 1921-25.  
12) Cabbage field N of Vintners Park EGP. 75 Waste ground by A.20, 1958, Penenden Heath, Maidstone, EGP, MNE.  
14) Tudor Hall Hawkhurst 55 DMcC.  
15) 02 Littlestone, 1947, MNE. Denge Beach SE of Lydd E Philp.  
Teynham; Sheppey; Malling; Sevenoaks; Tonbridge; Cranbrook ’55; Maidstone 1959; Dodington 1958.  

C. rubrum L.  
Red Goosefoot  
N 15, 16  38/51  
Native. Pond verges, brackish marshes and muddy pastures, waste ground, vegetable fields, farm yards, rubbish tips. Locally common in N. Kent and on the coast, rare in the Weald.  
1st record, 1777: Faversham, E. Jacob, Pl. Fav., p.14  
2) 47 Woolwich Arsenal, 1944, MNE. 57 Erith. 57 Stone Marshes. 67 Swanscombe Marshes, JDL. Northfleet. 67 Denton. 67 Shorne. 77 Cliffe. 87 Grain. Aylesford Bridge. 07 pond at Warden. 97 Eastchurch. 06 Shelling. 06 Seasalter. 06 Harty Ferry, S. side. 06 Harty Isle. 96 Graveney.  
3) 76 Wraik Hill, Whitstable, HMW.  
4) Sandwich dunes, 1946 MNE. 35 Deal, Miss J. Moore 1960. 36 Richborough sidings 1962, Miss Milward. 35 Worth. 15 Fordwich Miss T Webber. 35 Ham, E. Robinson. ickham DACL.  
5) Downe tip 52 D.P.Y. & DHK.  
6) 67 Gravesend. Longfield tip, ’48, DMcC.  
7) Eastling C. Turner. 76. 86. 05.  
10) 55 Kemsing Sta[ton] DMcC. 45 Field E of Chevening Church, J.D.L.  
12) 04. 94. 03. 93.  
14) 83 NE of Benenden. 83 NE of Tenterden R[ai]l[wajy Sta(tion], 1959 MNE. 93 Woodchurch area, freq[uent] ES.


16) Brockhill, LJ.M. 

var. cymosiflorus Aellen 

Rubbish tip, Sevenoaks, 1936, HKAS, NYS & JPMB, K. 

var. pseudobotryodes 

1) Plumstead Marshes. 

2) Denton Marshes. 

4) Sandwich Bay in sandy trench, DPY, 1947. 

Cliffe; Gravesend; Dartford; Woolwich; Blackheath; Keston; W.Wickham; Thanet E; Sandwich; Canterbury; Chilham 56; Doddington '58; Hollingbourne 1960; Maidstone; Mallig; Sevenoaks 756; Ashford '56; Hothfield; Headcorn 58; Tonbr[idge] '57; Edenbr[idge] 56; Chatham; Stockbury 57; Teynham; Faversha; Whitstable 58; Aldington; Woodc[urch] 56; Tenterden; Lamberhurst; Romney; Appledore '59; Sheppey. 

C. chenopodiodes (L.) Aellen 70 Saltmarsh Goosefoot N 15, 16 10/51. 

Native. On mud, in brackish marshes and in dikes: rare, but locally very common in 2) in the Lower Thames estuary and the marshes adjoining the Swale E. to Graveney; rare in 4) and 15). This plant is characteristic of drying brackish mud, exposed in late summer by the fall of water level in dikes of the alluvial marshes, and in natural brackish marshes. In wet summers often few individuals can be found, as the seeds do not appear to germinate unless the mud is exposed to the air: in dry summers, the crimson-red fruits may colour the exposed mud over wide stretches. 


4) [Pegwell Bay, H.C. Watson; Stonar, Syme.] 26 Brackish dike N. of Shuart, St. Nicholas, 1962. 

15) 02 Brackish marsh S. of Littlestone, 1950 MNE (site of the old Rother estuary). 92 Brackish meadows by Fairfield Church, 1962, Mrs K.D.R[owlands]. (spl!) 1994! 

Egypt Bay; Gravesend; Cliffe; Grain; Sheppe; [lowel] Halstow; Teynham; Faversha; Chislet; Romney; Appledore. 

This species is probably far commoner in N. Kent than elsewhere in Britain, though further search in S. Essex may reveal that it is equally common there; I have seen it myself in Essex at Leigh marshes; and at Stansgate Abbey, E. of Maldon. It also occurs, very rarely, in E. Sussex (Rye Harbour), W. Sussex (Clymping!); on the S. Hampshire marshes; and near Yarmouth in E. Suffolk. In N. France I have observed it in brackish "pans" near the mouth of the Somme. 

Seed identified as that of this species was found, together with that of Atriplex littoralis and fruit of Ceratophyllum submersum, in a Roman occupation site at Finsbury Circus, London; Reid, 1921 (Godwin, p.169): this suggests that it may have extended up the Thames in tidal marshes as far as London in Roman times, though the seeds may of course have been introduced from down stream. 

C. polyspermum L. Many-seeded Goosefoot N 15, 16 42/51. 

Native, on the coast; colonist of cultivated ground, inland; also in waste ground, and woodland rides. Widely distributed, and common in many parts of Kent, especially in the Weald: rarer on the chalk. 

69 All the entries in this list of 10km squares have been struck through in red ink, the samecolour ink having been used for the insertion of 10km grid square references in the account text and for the preparation of the distribution map.

70 In the manuscript given as C. botryoides Sm.
1st record, 1777; Faversham, E. Jacob, Pl. Fav., p.25.


2) Cuxton, AHWD. Beach Sheerness, JSM. Upchurch, FM Webb. Dartford Marshes.


4) 16 Sturry, 1947, L.W.W. Chislet, E.S.M. 15 Fordwich, Miss T. Webber, E.Robinson.

6) 67 Shorne. Court Wood Higham. 66 Roadside, Longfield Hill, 621679, Mrs D. Woods.


8) 04 Cadman’s Wood, Brook, ’51, DACL.

9) 36 Margate, 1950, L.W.W.

10) 55 Goldings, Sevenoaks, Lovis. Gault pit Greatness, RAC.


14) 73 Wood at Diprose, Benenden, 1949. 72 Sandhurst in fields, 1946. 83 near Breaches Pond, 1947. 82 Wittersham, 1956, MNE. Hawkhurst, JC Melvill. 83 Railway NE of Station, Tenterden 1959, MNE.

15) 01 Dungeness. 13 Hythe. 02 Lydd Common. S. of Ham St[reet], FJH. 92 R[oyal] M[ilitary] C[anal], E of Appledore, B. Dodds. SW of Small Hythe in wheatfield. 23.

16) 03 Aldington (Postling Green). Saltwood ESM. 13 Sandling Road, Hythe, waste ground, LJM. Cult[ivated] ground, Park Fm., V.F.P.D.

Blackheath 55; Woolwich 55; Gravesend; Cliffe ’55; Elham; Alkham; Dover; Sevenoaks; Hollingbourne; Doddington; Sandwich; Grain; Sheppey; Tunbridge Wells; W. Wickham; Chilham; Chislet; Dartford; Folkestone 55; Hythe; Aldington 55; Woodchurch; Tenterden; Cranbrook; Hawkhurst 56; E Oxney; W Oxney; Sandhurst; Romney 56; Dungeness 56; Edenbridge 55; Tonbridge 55; Pembridge 55; Marden 55; Headcorn; Hothfield; Ashford; Westerham; Malling; Maidstone; Chilham; Canterbury; Wingham; Orpington; Farningham 55; Cobham’55; Stockbury ’56; Teynham; Faversham ’56; Whitstable 55; Thanet ’55.

C. vulvaria L. Stinking Goosefoot. N 15, 16 8/51

Native, on dunes and beaches on the coast: alien in cultivated fields and waste ground inland; rare, though locally frequent.

1st record, 1777: Faversham, E. Jacob, Pl. Fav., p.13

1) Woolwich Common 1923, St J.M. in Hb. No recent records; many old ones: Brockley, Deptford; Blackheath;Woolwich Warren; Lewisham, M&G. Greenwich Park, W.W.R. Lee, Crockenhill.]

2) behind N Beach Grain, S. Davey 1994. 06 Faversham Creek, E. Jacob; 1949! L[ocally] v[ery] a[bundant] S of Queenborough, J Pitt. Woolwich Arsenal, AHWD; Higham Street, FJH; Upchurch, FM Webb; about Faversham, AHWD; Davington Hill, Cowell Fav.; By Medway S. of Rochester, FJH.

3) Whitstable, F.J.H.]

6) 76 Halling, 1949, in field W. of village, MNE.
7) Waldershare, Hevpworth.
8) Ringwould, Mrs Benson. Dover Parade, J. Woods.
9) Minster Abbey, below the walls, Flower.
10) Waste ground, W. Kent Cold Storage Works, Dunton Green, 1962, R.C. Palmer (Hb. Dr., Ox.).
13) [Hythe Town, FGEK.] 13 Old shingle, Willow Tree Fm., Burmarsh Rd., Hythe, IJM.
15) [abundant], Hythe W. Beach, CE Britton, abundant, 1949! MNE. 13 near Boat house Cafe, Seabrook, Miss V. Day. 02 Littlestone, ESM, abundant on sandy ground, 1946! MNE. 01 Dungeness, C.N.P. (near Romney, JSM.) 02 Lydd Common, 1946, MNE. Lydd SE, 65, B. Dodds.

† C. hybridum L. Maple-leaved Goosefoot, Sowbane. C 15, 16 7/51


2) [Woolwich, AHWD. Woolwich Common 1922 St JM.] [Crossness, AHWD.] [Faversham, Jacob.] Stone Marshes on pit fill, 1959, HMB.

3) 15 2 miles W. of Canterbury, 1949. 15 Orchard at Harbledown, 1951-2, Miss E. Milward.

4) 25 Wingham, field below Lit[tle] Britain Fm. 1947. 26 Stodmarsh, Undertrees Fm, 1958, E.G.P. MNE.

6) 57 near Darenth Wood, H.M. Pratt. (Singlewell, Northfleet, Greenhithe M&G.) Greenhithe, 1863, ex hb. Lamb MNE.

8) 15 Allotment edge, Bishopsbourne, 1960, MNE.

10) By path S. of church, Daenth, 1948-52, H.M.P.

11) Ryarsh, waste ground, 1896, W.M.R.


† C. urbicum L. extinct?] Upright Goosefoot. C

No recent records.

1st record, 1777: Faversham, E. Jacob, Pl. Fav., p.26. Some of the records given may be errors.

1) Greenwich Flats E de C.

2) Faversham, Jacob; Cliffe Creek, FJH.

4) Dyke by Road S. of Chislet, F.M. Webb.

9) Farmyards, Thanet, Dr. Hunter, Fl. Thanet.

10) Field near Fawke Common, 1874, Roper.

C. murale L. Nettle-leaved Goosefoot C 15, 16 17/51 [22/51]

Possibly native on the coast; only casual or colonist in fields, etc. Inland: rather rare.

1st record, 1777: Faversham, E. Jacob, Pl. Fav. P.14

In Surrey, Sussex, Essex and N. France


2) [77 Higham, F.J.H.] [86 Upchurch, FM Webb.] [06 Faversham, E. Jacob.] 96 Blacketts, Tonge, 1958, D.McC. 87 Field by Grain Church, Mrs. M.H. Dalling, 1962.

3) [16 Seasalter, AHWD & ESM.]


7) 76 Chatham, B. Carter.
8) 15 Kingston, in wheatfield SE of Bonny Bush Hill, Miss DACL, conf. R.W. Butcher. [S. of St. Margarets, JSM.]
9) 36 Margate, 1947; 1950; L.W.W.
10) 55 Kent Cold Storage Works, Dunton Green, 1961, R.C. Palmer.
11) 75 Barming Heath, H. Lamb, 1898 MNE.
12) 94 Little Chart, B. Carter. [reat] Chart ES.
13) 63 Halls Hole, Tunbridge Wells, 1897, Gilbert TLS. 54 High Brooms Brickworks, 1950, K.E.B.
15) 13 Willow Tree Farm, Burmarsh Rd., Hythe, 1956 MNE. 13 Fields at W. Hythe 1947. Lydd Common, 1946, MNE. 01 near Hope & Anchor, Dungeness; and E of Wicks; WJL Sladen, 1947. 02 Dungeness Bird Observatory, 56 JD Stephen, J Palmer. 12Appledore; 02 Littlestone ESM; 1901 Lady D[avy]. 02 Dymchurch, FJH.

C. cymosum 71
13) Tunbridge Wells, 1899, E.C. Gilbert, TLS.

‡ C. dessicatum A. Nelson 72
1) Green Street Green, on waste ground, JPM Brenan, BEC Rep, 1939-40, p.291.
12) Chylmington Dump DMcC & ES, det. JPMB.

‡ C. ficifolium Smith
Colonist. Cultivated and waste ground, rubbish tips, etc. Rare.
2) N. of Dartford, G.M. Brown. [Crossness; Woolwich Arsenal; AHWD. Canal, Higham Street, FJH. Below Faversham, Ray Syn; 1894, AHWD.]
4) Path E of Sandwich KEB.
5) Kale field Pilgrim Ho[use], Westerham, 1962.
6) [Ranscombe Farm, Cuxton, A.H.W.D.]
12) Chilmington Dump, ES, 983411.
13) Pantiles in Garden, 1953, KEB.  Dunorlan Park, KEB.

C. filifolium 73
13) Cowden, 1910, E.C. Gilbert, TLS.

‡ C. hircinum Schrad. 74

‡ C. berlandii Moq. 75

‡ C. opulifolium Schradex Koch & Ziz (casual alien). Grey Goosefoot. C
2) Brickfields by Faversham Creek, 1894 AHWD.
4) Sandwich. Worth, RGW.

71 Not in check-list, and no authority given. Probably a nomen nudum: perhaps C. griseochlorinum f. cymosum F. Dvořák, or C. gigantospermum f. cymosum Aellen (a synonym for C. simplex (Torr.) Raf.).
72 Given as C. pratericola Rydb. var. Thellungeanum Aellen. In manuscript.
73 Not in check-list and no authority cited, but C. filifolium Krock. Is now treated as a synonym of C. ficifolium Sm.
74 Not in check-list.
75 Given in manuscript with no details; not in check-list.
11) Tonbridge square, 1956, C. Stace. Hildenborough Sta[tion], 56, KEB.

C. album L. Fat-hen, White Goosefoot N 15, 16 51/51
Native, on the coast; introduced, inland; beaches, sea and river-walls, waste ground, farmyards, roadsides, cultivated land; extremely abundant throughout Kent
1st record, 1777; Faversham, E. Jacob, Pl. Fav., p.13
7) Kale field, Westwell, 1958 EGP MNE.
11) E. Malling. Bossenden West station 57, Miss M.E.M.
‡ C. reticulatum Aell. [this is annotated, incl[ude] under album]76
1) Green Street Green (Farnborough) JPMB, BEC, 1939-40, p.291.
12) Canterbury West station 57, Miss M.E.M.
‡ C. suecicum J. Murr.77 (indistinguishable from album except on microscopic char[acter]s of seed coat.)
13) specimen labelled this Tun[bridge] Wells, 1899, E.C. Gilbert TLS should be checked!

‡ C. probstii Aellen 78
Alien, Australia.
1) Shoddy field, Plaxdale Green, Hextable, 1948, D. McC; Hb. L.
4) Sandwich, Shoddy field, D.McC, 1959 [or 1960], MNE.
11) Comp, shoddy field, 1960, DMcC, MNE.

[‡] C. virgatum79
13) Building site, Culverden Down, Tunbridge Wells, 1962, KE Bull, det. J.P.M.B.

Atriplex L.
‡ A. hortensis L.80
1) Hayes, by road from Railway Station to Common, 1944.
7) Highstead Pit, Tunstall, DMcC.
12) Great Chart, 1950, ER & ES, MNE.
13) waste ground, High Brooms Brickworks, 1950, KE Bull.

A. sagittata Borkh.81

---

76 Not in check-list.
77 Not in check-list.
78 Not in check-list. There are two accounts for this species, in different parts of the manuscript, and these are combined here to produce a single account.
79 Not in check-list and no authority cited. If C. virgatum (L.) Ambrosi, it may now be a synonym for C. foliosum Asch.; if C. virgatum Thun., it may be a synonym for C. acuminatum Willd.; N. of Blaketts; Tonge
80 Not in check-list.
7) Highstead Pit, DMcC, 1953.  
12) Chylmington Dump, E.S. ("A. nitens"). G[rea]t Chart ES, det. JEL.

Native, in the same habitats as the last species [A. patula], and like it, very common throughout Kent.  
1st record, 1816[ near Tunbridge Wells, Forster, Fl. Tonbr., p.115.  
4) Pegwell Beach, 1946 MNE. Coast E. of Reculver, 1946 MNE. Shellness. 
6) Springhead, Northfleet. Buckland Rd, Luddesdown, PCH. 
10) Horton Kirby, PCH. S. Darenth PCH. River path below Shoreham PCH. Path, Ide Hill 483517 CAS. [Seven]oaks tip CAS. 
11) Peel St[reet] Hedges, Maidstone, 1957, EGP, MNE. By Medway, Tonbridge, CAS. E Peckham, CAS. 
15) Lydd, H. Elgar, 1897, MNE. E. of Sandgate, 1955, MNE. Palmmarsh, Hythe, MNE, LIM. 

A. glabriuscula Edmondston (incl. A. babingtonii Woods) Babington's Orache. N 15, 16 15/51
Native. Shingle beaches, sea walls, stony shores; frequent on the coast and on tidal estuaries.  
1st record, 1839: Sandwich salt pans, Cowell, F.G.E.K., p.75.  
2) Cray-Darent estuary, GMB. Stone Marshes, 1950, H.M.P. Grain S Beach MNE. Shellness in Sheppey MNE. 
3) Beach, Rose in Bloom Seasalter, H. Wilks, 1958 MNE. Leysdown Beach MNE. Swalecliffe, 1945 MNE, in saltmarsh. 
4) Pegwell Bay. N. of Deal; Sandwich Bay to Shellness point. Salt pans N. of Sandwich, 1950-59 MNE. 
9) Minnis Bay. 
11) N. Station y[ar]d, Edenbridge, 1956, DPY. 

A. longipes Drejer 83 Long-stalked Orache. N 

A. littoralis L. Grass-leaved Orache. 84 N 15, 16 15/51
Native. Sea shores, edges of salt marshes, sea walls; common on the coast and tidal estuaries, up the Thames to Crayford Ness, up the Medway to Cuxton, and up the Stour to Sandwich. 

81 Given as A. nitens, without citation; not in check-list.  
82 Given as A. hastata L., Halberd-leaved Orache. 
83 No account given. The taxon was only published as recognised in the British Isles in 1977; and in Kent, only its hybrid with A. prostrata has been recorded, viz. at Shellness in Sheppey, 1977 and 2016.  
84 Given as Shore Orache.

3) Whitstable W Beach REW. Swale cliffe. Chatham; Stockbury; Teynham; Faversham; Whitstable; Chislet; S. Thaxton.


Dungeness U[n](recorded); Romney U[n](recorded); Hythe U[n](recorded); Folkestone U[n](recorded); Dover U[n](recorded).

A. patula L. Common Orache. N 15, 16 48/51
Native. Salt and brackish marshes, sea-shores, on sand and shingle, on mud in ditches in alluvial marshes; cultivated and waste ground, inland; very common throughout Kent, especially along the coast and in estuaries. Very variable.


5) Sheppey; Grain; Cliffe; Gravesend; Dartford; Woolwich (Blackheath U[n](recorded)); E Thanet; Chislet; Whitstable; Faversham; Teynham; (Stockbury U[n](recorded)); Chatham; Cobham; Farningham; Keston 55; Beckenham DPY; Sandwich; Wingham 57; Canterbury; Chilham; Dodington 56; Hollingbourne 58; Maidstone; Malling; Sevenpaks 56; Westerham 56; Dover 55; Alkham 55; Elham 56; Ashford; Hothfield; Headcorn 55; Marden 53; Paddock Wood; Tonbridge; Edenbridge; Folkestone 55; Hythe 55; Aldington 55; Woodchurch; Tenterden 56; Cranbrook 55; Lamberhurst 56; Tonbridge W.[ells] S of W. Wickham PCH.

6) Sheppey; Grain; Cliffe; Gravesend; Dartford; Woolwich (Blackheath U[n](recorded)); E Thanet; Chislet; Whitstable; Faversham; Teynham; (Stockbury U[n](recorded)); Chatham; Cobham; Farningham; Keston 55; Beckenham DPY; Sandwich; Wingham 57; Canterbury; Chilham; Dodington 56; Hollingbourne 58; Maidstone; Malling; Sevenpaks 56; Westerham 56; Dover 55; Alkham 55; Elham 56; Ashford; Hothfield; Headcorn 55; Marden 53; Paddock Wood; Tonbridge; Edenbridge; Folkestone 55; Hythe 55; Aldington 55; Woodchurch; Tenterden 56; Cranbrook 55; Lamberhurst 56; Tonbridge W.[ells] S of W. Wickham PCH.

7) Sheppey; Grain; Cliffe; Gravesend; Dartford; Woolwich (Blackheath U[n](recorded)); E Thanet; Chislet; Whitstable; Faversham; Teynham; (Stockbury U[n](recorded)); Chatham; Cobham; Farningham; Keston 55; Beckenham DPY; Sandwich; Wingham 57; Canterbury; Chilham; Dodington 56; Hollingbourne 58; Maidstone; Malling; Sevenpaks 56; Westerham 56; Dover 55; Alkham 55; Elham 56; Ashford; Hothfield; Headcorn 55; Marden 53; Paddock Wood; Tonbridge; Edenbridge; Folkestone 55; Hythe 55; Aldington 55; Woodchurch; Tenterden 56; Cranbrook 55; Lamberhurst 56; Tonbridge W.[ells] S of W. Wickham PCH.

8) Sheppey; Grain; Cliffe; Gravesend; Dartford; Woolwich (Blackheath U[n](recorded)); E Thanet; Chislet; Whitstable; Faversham; Teynham; (Stockbury U[n](recorded)); Chatham; Cobham; Farningham; Keston 55; Beckenham DPY; Sandwich; Wingham 57; Canterbury; Chilham; Dodington 56; Hollingbourne 58; Maidstone; Malling; Sevenpaks 56; Westerham 56; Dover 55; Alkham 55; Elham 56; Ashford; Hothfield; Headcorn 55; Marden 53; Paddock Wood; Tonbridge; Edenbridge; Folkestone 55; Hythe 55; Aldington 55; Woodchurch; Tenterden 56; Cranbrook 55; Lamberhurst 56; Tonbridge W.[ells] S of W. Wickham PCH.

9) Sheppey; Grain; Cliffe; Gravesend; Dartford; Woolwich (Blackheath U[n](recorded)); E Thanet; Chislet; Whitstable; Faversham; Teynham; (Stockbury U[n](recorded)); Chatham; Cobham; Farningham; Keston 55; Beckenham DPY; Sandwich; Wingham 57; Canterbury; Chilham; Dodington 56; Hollingbourne 58; Maidstone; Malling; Sevenpaks 56; Westerham 56; Dover 55; Alkham 55; Elham 56; Ashford; Hothfield; Headcorn 55; Marden 53; Paddock Wood; Tonbridge; Edenbridge; Folkestone 55; Hythe 55; Aldington 55; Woodchurch; Tenterden 56; Cranbrook 55; Lamberhurst 56; Tonbridge W.[ells] S of W. Wickham PCH.

10) Sheppey; Grain; Cliffe; Gravesend; Dartford; Woolwich (Blackheath U[n](recorded)); E Thanet; Chislet; Whitstable; Faversham; Teynham; (Stockbury U[n](recorded)); Chatham; Cobham; Farningham; Keston 55; Beckenham DPY; Sandwich; Wingham 57; Canterbury; Chilham; Dodington 56; Hollingbourne 58; Maidstone; Malling; Sevenpaks 56; Westerham 56; Dover 55; Alkham 55; Elham 56; Ashford; Hothfield; Headcorn 55; Marden 53; Paddock Wood; Tonbridge; Edenbridge; Folkestone 55; Hythe 55; Aldington 55; Woodchurch; Tenterden 56; Cranbrook 55; Lamberhurst 56; Tonbridge W.[ells] S of W. Wickham PCH.


15) Hythe, MNE. Lydd airport, DMcC.

Sheppey; Grain; Cliffe; Gravesend; Dartford; Woolwich (Blackheath U[n](recorded)); E Thanet; Chislet; Whitstable; Faversham; Teynham; (Stockbury U[n](recorded)); Chatham; Cobham; Farningham; Keston 55; Beckenham DPY; Sandwich; Wingham 57; Canterbury; Chilham; Dodington 56; Hollingbourne 58; Maidstone; Malling; Sevenpaks 56; Westerham 56; Dover 55; Alkham 55; Elham 56; Ashford; Hothfield; Headcorn 55; Marden 53; Paddock Wood; Tonbridge; Edenbridge; Folkestone 55; Hythe 55; Aldington 55; Woodchurch; Tenterden 56; Cranbrook 55; Lamberhurst 56; Tonbridge W.[ells] S of W. Wickham PCH.

var. bracteata Westerl.

11) Edenbridge Station, 1956, D.P.Y., det. J.P.M.B.

A. laciniata L.85 Frosted Orache. N 15, 16 7/51
Native. Sandy sea shores, near the drift line, fore-dunes; not common, but locally frequent on the coast where sandy beaches exist.

1st record, 1777: Sheerness, E. Jacob, Pl. Fav., p10

2) Grain N. Beach, 1945! MNE. Grain S Beach, 1959 MNE. Leysdown, Hb. Davis, 1918 MNE. Shellness in Sheppey, 1946-56 MNE. [Sheerness, extinct, E. Jacob.] 3) [extinct from Sealsalter to Herne Bay,]


A. portulacoides L.86 Sea-purslane. N 15, 16 15/51 ?17/51
Native. Better drained parts of salt marshes, especially along creek banks, and at the abrupt lower margin so characteristic of the eroding Thames-Medway salt marshes; also on sea walls, round salt water ponds, and on muddy beaches; common on the N coast, ascending the Thames estuary, to Stone, the Medway up to Cuxton and Wouldham, and the Stour to Sandwich; much less common on the SE coast.

85 Given in manuscript as A. sabulosa Rouay, with A. laciniata L.,p.p. and A. arenaria Woods as synonyms.
86 Given as Halimione portulacoides (L.) Aelii., with Oblione portulacoides (L.) Moq. as a synonym.
1st record, 1597: Kings Ferry, Sheppey, Gerard, Herbal, p.420.

1) Reported in wheat stubble as a casual introduction, Orpington, 1899, W.H.G.


3) Swalecliffe, 1945 MNE.

4) Reculvers; W. of Minnis Bay. Pegwell Bay, Shellness.#

5) Not seen recently at Dover or Lydden spout (G. Waltons records).

6) M. Pedunculata L. Pedunculate Sea-purslane. [15, 16]

Native. Salt marshes, particularly on bare stony or sandy ground, less often on mud; very rare and not recently seen. Most of the records come from the Stour estuary, where it has been seen in a number of places, particularly near Ebbsfleet.

First record, about 1720; between Sandwich, and Pegwell, Petiver and Sherard Mss. Latest records, Ebbsfleet, 1930, A.J.Wilmott; Sportsman, 1924, Mrs Graham.

2) 2 miles below Gravesend, Mitten; Gravesend, 1842, BM Holman. Near Shorne Battery, B. Syme.

3) On black, boggy ground on (the right of) Seashore between Gravesend and Whitstable (near Swalecliffe, W. Wood in F.G.E.K.). Herne Bay, 1873, P. Marnock BM.

4) Many localities named in the Marshes of the Stour estuary from Sandwich to Ebbsfleet, from 1838–42, Hb. Winterbottom BM, Sandwich, 1856, J.T. Syme ex Hb. Lamb. MNE, to C.E. Salmon, 1924 BM. For latest records see above. Sandwich Beach, Flower. The later records are all from the S. end of Pegwell Bay near Ebbsfleet.

15) “Romney Marsh” in Hb. BM.

Many botanists have searched for this plant in vain in Kent since 1930.

Beta L.88

B. vulgaris L. ssp maritima (L.) Arcang. Sea Beet. N 20/51

Tidal river banks, edges of salt marshes, sea and river walls, beaches, cliffs; common on the coast and the tidal estuaries.

1st record, 1629: Gillingham to Sheppey, Johnson, Iter, p.5.


Woolwich; Dartford; Gravesend; Cliffe; Grain; Sheppey; Maidstone; Chatham; Stockbury; Teynham; Faversham; Whitstable; Chislet.


4) W. of Minnis Bay (St Nicholas at Wade). Sandwich Bay. Deal. Pegwell Bay. Shellness (Sandwich). Kingsdown.

8) Dover, E.Cliff (J Ridley MNE); W. Cliff; beach and salting below Abbots Cliff; St Margarets. Dover


15) 13 Hythe. 02 Dymchurch S. & N. 02 St Marys Bay. 02 Romney Golf Course. 02 Greatstone. 01 Dungeness. 13 Seabrook, LJM.

16) Folkestone, East Wear Bay. Sandgate east.

Dungeness, Romney, Hythe; Folkestone.

Ssp. vulgaris

87 Given as Halimione pedunculata (L.) Aell., synonym Obione pedunculata (L.) Moq.

88 Follows Chenopodium in manuscript.

89 Subspecies cited as(L.) Thell. in manuscript.
5) Downe tip ’56, DPY.
9) Minnis Bay, MS Campbell 1935 BM.

‡ B. trigyna W[aldst.] & K[it].
2) Erith, St.J.M., BEC, 1926, p.130; Hb. St.J.M.

Sarcocornia A.J. Scott
S. perennis (Miller) A.J.Scott† Perennial Glasswort.  N 15, 16 8/51
Native, on firm consolidated mud in the general salt marsh community; sometimes on more sandy mud. Not extending up estuaries away from the zone of highest salinity. Not on the S. Kent coast now.
2) 87 All Hallows.  87 Grain, Ray Syn ed.3. (1945-91), NE Beach 1945 MNE, 1959 MNE; S Beach 1948 MNE.  77 Egypt Bay.  77 St Mary’s Bay.  87 Lower Stoke.  96 Conyers Creek.  06 Nagden Marshes.  06 Graveney Marshes.  86 Funton Creek, ’62.  86 Chetney Marshes.  96 Marshes of Elmley 1950 MNE, 1954 MNE; and 06 Harty.  06 Shellness 1944 MNE, 1956 MNE.  07 N. of Leysdown, 1918, Hb Davis MNE; 1956.  97 Queenborough ESM.
4) 36 Pegwell Bay C.P.S.K. (1946-55!).  36 Shellness, in saline slacks, 1954 MNE.  35 [Deal, WWR.]
15) [02 New Romney, E.S.M. (extinct through drainage)] South Brooks,E.P.  Stockbury sq[uare]; Cliffe; Grain; Sheppey; E Thanet; Chislet; Faversham; Teynham.

Absent in Surrey, very local in Sussex (Rye, Shoreham and Chicheste Harbour only) but common in the Essex Saltmarshes. Unrecorded in Pas de Calais.

Salicornia L.
S. pusilla J. Woods One-flowered Glasswort.  N 15,16 (S. disarticulata Moss)
Native. At the upper edge of the general salt marsh association, about spring tide level; locally frequent in the Thames, Medway and Stour estuaries.
1st record
4) 36 Shellness, at mouth of R. Stour, 1954 MNE.
Stockbury; Teynham; Faversham; Grain; Cliffe; Stourmouth.

S. ramosissima J. Woods Purple Glasswort† Native, at various levels in the general salt-marsh association, usually in fairly closed vegetation; very common 2) on the N. coast, from Cliffe to Grain, on the Medway up to Cuxton, throughout the Swale salt marshes, and at Leysdown, 4) the Stour estuary, and 15) at the Midrips. Exceedingly variable; there are many forms which form distinct-looking populations, particularly by the Swale and in Grain, but recent experimental work is claimed to indicate that these are not really distinct. Far more experimental work is needed on the poly morphous forms of the Medway – Swale estuarine system before the problem can be said to be settled.
1st record, 1899: Fl. Kent

90 Not in check-list.
91 Given under Salicornia, as Salicornia perennis (Gouan) Mill.
92 Common annual glasswort, in the manuscript.
S. gracillima (Towns.) Moss 15, 16 (included under S. ramosissima)93.
   Native. General salt-marsh associations, not uncommon, but a doubtfully distinct species generically, though appearing distinctive in the field.
4) Shellness, near Sandwich.

S. prostrata Pall. Sec. Moss94

S. appressa (Dum.) Dum.95
   Drier, thinly vegetated salt marshes, especially upon dry saline mud behind sea walls and beaches; locally abundant on the coast and in estuaries.
4) Shellness, Sandwich 1954 MNE.
15) New Romney, 1891, E.S.M. (1950!).

S. smithiana Moss96
   Drying saline mud flats at the top of salt marshes and behind sea walls; locally frequent.
4) E of Reculver, 1946, MNE.

S. europaea L. Common Glasswort. N 15, 16 12/52
   Native, common in the lower zones of salt marshes, on rather bare mud.
   1st record97
2) 77 Higham Marshes. 77 Egypt Bay. 77 St Mary’s Bay. 87 All Hallows. 67 Swanscombe Marshes, 1945 MNE. 96 Temple Marsh, Strood 1954 MNE. E of Frindsbury, 1944 MNE, 1945 MNE, 1949 MNE. 77 Hoo. 77 Lower Stoke. 76 Cuxton. 76 Borstal. 87 Grain W shore 1945, 1948 MNE, 1959 MNE. 97 Queenborough. 86 Chetney Marshes, 1961, E.P. 96 Elmley, 1950 MNE, 1954 MNE. 06 Harty, 1961. 86 Funton Marshes, ‘62. 86 Lower Halstow. 06 Shellness, Sheppey, 1956 MNE, 1960 MNE. Oare Creek. 06 Nagden Marshes. 96 Conyer Creek. 06 Graveney Marshes. Castle Coot, Seasalter, 1960 MNE.

93 Although inclusion was Francis Rose’s intention, the records appear thus in the manuscript under S. gracillima, a taxon not in the check-list.
94 Given a heading in the manuscript, but without entry. Not in check-list and to be treated as included in S. ramosissima.
95 Not in check-list and to be treated as included in S. ramosissima.
96 Not in check-list and to be treated as included in S. ramosissima.
97 Unstated.
3) 16 Whitstable GMB.
4) 36 Bloody point. Shellness, near Sandwich, 1954 MNE. 35 Salt pans, N. of Sandwich.
15) 13 Mud deposits (saline) Palmarsh gravel pits, L.J.M.

(S. europaea) L. sec. Wilmott.
2) Swanscombe Marshes, 1945, AJW & F.R. Higham Marshes, 1948, F.R. teste A.J.W. St Mary’s Bay,

S. obscura  P. Ball & Tutin  Glaucous Glasswort.  N

S. nitens  P. Ball & Tutin (= S. emerici Duval-Jouve)  Shiny Glasswort.  N
15) 92 Fairfield, saline meadows by church, 986264, K.D.R., det. T.G. Tutin.

S. fragilis  P. Ball and Tutin  Yellow Glasswort.  N

S. dolichostachya  Moss  Long-spiked Glasswort.  N  15, 16 6/52

Native. On bare mud below the closed salt marsh association; locally frequent on the N. coast.
1st record, 98

2) 77 Bare mud below saltings E. of Frindsbury, 1949 MNE. (? at High Halstow or Cliffe or Higham). 87 Grain., 1945 MNE. 87 All Hallows. 97 Elmley Marshes, 1950 MNE. 97 Queenborough. Faversham Creek, ES. 06 Shellness, Sheppey, 1949 MNE. 06 Harty Marshes. 06 Nagden Marshes, Mrs B. Dodds, det. D.McC.

4) 36 Stour estuary, Shellness, 1954 MNE.

S. vera  Forsskål ex Gmelin  Shrubby Sea-blite  N  15

Native. On firm sand and on shingle at the upper parts of salt marshes; extremely rare, and only spontaneous at one place in 2); naturalised in 15), locally abundant in the salt marshes of Essex; not in Sussex or Surrey; only naturalised in Pas de Calais.

2) Lower Halstow; by sea wall on edge of Creek, 1964, E.G.P.
15) Abundant round a salt water lagoon at the Midrips on muddy shingle (vc14). Originally reported planted by the Range warden at Lydd, teste R.G. Williams, but now well naturalised ad spreading, 1947.

S. maritima  (L.) Dumort. 100  Annual Sea-blite  N  15, 16 18/51

Native. Salt marshes and sea walls. Very common in the Thames, Medway and Stour tidal estuaries, more local on the S. coast of Kent where fewer suitable habitats occur.


3) 16 Swale Cliffe. 16 Tankerton. 16 Whitstable.
4) 26 E of Reculver. 36 Pegwell Bay. 36 Shellness, and Stour marshes. Salting behind Shingle Beach, 1m W of Minnis Bay, 1962! 35 up to Sandwich.
8) 34 Beach below Shakespearees Cliff.

98 Unstated; it is mentioned for Kent in the Cambridge British Flora, 1914.
99 Given as S. fruticosa Forsk.
100 Cited as S. maritima Dum. In manuscript, Englished as plain ‘Seablite’, and order of Suaeda species is reversed.
9) 36 Cliffsend. 26 Minnis Bay.

15) Dymchurch (02 S. of village between main road and sea wall, 13 N. of village by sluice.) 13 Seabrook. 01 Wicks. 01 South Brooks. 01 Midrips 92 Fairfield, saline meadow by Church, 1962, Mrs. K.D.R.

16) Sandgate Beach and sea wall, VFP Day. 23 Eastwear Bay.

Dartford; Gravesend; Cliffe; Grain; Sheppey; Hythe; Romney; Chatham; Sheppey; Teynham; Faversham; Whitstable; Chislet; Thanet; Sandwich; Dover; Folkestone; Dungeness.

Salsola L.

S. kali L. ssp. kali 101 Prickly Saltwort. N 15,16

Native. Sandy shores, mostly along the strand zone, where its seeds are deposited by high spring tides. Very local, as the extent of suitable sandy shores is limited.


4) Pegwell Bay. Abundant from Shellness to Sandwich Bay, 1954 MNE.

8) Beach, Lydden Spout, 1945, DHK.


16) Below Folkestone Warren, 1898, Hb Lamb MNE; extinct at present.

‡ S. kali L. var. tenuifolia

2) Faversham Miss M. Cobbe, BEC, 1923, p.209.

S. kali L. ssp. ruthenica (Iljin) Soó 102

13) High Brooms tips 44, JEL.

AMARANTHACEAE

Amaranthus L. 103

‡ A. retroflexus L. Common Amaranth 104 16

Alien, now widespread in cultivated land, especially where “shoddy” has been used. Persistent at 1) Farningham Wood, Stone hill Green, 2) N. of Dartford, 3) about E Malling and Barming.


3) Garden Sealsalter, HMW ’56. Whitstable harbour REW.


9) Sacketts Hill, Broadstairs, on dump in pit, 1958, MNE. Ebbsfleet 1936 PHC.


15) near Hythe, on shingle, 1953, D.P. Murray, MNE.

var. deliliei (Richter & Lorent) 1

1) Hextable, 1953, DMcc.

[‡] A. hybridus L. 105 16 Green Pigweed

Alien, in shoddy fields.

101 Named as species, rather than subspecies, in manuscript.

102 Not in check-list; given as S. pestifer.

103 In manuscript given following Salicornia, in species order: A. retroflexus, hybridus, thunbergii, albus, graecizans (as angustifolius), quitensis, caudatus.

104 Pigweed, in the manuscript.

105 Not in check-list.
1) Stonehill Green, Hextable, N.W. of Swanley, 1948, RAB, FR, ECW, MNE.
2) Motney Hill, Rainham, 1951, DMcC.
6) Longfield Tip, DMcC.
9) Birchington, 1960, KDR.

‡ A. quitensis Kunth
11) Shoddy field, Comp, 1960, DMcC, MNE.

‡ A. caudatus
6) Longfield tip, 48, DMcC.

‡ A. albus L.

1) Bromley, Cole (as A. blitum L.).
3) Faversham, Jacob, 1777*.
4) Deal, 1880, Baker.
5) Cudham, in Fagopyrum '52 PCH det. BM (as albus).
6) Longfield tip, DMcC, '56 (albus).
15) waste ground, former dunes, behind esplanade at Littlestone, 1946, det. F.H.P., 1962 (as albus).

‡ A. thunbergii Moq.

4) Sandwich, 1959, DMcC (forma maculatus) MNE.

‡ A. graecizans L.
6) Longfield tip, DMcC. 1956 MNE.

PORTULACACEAE

Portulaca L.

‡ P. oleracea L.

Claytonia L.

‡ C. perfoliata Donn ex Willd. Spring Beauty. C 15, 16 Naturalised in sandy open ground; now established locally.
1st record, 1869: Etham, J. Cracknell

3) Weed, Whitstable Castle G[rounds]; Kingsdown Park, Tankerton, REW.
4) Sandwich Bay, 1950, M.E.M.
8) Wood opp[osite] Red Lion, Denton, VFPD.
11) Borough Green, D.McC. Allington, 1936, MNE.
16) Sandling Park, Hythe, Miss V. Day; 1952, DACL. Garden, Folkestone, 1949, V. Day.

C. sibirica L. 110 PinkPurslane. H 16
Alien, naturalised in several places.

1) Shortlands, ASK.
10) 55 Oldbury Lane, Mrs. Besch. 55 near Sevenoaks GMB.
16) 13 Sandling Park, DACL, ’52.

Montia L.
M. fontana L. 111 Blinks. N 15, 16 16/52 [23/52]
Native. Bare, sandy or gravelly ground, and turf, shingle beaches, arable land on gravelly soil, either by springs or in places liable to be very wet in winter: now quite rare.
2) 06 Meadows by Faversham, A.G. Turner; 1946 DHK. (76 Snodland by Ditches, P. Jacob, FGEK.) 97 Meadow N. of Kings ferry bidge, Sheppey, 1960, E. Philp.
6) [67 Gravesend Hill, R. Pocock, 1813 BM.]
9) [26 Birchington; 36 Margate; 36 Minster; 26 Monkton and 2 St Nicholas Marshes, Dr. Hunter, F.G.E.K.]
10) 45 Marshy g[roun]d by stream ¼ m S of Westerham, GMB.
13) [53 Tunbridge Wells Common, W.W.R.]
16) [Turf near boathouse, E. of Sandgate, C.P.S.K.] 13 Gossy Banks, Hythe; 23 Brockhill; Path, Pedlinge, LJM.

Segregate records:
M. fontana ssp. chronodispersa (Fenzl) S.M. Walters
1) 46 Keston Common, Hb. FW Payne BM det EBBa. Crayford, R.P. det. EBBa, BM, “prob[ably]”.
3) 15 Ride, Trenley Park Wood, Fordwich, 1949, FR, det. S.M.W., MNE.
4) Deal dunes, 1889, ESM, BM det. SMW& EBBa.
6) 67 Gravesend Hill, 1813, R. Pocock, BM, det. SMW.

110 Given as Claytonia alsinoides Sims (Montia sibirica L.)
111 The check-list gives only "M. fontana ssp. minor Hayw. (= ssp chronodispersa (Fenzl) Walters)", which seems surprising, so the account is given here with manuscript nomenclature, dealing with the various segregates.
12) 04 SE of Hinckley, open boggy field, 1948, FR, det. S.M.W., MNE.
15) 13 Gravel pits W. of Hythe, 1949, FR, det. S.M.W., MNE.
M. fontana L. ssp. indet.
1) 46 Sparrow Fields, W. of Orpington, 1954, CA Swain, det. S.M.W., MNE.
12) 13 Gibbons Brook, Sellindge, 1945, FR, det. SMW MNE.
M. fontana ssp. intermedia (Beeby) SMW

CARYOPHYLLACEA

Arenaria L.
A. serpyllifolia L. ssp. serpyllifolia112 Thyme-leaved Sandwort.  N
Native. Dry base-rich ground, bare places on chalk downs, old quarries, wall tops, dunes, beaches: very common in suitable places on chalk, Ragstone, Folkestone sand, and the coast, but absent from nearly the whole of the Low and High Weald except at Stone Cliff and Tonbridge. Moderately calcicole.

1st record, 1777: Faversham, E. Jacob, Pl. Fav. P.4. The var. glutinosa Koch is not uncommon on sea-beaches. Seeds abundant at Minnis Bay, in Late Bronze Age, clearly ruderal or weed at that time (Conolly, 1941: Godwin, p.94). c.1425, in plaster from House, Larkfield, JRB Arthur.

2) Shellness; Leysdown MNE; Sealsalter – these appear to be var. glutinosa Koch. Egypt Bay REW. Woolwich Arsenal AHWD. Grain S Beach, AHWD 1893 BM; 1955 MNE (glutinosa). N of Naden Marshes (1928, CES, BM) = Castle Coot (glutinosa).
3) Beach W. of Sealsalter, 1947 MNE. Whitstable. Swalecliffe Beach, REW.
4) Sandwich, 1875 J.F. Duthie BM det. E Drabble (abundant from Deal to Shellness on the dunes!). Kingsdown Beach, 1954 MNE. Pegwell Bay.
5) Chalk W. of Eynsford PCH.
10) Old wall, Darenth AHWD. 45 Wall Brasted 471551, CAS. 55 Wall of house near Ightham Mote, CAS. 55 Sandpit Riverhead CAS. 55 E of Sevenoaks PM Hall 1933 (v[ar]. scabra) BM. 56 Horton Kirby. 56 S. Darenth. 45 Farley Common, Westerham, 1934, DYP.
12) 94 Hothfield Common. 04 Ashford Warren.
13) [very] rare, 63 S. of High Wood, Hawkenbury, GE Shaw.
14) very rare; only at 83 Tenterden R[ail]y[wa]y Sta[tion], 1959; and 92 Stone Cliff, Oxney, 1949.

A. serpyllifolia L. ssp. leptoclados (Reichb.) Nyman  N  15, 16  Slender Thyme-leaved Sandwort

112 Given as plain A. serpyllifolia (ssp. leptoclados was treated as a separate species).
Native. Old walls, dry banks on chalk, sand and ragstone, bare ground on chalk, dry arable land, waste ground; locally common with a similar distribution to A. serpyllifolia, but less calcicole, more often found in arable land; less often on the sea shores. Absent from the High Weald, Grain to Sheppey, and most of the N clast, but occurs in Thanet.

1st record, probably 1866: Canterbury, Hb. J.S. Mill.


2) Upnor, by shore, 1963, H.M.P. [Isle of Grain, St J.M. Hb.] (Absent Faversham, Whitstable, Bexley, Grain, Sheppey.)

4) Sandwich Bay Dunes, 1954 MNE. Walmer Beach, 1960, B. Nash, MNE.

5) 36 Stubble near police kennels, SW of Keston PCH. Cornfield on downs NE of Brasted RAC.


10) abs[ent] Westerham. Old wall, Sutton at Hone, 1945 MNE.


‡ A. balearica L. Mossy Sandwort. H


Moehringia L.113

M. trinervia (L.) Clairv. Three-nerved Sandwort N 15, 16

Native. Woodlands on all but the most acid soils, hedgebanks. Common throughout most of Kent, but absent from Grain, Thanet 9), Sheppey, the lower Stour marshes, and Romney Marsh 15).

1st record, 1763: Charlton Wood, Martyn, Pl. Cant., p.52.


113 Follows Honkenya in manuscript.
2) Hawes Wood, Newington. 804759 Copse S of St Marys Hoo, 1955 MNE.
12) Folkestone, G.E. Sm. (Eastwear Bay, 1956!).

Honkenya Ehrh.
M. hybrida (Villars) Schischkin

Minuartia L.
S. media (L.) Villars

Stellaria L. 115

114 Cited as M. hybrida (L.) Hiern. and follows Sagina, preceding Honkenya.
115 Follows Cerastium and Myosotis in manuscript.
Native. Cultivated land, waste ground, roadsides, hedges, copses, meadows, etc.; abundant everywhere.


3) Arable E. of Seasalter Church 0964, 0965, 1065, 1958 HMW.

4) Wenderton Manor Road ’58, B. Nash. Sandwich Bay.


8) Wye.


16) Aldegate.

S. pallida (Dumort.) Piré 117

15, 16 Lesser Chickweed N

Native. Dry sandy or gravelly fields, sand dunes and beaches, open places in sandy woods, heaths; local, but frequent on the coast and the Folkestone Sand.

1st record: Fl. Kent, 1899.


3) Rough Common, RGW.

4) Dunes from Deal to Sandwich Bay, F.J.H., abund[ant] (abund[ant], 1946!). Deal links, 1961, MNE.

6) Near Shorne Windmill, abundant, 1946.


12) Hothfield Heath, 1946–54 MNE.


S. neglecta Weihe 118

Greater Chickweed N

S. media var. major Koch; S. umbrosa Opiz; incl. S. Elizabethae F. Schultz.


Native. Damp copses on base-rich alluvial soils by stream and rivers; rare, but locally abundant on the Medway in Ash copses on alluvium, and in the Cray, Darent and Stour Valleys in very limited localities.

116 Plain Chickweed in manuscript.

117 Given as Stellaria apetala Ucria incl. S. pallida (Dum.) Piré & S. Boreau Jord.

118 A distribution sketch map is given in the manuscript as well as some fragmentary assemblages of hectad map squares which are consolidated here to provide a single hectad map.
4) 16 Westbere Marshes, SS, RGW.
7) [05 Challock Woods, near Nursery above Whitehill, E.S.]
10) 57 Abundant in wet copse S. of Darenth Church, AHWD; 1944-1950! MNE. 57 By the Roman Villa, S.
   Darenth, 1958.
11) Abundant in damp Ash coppices [sic] by R. Medway: (1) 54 above Tonbridge, 1945 MNE; 54 copse by Medway, Barden Park, Tonbridge, + ...; '57, CAS; (2) 64 above Hartlake Bridge, 1956 MNE; (3) 64 S. of E. Peckham, 1956, MNE; (4) 64 near Medway, Brandbridges, 1957, C. Stace.
12) 95 Wet copse by R. Stour N. of Bowley Fm, Lenham, 1944, MNE. 94 Wet copse by Stour, Charing Heath, 917486, E.S. 04 Wet copse, 043443, N. of Blackwall Farm, Willesborough, E. Scott (1955!) MNE. N of Willesborough Lees EP. Stour, Little Chart Mill.
13) Bargrove Wood, SW of Frogholt, VFP Day.
16) [Folkestone, B.D. Jackson.]

S. holostea L. 15, 15 Greater Chickweed “Satin Lady”, Folkestone N
Native. Woodland and hedgebanks, roadsides: very common indeed, one of our most abundant plants, yet rare in Thanet and Romney Marsh, and so far only found by one roadside in the Isle of Sheppey: this seems inexplicable.119

1st record: 1632: Johnson Kent Descriptio p36: “Holosteum Ruellii, Gramen leucanthemi, Dod. Faversham, Woods near”120
1) Petts Wood. Lessness by pond RAB. Abbey Wood. Bostall Heath AHWD. NW of Petts Wood Sts[tion].
2) Only found in Isle of Sheppey by roadside 1 mile N. of Kings Ferry Bridge. Funton Creek, bank by R[oa]d.
   804759 Fenn St[reet]. Hawes Wood. Hedge N. of Oare C.T. 9472 Minster E.P. W of Leysdown EP.
6E) High Halstow 60, HAS. Higham Upshire copse. NE of Hoo Common.
9) Minster, Thanet, RGW 61/36.
10) Horton Kirby PCH. R[oa]dside N of Farningham R[oa]d PCH. Westerham Wood, B. Sennitt (82!). S of
   Owley Gill. Rolvenden Sta[tion]. NE Pk’s Fm Rolvenden.
15) Dungeness, rare, J. Hubbard.
16) S of and NW of Aldington Knoll, LJM. Seabrook. Casebourne Wood. Hedge N of Horn St[reet]. W of Hythe
   Lane to Scar. Shornecliffe. Wood W of Hythe.

119 This is qualified by finds by Eric Philp given below.
120 Although given within the quotation marks, the last words (in English) are not part of the Descriptio text.
S. palustris Retz.  15  Marsh Stitchwort  N
(incl. S. dilleniana Moench, and S. glauca With.)

Native.  Swampy Fens and pond borders: very rare, though in several places in the fen swamps of the lower Stour Valley.


[The Tunbridge Wells locality given as the 1st record in Fl. Kent (1899) is in Sussex; it is extinct there now any way.]

S. graminea L.  15, 16  Lesser Stitchwort  N

Native.  Grass-heaths, dry pastures upon sand and gravel, occasionally on the downs where there is a drift over the chalk; very common in the Weald and on the Tertiaries; rather rare in the Marsh districts and the chalk country.

1st record, 1777: Faversham, E. Jacob, Pl. Fav., p.22.


2)  97 Minster Marshes, Sheppey, 1918, A.G. Davis MNE.  77 Meadow ¾ m S of Cliffe 1944.  Bagshot Sands E of Minster.  77 Upnor.  87 Grain, PCH.  96 Tonge, DMcC.


4)  35 Sandwich Bay.


7)  Walderslade; Lords Wood, BC.  95 Lenham Downs.  86 Downs near Three Squirrels, Stockbury, 1943 MNE, 45.  Squirrels Wood 45.  95 Roadside, Highcroft, 959503, ES.

8)  Swingfield Minnis DACL, ’56.


12)  94 Hothfield Heath.  04 Willesborough Lees.  94 Ashford Warren.  03 Sellinge.  04 Fen meadow W. of Cuckoldscoomb, Brook, 44.


14)  72 S. of Hawkhurst PCH.

15)  Hexden Channel.

16)  Newington Moor.

S. uliginosa Murray121  15, 16  Bog Stitchwort  N

Valley bogs, boggy alderwoods, wet hollows and ruts in damp woods, usually on acid soils; locally common in the Weald and on the Tertiaries and the greensand.

121  Given as Stellaria alsine Grimm, with S. uliginosa as a synonym.
1st record, 1632: East of Canterbury, Johnson, Descriptio, p.30


2) Meadow, Wey Street Farm, Hernhill, 061623, C. Turner.


5) Garden, Spring Head, (Southfleet) R. Pocock, 1818.


7) Wet meadow 1m E. of Westerham, 1955, MNE. Seal Chart, Roper; SW corner, 1954!

8) Meadow, Wey Street Farm, Hernhill, 061623, C. Turner.

9) Meadow by Stour, Chilham Mill 1962, Mrs Brickenden. Meadow N of river, E. Stour Farm, Godmersham, E.S.


14) Brockhill Marsh, 1962, DACL.

Holosteum L.

[H. umbellatum L. (walls of St. Mary's Barracks, Chatham, & casemates of St. Mary's Barracks years ago.). (J. Hepworth, Rochester& District Sketch Guide, 1913)] Jagged Chickweed

Cerastium L. 122

C. arvense L. 123 Field Mouse-ear N 15, 16

Native.. Dry pastures and roadside banks, principally on chalk, but also on sand and gravel; abundant on chalky roadsides (the relics of former downland, now mostly ploughed) all over the largely drift free chalk plateau of E. Kent. E. of Watling Street, and in Thanet; very scattered and rather rare on the chalk and greensand in Mid and W. Kent; absent from the Weald and N. Kent

1st record: probably Johnson's Iter, 1629; “Alsine hirsuta major Gravesend to Rochester” — but see Fl. Kent.

1) Keston, 1926, J.E.L. Hb. L. Roadside E of Swanley, 1951, MNE.

2) Keston, 1926, J.E.L. Hb. L. Roadside E of Swanley, 1951, MNE.

3) Sandy hills between Boughton and Dunkirk, Dowker.

4) Dunes, Sandwich Bay, v[ery] local on fixed dunes, 1946, W.J.L.S. Shingle N of Deal, DHK.

5) Orpington by-Pass, 1931; Westerham, 1942, PCH.


7) S. of Ospringe, Mrs. Verschoyle. (Hollingbourne Downs, JH Allekin, 1911; E. Elgar [sic], 1925, MNE.)

8) Abundant in the remaining chalk turf (mostly by roadsides) on the open chalk plateau in the E. of this district. Walmer, Miss Day. St. Margarets, FJH (46!) E. of Dover Castle, F.G.E.K. (1946!). Lower Hardres RGW. Free Down, Ringwould, F.J.H. (1947!-54!), MNE. Barham Downs; E. of Bishopsbourne; Eythorne; West

---

122 Follows Gypsophila in manuscript.
123 Thus in check-list; but given as Large-flowered chickweed in manuscript.
11) 1 mile W. of Hollingbourne, on sandy verge of A.20 on F[olkestone] Sand, 1945 MNE.
13) Greatstone, E. Scott.

† C. tomentosum L. Snow-in-summer
2) Waste ground, Crossness, PCH.
3) Gas Works, Whitstable, HMW.
4) Dunes N. of Deal; Sandwich Bay.
5) Mounts Road, Greenhithe. ... Stone, HMP. Gravesend, 1962, W.A.S.
6) On chalk, Whitehill, Ospringe, 1954, REW.
7) Langdon Bay; St Margarets, DPY.
10) Sevenoaks tip, CAS.
11) Dittons Wrotham Heath.
12) Hothfield Common. Smeech Sta[tion] RAC. Canterbury bombed sites DHK.

C. fontanum Baumg. 124 [=C. vulgare Fries; C. triviale (Murb.) Jalas] ssp. vulgarre (Hartman) Greuter & Burdet
Common Mouse-e[ar]

Native: pastures, walls, Roadsides, open woods, meadows; abundant throughout Kent on all types of soils, except in very wet places.
1st record; probably 1629, Johns. Iter, p3 “Alsine hirsuta mior. Gravesend to Rochester”. (but see Fl. Kent.)
4) Fen S of Wingham, 1948, MNE. Ham. Hacklinge, tall meadow form, 1954 MNE.
9) N. Foreland J.G.
10) Darenth Meadows, 1944 MNE. Meadow N. of Shoreham 1954 MNE. Meads by R[iver], S. Darenth, PCH.

124 Given as C. holostoides Fr. Common mouse-e[ar] chickweed In manuscript.
125Brook; Brabourne Stowing, in wet meadows.


C. glomeratum Thuill.  Sticky Mouse-ear 126 N 15, 16
(C. viscosum auct.)

Native. Dunes, dry pastures and banks, wall tops: very common.  


3) Open grassland N. of Dunkirk. Dengrove Wood. Trenley Park Wood. Thornden Wood (v. robust, leaves 1” across) RGW. Reculver, M.E.M.

4) Sandwich Bay.


13) Tunbridge Wells Common, on steps, CAS. Scotney Castle PCH. Sandy field SW of Pembury by R[o]ad to High Wood, 1944 MNE. Arable field, Pembury Lower Green, 635413, CAS. R[o]ad, SW of Penshurst.


16) NE of Seabrook. Shorncliffe. Scars W of Hythe.

This very glandular plant is of a paler more yellowish hue than C. vulgatum, but has large curved fruits like that and unlike the small ones of C. semidecandrum.

C. brachypetalum Pers.  Grey Mouse-ear 127 N

C. diffusum Pers.  Sea Mouse-ear N 15, 16
(Cerastium tetranda Curt.)

Native. Sand-dunes, sand and shingle eaches, common: open sandy heaths and sandpits inland, very rare. This species is very glandular, has very laxly branched dichasia, and almost entirely herbaceous bracts (i.e. devoid of a translucent silvery margin).

1st record, 1836: Cooper, Fl. Met.

1) (Blackheath, Cooper Fl. Met.)


3) Herne Bay, F.J.H. Whitstable W. Beach, REW.


125 In the check-list, this is given a separate heading, C. fontanum Baumg. ssp. holosteoides (Fries) Salman, Ommering & de Voogd N.

126 Given as Sticky mouse-ear chickweed in the manuscript.

127 Given in check-list, but no manuscript account.

128 Given as C. atrovirens in the manuscript.
12) Sandpit, Brabourne Lees, 1946, MNE.

C. pumilum\textsuperscript{129} Curtis Dwarf Mouse-ear N \textit{[no account found in manuscript]}

C. semidecandrum L. Little Mouse-ear N 15, 16

Native. Sandy banks, open heaths; locally common on the coast and on the Andy commons inland; absent on chalk and clay.

1\textsuperscript{st} record 1777: Faversham, E. Jacob, p24. The record in Johnson’s \textit{Iter}, quoted in Fl. Kent, “Alsine hirsuta minor” probably refers to \textit{C. vulgatum}.


4) Deal, Duthie. Sandwich, F.J.H. Reculver M.E.M. Abundant on the dunes from Deal; to N. of Sandwich Bay 1948 MNE. Kingsdown Beach, 1954 MNE. Pegwell Bay, F.J.H.


8) Downs SE of Chilham, D.H.K.

9) Broadstairs; E. of Margate, F.J.H.

10) Bank of A25, Bessels Green, 1951 MNE.


16) Sandgate, Walton (Shornecliffie, 1955!) MNE.

\textbf{Myosoton} Moench

\textit{M. aquaticum} (L.) Moench 15, 16 Water Chickweed N

Native. By river, stream and ditch sides, often in partial shade; local, though common by the Medway, Darent and Stour rivers, absent from much of the county.

1\textsuperscript{st} record: probably 1629, Johns. \textit{Iter}, p.3, “Alsine maior glabra”, Journey from Gravesend to Rochester, unless this is \textit{Stellaria neglecta} Weihe.


2) [Davington, Brooks; Goodnestone, J. [sic] Jacob, 1777.] Abundant S. of Snodland, in wet cposes and marsh ditches, 1944-45 MNE. Barnes Cray, HMP. 66 W of Ham

\textsuperscript{129} Given in check-list, but no manuscript account.

4) Margate Brooks, Dr. Hunter, Fl.G.E.K.


Moenchia Erh.

M. erecta (L.) Gaertner Upright Chickweed N 14/51 [21/51] 19 modern localities 130 15, 16 (Cerastium quaternellum Fenzl)

Native. Dry open grassy heaths on sand or gravel, sand and shingle near the sea; very local, but not rare in 1), on the Folkestone Sand, and on the coast of Romney Marsh.

1st record, 1724: Blackheath, Ray Synopsis, ed.3, p.344.


2) [06 Nagden, J. Jacob.] 97 Queenborough, ESM. 96 Towards the sea, NW of Faversham towards Teynham Street, RGW.

3) 05 Sandy grass-heath N. of Dunkirk, 1945; 1955 MNE.

4) 26 Banks in Sandy meadow SW of the Church, Preston, 1958, B Nash! 35 Dunes N. of Deal, Mrs Benson (Miss E. Day, c.1930). 35 N of Deal, 1961, Mrs. Pankhurst, W.F.S. Excursion! S. end Royal St after


9) [36 Swins Court to Salmston, Dr. Hunter.]


11) 65 Roughetts Common, Ryarsh, 1945-55, MNE. 85 Sandy verge of A.20, 1m W. of Hollingbourne, 1945 MNE.


13) [53 Tunbridge Wells Common, W.W.R.]

15) 13 Shingle bank between Dymchurch and Hythe, H.B. Mackeson (1949, abund[ant]!) MNE, 1 ½m. W of Hythe, U.M. 02 Romney, F.J.H. (by A.259 near Warren House, 1948!) MNE. 01 Near Lighthouse, Dungeness, 1949, MNE. 01 Forelands, 4m. SW of Lydd, 1958 MNE. On turf/shingle ½ m. SW of Lydd, 1958 MNE. 01 Boulderwall, Denge Beach, Mrs. B. Dodds. 01 NE of Littlestone, ‘62, E.S.

16) [23 E. of Sandgate Castle, G.E. Sm.] 13 Shorncliffe, 1948, Mrs B Welch. 13 Gossy Banks, Hythe, 1958, L.J.M.

The numbering of overall records has been reworked in the manuscript. The reference to 19 modern localities appears to be early handwriting in the draft. The 14/51 hectad total appears to have been written over 19/51, and 21/51 is a later addition after hectad numbers had been assigned to the records (an exercise apparently done in conjunction with preparing the hectad distribution maps in the manuscript, which themselves were prepared twice over, with differing results). There is also a marginal summary list of named hecands, but these total only 12: Dartford, Chislet, Chilham, Keston, Gravesend, Malling, Hollingbourne, Hothfield, Ashford, Hythe, Romney, Dungeness.
Sagina L. 131

S. nodosa (L.) Fenzl  Knotted Pearlwort.  N  15
Dune slacks and shingle hollows, liable to wet in winter; now very rare.
1st record, 1829: Sandwich sandhills, G.E. Smith in C.P.S.K., p.27.

4) Sandwich (dunes) G.E. Sm. (Cat. Pl. S.K.) =

9) [Thanet, common; Margate Brooks, Fl.G.E.K.]


[S. subulata (Sw.) C. Presl.  Heath Pearlwort).  {Extinct}

S. procumbens L.  Procumbent Pearlwort132  N  15, 16
Native. Waste ground, paths, walls, woodland rides, mewadows, etc.; abundant throughout Kent, both inland and near the sea, though not in saline habitats. Double flowers at Lit[tlestone, St J.M., Hb. St J M, 1925.


2) [near Canal, Denton, R. pocock.] E End Minster on Bagshot Sand. Queenborough, E.S.M.

3) Bigberry gravel pit. Dengrove Wood.


6) Stone House cricket field HMP. Mounts Wood PCH. Preston Hill, PCH. Dartford HMP. Old wall, Cobham, HMP.

7) Squirrels Wood plateau drift ride. Putt Wood gravel pit.d


9) Downs S. of Kingsdown, 1946, MNE.


14) Wood near Breeches Pond, RAC.


S. apetala Ard. ssp. erecta F. Herm  N
[N.B. the checklist, following Stace (1997), lumps (as above) segregates together under S. apetala for which Francis Rose gave separate accounts as species in the manuscript. These species and their accounts are accordingly given below, with the names used in the manuscript. Standard British treatment regarded S. apetala, S. ciliata and S. filicaulis as separate species from 1952 to 1962, when S. filicaulis became regarded as a variety of S. ciliata. From 1987, S. ciliata was considered to be a subspecies of S. apetala (viz. subsp. apetala), but from 2010 S. filicaulis was again regarded as having specific rank.)

131 Species in the manuscript were given in sequence: S. apetala, S. ciliata, S. filicaulis, S. maritima, S. procumbens, S. nodosa.

132 Common Pearlwort in the manuscript.
S. apetala L. 15, 16  Pearlwort
Native. Dry sandy and gravelly ground, paths, and wall tops. Fairly common.
2) Grain beach. Bank by Holborough Marshes, Snodland 1945 MNE.

S. ciliata Fr. 15, 16  Sandy open sandy or gravelly ground, wall tops: locally frequent.
1st record, 1849: Greenwich Park, Mr Luxford133, Babington, Bot Gaz p176.
3) [Hatch Green, FMW. Field below Fordwich, F.J.H.] Dengrove Wood. Rough Common 55 RGW. Upper Ensign, 1945, DHK.
7) Burham Cement Works, 1953, MNE. Challoch Woods, in ride, E.S.
10) Chert pits, E of River Hill, RAC.

S. filicaulis Jord. 15, 16  Sandy ground and wall tops. This is now included under S. ciliata134: its records are given below.

133 Francis Rose here and later refers to Mrs Luxford, but the Botanical Gazette refers to Mr Luxford (presumably George Luxford, known to have botanised at Cobham in 1838).
134 But see introductory note on Sagina for changes in usage of the name S. filicaulis.
S. maritima G. Don

Sea Pearlwort. N 15, 16
Native. Banks, stony slopes, brackish or saline mud, always near the sea or tidal waters: local.
1st record, 1873: E. Kent, A. Bennett, in Top Bot.

Scleranthus L.
S. annuus L. Annual Knawel. N 15, 16
Native on open sandy ground on heaths, then usually biennial ("var. hibernus Rchb.: S. biennis Reut."): in sandy arable fields, then normally annual.
1st record, 1629: Gravesend to Rochester, Johnson, Iter, p.2. ("saxifraga anglicum")

S. perennis L.
Pollen of this species was reported in a Neolithic site at Addington, Kent, by Burchell & Erdtman, 1950 (Godwin, p.168), so it may have been present in Kent as a native species then; it is one of those open-habitat

---

Cited as S. maritima Sm.
Not in check-list.
species of highly disjunct present distribution in Britain (Radnor to Breckland) which was probably widespread in the open conditions of the Late Glacial Period.]

[Corrigiola L.]
C. littoralis L. 137

Casual on dunes near cinderheap with other aliens, Sandwich Bay, 1932, Col. R. Meinertzhagen, BM confd. JEL.

Hernaria L.
‡ H. glabra L. Smooth Rupturewort

(H. glabra and H. hirsuta both occur in Somme.)

Illecebrum verticillatum L. 16 Coral Necklace

Probably native. In damp woodland rides on sandy loam: very local and rare.

The history of this plant in Kent makes a strange story. According to Fl. Kent (1899), specimens of this species were seen by Mr. Duthie labelled “Boggy places 4 miles S.W. of Dover” in Herb. Univ. Edinburgh. In Hb. Bot. Gard. Edin. there is a specimen labelled nr. Dover, Hb. Mitchinson, presented 1900. In B.E.C. Rep. 1920 VI, I, p.143, Mrs Godden records it as being found “In great quantity near Doves, Kent”. This refers to a farm S.E. of Cranbrook (N.G.R. 51/783344), but is extremely vague as a record. Mrs. Godden commented that the locality “four miles SW of Dover” (vide supra) may be a misreading for “Doves”, as her locality is just about four miles from that place. It is strange indeed to record a plant as near a farm four miles away and not under the parish or nearest village or hamlet: nevertheless the Bedgebury locality is about 4 miles WSW of Dovess Farm; possibly Mrs Godden lived, or was staying at, Doves. The first completely unambiguous evidence for Kent is “near Cranbrook, 1935”, A.H.W.D. (specimen in Hb. Tunbridge Wells Museum).


Spergula L.
S. arvensis L. Corn Spurrey. N or C 15, 16 40/52

This species has two varieties, var. vulgaris (Boenn.) Mert. & Koch and var. sativa (Boenn.) Mert. & Koch. These are often raised to specific rank, but all combinations of the diagnostic characters may be found in a single field (see Fl. of Brit. Isles, 1952, pp325-326). There seems therefore little justification in maintaining these varieties. Arable and waste ground, mostly on sandy soils; locally frequent where sandy soils occur; not recently recorded for Thanet, nor in Grain and Sheppey.


2) Sandy fields S. of Bysing Wood, pits to S.E.. H.M.W. Sharnel St[reet] Sta[tion], PCH. 96 Conyer, KDR.

137 Taxon not included in check-list and any purported finding by this recorder has to be treated with caution, as many of his ornithological discoveries have been claimed as fraudulent.
5) Knockholt, 1941, P.C.H. (var. sativa Boenn.). Downe, AG Davis, 1915 MNE. Field, Halstead Place, PCH.
7) Rainham weed OD. 05 Challock Forest, rides, ES. 95 Longbeech Wood E., E.S.
10) Sandy arable land S. of Brasted, 1955 MNE. Sandy field E. of Chipstead, 1955, MNE.
11) Westenhanger, 1893, E.S.M. (BM). Lenham Forstal, sandy cabbage field, 1958, MNE.
13) Hawkhurst, P.J. Hall. Loamy cornfield, W. of Wittersham, 1956. (not near Tenterden nor Woodchurch.) (E. Oxney u[n]c[ored].)

Spergularia (Pers.) J.S. & C. Prsel
S. media (L.) C. Presl Greater Sea Spurrey N 15, 16
(S. marginata (DC.) Kittel)
Native. Tidal Salt Marshes; chalk cliffs by the sea in the spray zone; common round the coast ad on tidal statuaries, never away from tidal waters.
1st certain record, 1836: Northfleet, J. Forbes Young, (Hb. BM).
Note. Spergularia rupicola Le Jolis might have been expected on the chalk sea cliffs of Kent, but the only species found on them so far is the present one. S. rupicola occurs as near as the Isle of Wight.
Easily distinguished from S. salina by the broadly winged seeds and the larger, paler flowers.

S. marina (L.) Griseb. Lesser Sea Spurrey N 15, 16
(S. salina J. & C. Presl)
Native. In salt marshes, saline dune slacks and shingle lows; common round the coast and in tidal estuaries, absent inland: occurs both with S. marginata and also in drier places than those in which that species occurs. Easily distinguished from the last by its unbordered seeds, smaller darker pink flowers, and its smaller capsule, shorter than its stalk.

---

138 Salt marsh Spurrey in the manuscript.
S. rubra (L.) J.S. & C. Presl.  Sand Spurrey  N 15, 16  30/51

Native. Dry open sandy or gravelly ground, gravel paths, sand dunes, beaches, etc., locally common, but apparently absent from large areas. Very tolerant of trampling, not recently observed in Sheppey or Gravm, probably absent in Thanet; no recent records for the Greensand of mid Kent.

1st record, 1632: W. of Sandwich, Johnson, Descriptio, p.28.


6) 67 Gravelly ground at Shorne, near Windmill, 1945, ESM. 77 Gadshill, 1947. 57 Green Street Green, Darenth, 1947. 66 E of Ash Place Fm, 605645, Mrs D Woods.

7) 05 Challock Forest, rides, ES. 95 Eastling, on Path, C. Turner.

8) 14 Gravelly drive, Court Lodge, Denton, 1945.

9) [The Brooks, Margate Dr Hunter FGEK.]


11) [Maidstone, H. Lamb, 1885 MNE.] 65 By Leybourne Castle, 1959, MNE. 54 By Medway, Tonbridge. 44 Hever Castle Grounds CAS.


Lychnis L.

† L. coronaria (L.) Murray 139  Rose Campion  H

139 Cited as Lychnis coronaria (L.) Desv. and placed after L. flos-cuculi.
Casual alien

1) Old chalk pit, Green Street Green, 1937, J.E.L., Hb. L. Ruxley Pits.
15) Sea front, Littlestone, on waste ground among furze, 1953, KEB.

L. flos-cuculi L. 15, 16  Ragged Robin  N
Native. Streamsides, marshes, fens, wet woodlands, both in alderswamps and in wet rides; very common, except in the chalk districts.

1st record, 1629: Gillingham to Sheppey, Johnson, Iter, p.5.

1) Holwood Park. Keston Bog MNE, GMB. Hayes, McC. Ravensbourne, Bromley, AG Davis 1916 MNE. Pokeridden Wood Orlington Swain. N. Cray Marshes. [Hanging Wood, Charlton, 1890, AHWD BM.]


5) Fern St[reet] 804759.

7) Berengrave pit, Rainham, PM Roberts.

10) Meadow N. of Shoreham 1954 MNE. Otford PCH. Meadows, Eynsford GMB. Sutton at Hone HMP. By River @ Darend; and N. of Darent '44. N.W. of Bat and Ball. Westerham Wood, B. Sennitt.


12) 94 Hothfield Common. 03 Sellingle (Stone hill). 13 Gibbons Brook. 94 Westwell. 14 Stowting. 04 Willesborough. 04 Brook. 04 Fen W of Cuckolds coomb, Brook, '44. 05 E. Stour Farm, Godmersham in meadow by River, ES. 05 Chilham Meadows ES. SW of Sellindge Ch[urch] in meadow RAC. Brabourne Coomb. Stowting Meadows. S of Brabourne Ch[urch]. SE of Lenham Ch[urch].


14) Wood E of St Michaels Tenterden RAC. Wood by Breeches Pond RAC.

15) Hoppen Pits Dungeness 1946 MNE. Sandhurst Levels.


Agrostemma L.
‡ A. githago L. 140 15, 16  Corn Cockle
Colonist. Cornfields and waste ground, now extremely rare, and usually only a casual, though formerly very common in arable land, especially on chalk. Very rare now in adjoining counties. It is one of the arable weeds that has decreased in England due to cleaner seed, though still fairly common in N. France. There is some evidence that (in the days of its mediaeval abundance) the high saponin content may have caused susceptibility to leprosy: it seemed to have been limited too with rye crops formerly, and rye is now scarcely grown in England (Godwin, p.91).

1) Casual on rubbish dump, Green Street Green, 1946, MNE. Well Hall, Eltham, 1888 AHWD BM. Hayes Common, AG Davis, 1902 MNE.

4) Fordwich, 1940, L.W.W.

5) Halstead, AA, BM.

6) Cornfield SE of Cobham Park, 1946, 1 plant MNE. Pilgrims Way, Wrotham, Miss Tatton Brown. Near Dartford, P.H.C. Near Trottiscoife Ch[urch], 1939, Miss Nisbett. 596676 cornfield near Fawkham Ch[urch], DVS Woods, 1 plant.

7) Boxley, Miss Hayton. Cornfield, Rainham, Alex P. Major, 1948-49.


10) Near Dartford. P.H.C.

11) Maidstone to Snodland Marshes, 1883, E. Bartlett MNE. Deakin Leas, Tonbridge, 1 pl[ant], 1944, KEB.

140 Marked 'now extinct' in check-list.
Silen L.

S. italica (L.) Pers. (introduced originally?). Italian Catchfly.

?N or H [15], 16

Synonyms: S. patens Peete. S. paradoxa auct. Non L.

Denizen. Roadside, chalk quarries, banks and cliffs, very rare.

This plant has been much confused with the varieties of S. nutans L.

It appears to have been first recognised in Kent as distinct from S. nutans by W. Peete, who found it at Dover in 1825, and recorded it (with a figure) as S. patens in Eng. Bot. Suppl. vol 2, no. 2748, in 1832. He pointed out that S. nutans also grew at Dover and (1) it was accurately described by Ray, and mentioned by him as growing there, and (2) both species had been found by his friend T.F. Forster at Dover some years before 142. The plate was subsequently identified with S. italicc (L.) Pers. It has not been observed at Dover for many years.

6) [Dartford, J.B. Syme, 1859 BM. Roadside, Dartford to Darenth, J.B. Syme, 1863; 1876, A.B., BM. Roadside, Dartford to Green Street Green, J.S.M., 1863; 1888-9, A.H.W.D. BM. Lane from Dartford to Darenth Wood, 1867, H.T. BM; W.W.R.; 1881, A. Bennett BM. Between Dartford and Greenhithe, quite wild and abundant, 1869-71, J.C. Melvill. Dartford 1922 Mrs Wedgewood BM. Reservoir, Darenth, HB 1875 BM. Hedge near Dartford 1867 FA Hanbury (HB Coll Marlb.). Not recently observed in any of these places! Greenhithe, 1862, Hb Lamb MNE; 1863, J.S.M.; Hb. Mill; 1921 GCD BM; 1924, T.J.F BM; 1947,H.M. Pratt BM; etc. 1946-54 MNE, abundant on banks of Mounts Road, Greenhithe and on adjacent quarry cliffs! Galley Hill, G.C. Druce; 1931, JEL, BM.


S. nutans L.

This species has been the subject of immense confusion in the past, both with Silene italica Pers. and S. paradoxa L., and also with regard to its own (actually very distinct) varieties. Much of this confusion was sorted out by F.N. Hepper in 1951 (The variations of Silene nutans L. in Great Britain, Watsonia, II, pt. II, 1951, pp. 80-91) but experimental work is still needed. Only the main conclusions, as they affect Kent, are discussed here.

It appears that there are two very distinct taxa in Kent (and in Britain); Heppner gives these varietal status, but these taxa could, in my opinion, equally well be regarded as sub-species 144 or even as species, by analogy with other groups of plants. I have tested plants from Kent populations of the two taxa and maintain their distinctness.

The two varieties, with their main distinguishing characters, the 1 records and distributions in Kent are given below.

S. nutans L. ssp. smithiana (Moss) Jeanm. & Bocq 145

Nottingham Catchfly

N 15

Plant much stouter and hairier than (var.) salmoniana, radical leaves broader, ovate-lanceolate to elliptical, blunter, more abruptly tapering into the petiole. Capsule 8-10 mm long. Carpophore 2.0-2.5 mm long. Flowers usually pure white.


Silene paradoxa L. sec. Smith, non L.

S. nutans L. sec. Salmon, in sensu strict, non L.

Native. Chalk sea-cliffs and short turf on their summits, very local. First reported in Kent in 1690 at Dover by Mr. Newton in Ray, Synopsis, ed. 1, p.15, as "Lychnis major noctiflora Dubrensis perennis".

8) Abundant on the chalk cliffs, and on the short turf on top within a few yards of their edges, from Folkestone Warren to Dover West Cliff, and from Dover East Cliff to just S. of Oldstairs Bay, Kingsdown, more or less continuously. Many specimens in BM, K and MNE, from 1828 onwards.


142 The source cited does not support Forster having found S. italicc as well as S. nutans.

143 There is a deleted section in the manuscript which treated this as an error for S. nutans.

144 Treated as subspecies in the check-list, and so subspecific names have been substituted here.

145 Given in the manuscript as S. nutans L. var. smithiana Moss Dover Catchfly, following var. salmoniana.
1) naturalised on old wall, Lessness Abbey, 1948, R.A.B.
This plant grows with *Crithmum maritimum* and *Limonium binervosum* on the ledges of the cliff faces, and in turf of *Festuca rubra* and *ovina* or *Brachypodium pinnatum* on the cliff-tops. A plant apparently identical with this (reputably endemic) British variety is abundant on limestone rocks in open woodland at Urach, Swabia Gura, S.W. Germany. Elsewhere in Britain similar plants occur on the chalk cliffs at Beer in Devon, and in Derbyshire, Denbigh, Caernarvon (Great Orme’s Head), Dorset, Knaresborough in Yorks, and on the cliffs on the E. Scottish coast.

**S. nutans** L. ssp. *salmoniana* Hepper[^146]

Plant slender, radical leaves narrow-lanceolate, acute, attenuated gradually into the petiole, shortly pubescent to very glabrous. Capsule 11-14 mm long, carpophores 3-4 mm long, flowers cream or rose-pink.

Synonyms:
- **S. nutans** L. sec. Moss, non L. in sensu strict.
- **S. nutans** L. var. vulgaris Moss (1920, Cambridge Brit. Flora).

Native. Shingle beaches and sandy cliffs.

First recognised as a distinct plant by E.S. Marshall, who collected it at Dungeness beach in 1890; it was however recorded wrongly as *S. italic* Pers. in Fl. Kent, 1899. On chalk downs in Sussex, and in a gravel pit in Surrey.

12) Roadside of A20, E. of Willesborough, C.N.P.
15) Dungeness beach, from near Greatstone and just west of the lighthouse inland to Boulderwall and S. of Lydd: not on the newest shingle where there is no turf or soil. It is very abundant over several square miles, associated with *Teucrium scorodonia*, *Jasione*, *Festuca ovina* ssp. *tenuifolia*, *Sedum anglicum*, *Dicranum scoparium* and *Cladonia* spp. There are several gatherings from here in BM and in MNE.

13) Hythe shingle beach, 1895, Dickinson: J. Walton, old shingle, Willow Tree Farm, Burmarsh Road, Hythe, LJIM 1957.
16) Abundant on cliffs of Folkestone Sand, Shorncliffe, 1955. [Sandgate castle, Dillwyn, Fl. Brit. (probably this)] This is common in stony hollows of sand-dunes in the Pas-de-Calais and at Hardelot, and on the Belgian coast: I have seen very similar plants on gravelly glacial rubble by a stream in Klein Walsertal, Allgauer Alps, Austria.

**S. otites** (L.) Wibel[^147]

Alien, long extinct.

Charlton chalk-pit, Miss S. Berkeley, Cooper, *Mag. Zoo. Bot.* 1, p.495: possibly sown as food for caterpillars of [sic].


Native. Roadside banks, rough grassland, waste ground; common on chalk and ragstone, rather rare elsewhere, and unrecorded from Sheppey and Grain.


3) NW of Chartham → C[hartham] Hatch. Old R[ai]l[w]ay S of Whitstable HMW.
8) Ileden Wood.
10) Darent Rd, Dartford 44. S. Darenth PCH. Ide Hill, CAS. Kemsing St[atio]n. Sevenoaks Sta[tion] CAS.

[^146]: Given in the manuscript as *S. nutans* L. var. *salmoniana* F.N. Hepper Nottingham Catchfly.
[^147]: Given after *S. armeria* in manuscript.
[^148]: Cited as *S. vulgaris* (Moench) Garcke.
11) Railway, Hildenborough, 563482, CAS.  NW of Tonbridge Railway Station by railway 1958 CA Stace. Meadows W of Eden Bridge.


11) near Wrotham, 1774, Hb. Banks.

S. uniflora Roth (= S. maritima With). Sea Campion. N 15, 16
Native.  Sea shores, mostly on shingle: rare but locally abundant.  
1st Rec[ord] 1632 Johnson Descriptio p24 ‘Lychnis marina anglica Lob.’ — Margate to Sandwich by the sea shore. 150


4) Sandwich Bay, Cowell, FGEK; L.W.W.; RGW.  [Stonar Beach, Cowell, FGEK.] [Walmer Beach, Miss L. Day.]

8) Dover beach, Hb. F.A. Hanbury; J. Ridley, 1911 MNE; J.C. Melvill.

9) [Margate, Miss Nevill.]


16) Between Folkestone and Sandsgate, M.N.H.S., 1848 MNE.

S. vulgaris x uniflora 151

2) Woolwich Arsenal, 1901, AHWD (BIRM).

♀ S. armeria L.  
1) [Observatory Hill Enclosure, Greenwich Park, 1901, A.D. Webster.] Hayes Old Rectory, 1936, DMCC.  Hayes Church, D.McC. (1946!)

[?] Near Dartford, W.W.R.]  

S. noctiflora L. 152  Night-flowering Catchfly.  C 15, 16
Colonist.  Cornfields on chalk and on sand: rare but widely distributed; mainly in E. Kent.  
1st record, 1632: “Lychnis sylvestris parva” W. of Sandwich, Johnson, Descriptio.

1) [Plum Lane Brickfield, Plumstead, 1 plant, 1892.  R[oad]side, Bostall Heath to Bexley Heath, AHWD.  Cornfield near Darrick Wood, Orpington, 454649, F. Swain, 1959, MNE.  Green Street Green.


149 It is under this name that the species is given in the manuscript.

150 This entry replaces a deleted reference to Johnson’s Chatham record in the 1629 Iter (where Johnson wrote of Caryophyllus marinus, sive gra: marinum).

151 Given as S. maritima x cucubalus.

152 Treated as Melandrium noctiflorum (L.) Fr., the genus Melandrium Röhl placed following Silene.


**S. latifolia** Poiret (= S. alba (Miller) E. H. Krause nom. illeg.) White Campion. N 15, 16

See Baker (J. Ecol., 1947) for an account of hybridisation between this and *Melandrium rubrum*.

Colonist: arable land, roadsides, waste ground, hedgebanks; common on the chalk and the coast, much less common in the Weald.

1st record, 1629: Grain to Cliffe, Johnson, _Iter_, p.8. This species probably arose in the Middle east and spread west and north with agriculture: it has hybridised with *Melandrium rubrum* as it has spread. It was most likely a Neolithic introduction in Britain (Godwin, p.90).


4) Wingham E of. Sandwich Bay.


7) Borstal. Newnhum.


9) Ramsgate, 1850, T.M. BM. Arable W. of Cleeve Court, Minster, ’63.


15) Dungeness, J. Hubbard. 16) Hillhurst Fm, Pedlinge, LJM. Klin Wood, Sandling, LJM.

**S. latifolia x dioica**

Hybrids are frequent, e.g.

[1] Blackheath GMB. 47 Abbey Wood, St J M.

2) 07 Warden, Sheppey, 1947.

8) 04 E of Pett Street, Wye, 1961, CAS, with parents. Crundale, by r[oa]d, ab[undant], DHK 1945.

12) 03 Near Stour, Smeth, LJM.

**S. dioica** (L) Clairv.

Red Campion. N 15, 16


153 Treated as _Melandrium album_ (Mill.) Garcke.

154 Given as _Melandrium rubrum x M. album_.

155 Given as _Melandrium rubrum_ (Weig.) Garcke.


† S. coeli-rosa Godron Rose-of-Heaven. H [no account found with manuscript]

S. gallica L. (incl. Silene anglica L. and Silene quinquevulnera L.)^{156}

Sandy fields, waste ground, only a casual in Kent.


2) One plant on Shell sand beach, St Marys Bay, St Mary Hoo, 1958 MNE.

3) Hatch Green, F.M. Webb.

6) Darenth, J.C. Melvill. Green Street Green, E.F.

8) Lit[tle] Mydeking, Denton, Miss DACL, 1958, MNE.

9) [Cornfields, rare, Fl. Thanet.]


12) Between Brabourne and Kennington (Mersham) G.E. Sm. FGEK.

13) Tunbridge Wells*, Miss Nevill.


Records marked thus* are for S. quinquevulnera L. s.s.


[[†] S. dichotoma Erh.

^{156} An earlier, deleted draft of this account, with fewer records and treating S. quinquevulnera as a separate species, appears on a sheet preserved because it carries two other species accounts on the back.

^{157} Apparently duplicated entry.
4) Wingham, Dowker.

*S. conica* L. 15, [16] Sand Catchfly\(^{158}\). N

Native. On sand-dunes, especially in slightly disturbed ground; very rare, but v[ery] locally frequent on the coast.

1\(^{st}\) record, 1724: Sandown Castle, *Ray Syn.* ed. 3 p341.


[6] Fallow field near Dartford, right of road to Darenth Wood, 1877, E. de C. BM.


This species, very distinct in its stiff inflated green-and-grey ribbed calyces and small pink petals, is very common on the dunes of the Pas de Calais and grows larger there than in Kent.

*Saponaria* L.

† *S. officinalis* L. Soapwort. D 15, 16

Denizen. Hedgebanks, roadsides, waste ground; local, but well distributed; a relic of ancient culture.

1) Dartford Heath HMP. Below W Hill Blackheath, GMB. 37 New Cross to St John’s by railway, 1901, P. Cochrane; DMcC. Ruxley Pits. 46 Hayes Common, and in village (double flowers) DMcC. 57 Stonehill Green, Hextable, PCH; 505703 HMP. 56 Swanley Junction, 1913, L.J.T. Ravensbourne, Bromley, AG Davis, 1917 MNE. 57 R[oasa]side Hawley, PCH. R[oasa]side Wilmington PCH.

2) 47 Woolwich Arsenal, abundant. 47 Crossness, waste g[rourd]d, PCH. (57 Stone Marshes AHWD 1891 BM.) 97 Eastchurch. 06 By r[ailwa]y, Ace Sand & Gravel Co., Oare (single) H.M.W. 76 Snodland Churcheard, A. Beadell; by Gas Works, 1980.


5) Near Swanley, 1878, H. & J.G., BM.


7) Near Rochester, 1834, HERB. J.S. BM. Syndale Farm, FGKE; ‘50, REW.

8) 05 E. of Godmersham, L.W.W.; ES. 34 Dover DHK. 15 ... Lane S of Canterbury, RGW.

10) 57 Ditches, Sutton-at-Hone, H.M.P. By Ightham Mote HMP. 57 By Darenth, Hawley, H.M.P. Sevenoaks gas works CAS. S[even]oaks Dump DMcC.

11) Malling, J James 1830 MNE. 75 Allington, H. Lamb 1881 MNE; by lock, 1961, HMP, 745682. 65 Gravel pit N. of Hadlow, 1943. 75 Bank, Ivy Farm, E. Malling. 65 Yalding. 94 NE of Betersden, J.E. Chambers (fide CES, J Bot 1924, p307); E. Scott.

12) Lenham Heath, AG Davis, 1902, MNE. 05 Godmersham, 1936, Miss E Milward. Sturry WW. Hothfield, AE Webb. 04 Brook. 04 Wilslesborough, E. Scott. 94 Westwell, ES. 94 Westwell Leacon. 94 Tut Hill, ES. Ashford GMB. Sellindge SW RAC. 94 Hothfield Common S end, ES. 04 Kennington ES. 03 S.E. of Kingston, ES.

13) 53 Forest Rd, Tun[bridge] Wells, 588378, E Shorrock, 1960. 64 Pembury L[owe]r Green, CAS. Rusthall Common KEB.

14) 53 Hawkhurst, J. Piper, fide DS.

15) 13 waste g[rourd]d by Redoubt, Dymchurch Rd., Hythe, LJM.

16) 23 Cheriton, on Railway bank, 1944, DHK. Coolinge, VFDP. 13 Sandpit, Stone Farm, Newington, 1959, LJM.

\(^{158}\) Sand Catchfly in species list; Striated Catchfly in manuscript.
† **S. ocyoides** L.  Roack Soapwort.  H
   **Alien**, naturalised on a shingle beach and on a roof; very rare.
15) On shingle N. of Pilot Inn, Dungeness, 1947 **MNE**.
16) On roof in Lympne Village, 1947 **MNE**.

**Vaccaria** Wolf
† **V. hispanica** (Miller) Rauschert  Cowherb  
(Saponaria vaccaria L.; S. segetalis Link.)
   **Casual alien.**
3) E of Herne Bay Pier, 1832, F.G.E.K.
5) Cockerhurst, near Lullingstone 1933; by Chelsfield Railway Station, P.H.C.
6) Gravesend 1924, St.J. M.

**Petrorhagia** (Ser. ex DC.) Link
† **P. nanteuilli** (Burnat) P.[W.] Ball & Heywood  
(† extinct)  N
   **Native.**  Dry gravelly pastures and shingle beaches: extremely rare.
4) † Railway sidings, Richborough 1937, D.McC; 1939, J.PMB & NYS (BEC 1939-40, pp252-3); 1956, BN; 1946-58! **MNE**; 1960, Mrs D.K.R. **MNE** & Mrs B, both sides (oa)d.
11) Sandy railway Bank, Malling, plentiful, 1882, E. de CRESSP, **BM**. Also by E. de C., ex Hb. Charles Bailey (**BIRM**).
15) Shingle W. of Hythe, Woods in Hb. Borrer; on “Dwelling Ground”, Hanbury; 1900, S.E. Chandler; Miss Murray, 1922; by road to ranges, S. of range canteen, 1948, Mrs B. Welch; by road S. of range canteen, 158, abundant here, 1956! **MNE**. In lane 1½m W. of Hythe on N. of Dymchurch road, E.F. **BM**.

† **P. saxifraga** (L.) Link  
   **Tunic-flower**  
   **Alien, naturalised in chalk pit.**
7) Old chalk pit, Highstead, S. of Sittingbourne, 1958, D. McClintock & E.G. Philp **MNE**.

† **Gypsophila porrigens** Briss.

**Dianthus** L.
† **D. caryophyllus** L.  Clove Pink.  D
   **Long-established Denizen:** on old walls, vey rare.
2) “Snodland Marshes”, E. Bartlett, 1883 **MNE**; presumably on a wall, if correct.
   On outer wall near River entrance and on inner face of outer wall opp[osite] keep, GCB[;] and by gents!

---

159 Given as *Vaccaria pyramidalis* Med.
160 Given as *Kohlrauschia prolifer* (L.) Kunth., Synonyms:- *Dianthus prolifer* L., *Tunica prolifera* (L.) Scop.
161 Given as *Kohlrauschia saxifraga*.
162 Follows *Agrostemma* in the manuscript.
† D. plumarius L. Wild Pink. 
Denizen. Old walls, extremely rare.
10) Sevenoaks tip, CAS.

D. deltoides L. Maiden Pink N (? Now extinct as N) 15, 16
Probably extinct as a native. Dry sandy or gravelly pastures, naturalised in a disused ragstone quarry; very rare now and most often as a garden escape; formerly in several localities.
1st record 1597: Deptford, Gerard, Herbal, p.476.
4) † By ruins of coast guard station at Sandwich Bay, 1946, MNE.
7) [Rochester, H. Lamb.] [Beacon Hill, Norton, Blackstone.]
10) Plentiful in disused ragstone quarry on gritty loam, Dry Hill, Chevening, F.S.E. Fawkes (1954!-60!) MNE; seed originally sown here by P. Armstrong, teste A. Brown.
13) [Hawkhurst, Melvill. Angley Park, Cranbrook, in sandy field, A.W. Hudson.]

† D. barbatus L. Sweet-William H 16
Garden escape, naturalised in a few places.
5) Chalky railway cutting near Chelsfield, 1946, D.H.K.
6) Chalk railway cutting S. of Eynsford, 1949, JEL, Hb. L.
7) Long reach Wood, Detling, 1948, DMcC.

D. armeria L. 15, 16 Deptford Pink.
Native. Dry banks and fields on sand and gravel, usually in full sun: formerly locally common, now quite rare.
6) Fawkham, Mrs D.G. Woods. [Coast Guard Stn, Greenhithe, 1862, Hb. Lamb MNE.] [Cobham, Maidstone N.H.S. 1848, MNE, several old localities.] Luddesdown, 678689 S. of Cobhambury Wood by lane, D.V.S. Woods. 598676 Culery Down Broke, near Fawkham Church, D.V.S. Woods.
7) By Rainham Park Wood in open grassland on sandy loam, 650810, Mrs. V. Bramby 1951; B. Carter, 1952

POLYGONACEAE

Persicaria Miller
† P. campanulata (Hook. f) Ronse Decraene Lesser Knotweed.

P. bistorta (L.) Samp. Common Bistort. N
† P. amplexicaulis (D. Don) Ronse Decraene
Red Bistort.

P. amphibia (L.) Gray  Amphibious Bistort.  N
Localised sites for district 15: in the Royal Military Canal but only west of Hythe (TQ92, TQ93, TR03, TR13) and at Dungeness in 1955 (TR01). Also off the Romney and Walland Marshes in the Hexden Channel in 1954 (TQ82).

P. maculosa Gray  Redshank.  N

P. lapathifolia (L.) Gray  Pale Persicaria.  N

‡ P. pensylvanica (L.) M. Gómez  Pinkweed.

P. hydropiper (L.) Spach  Water-pepper  N
Localised sites for district 15: in a ditch south of the road at Potman’s Heath in 1956 and 1958 (tetrads TQ82T or 82S); by Hexden Channel at Newenden in 1956 (tetrads TQ82J or 82P); and dyke east of Windmill Channel in 1959 (tetrad TQ83Q).

P. laxiflora (Weihe) Opiz  Tasteless Water-pepper.  N
[In manuscript given as:]

Polygonum mite Schrank
Wet open ground, ditches, ponds, etc.: extremely rare in Kent.  1st record, 163


2)  Near Minster-in-Sheppey F.J.H.

11)  (Hadlow, Miss Peers “spring field”. Is this a reliable record?)


P. minor (Hudson) Opiz  Small Water-pepper.  N
[In manuscript given as:]

Polygonum minus Huds.
Native. Wet open ground, especially on gravel soils, ditches and ponds: extremely rare.  1st record, 164


10)  Seal Chart, Roper, 1874.

11)  By Medway near Haysden, Tonbridge, G.E. Shaw, 1938 TLS: MNE.

12)  [Willesborough Leas, rare, 1863, J.S.M.]

15)  Halfway Bush, Dungeness, in fresh water, 1946. MNE.

[Genera and species continue through Fagopyrum and Polygonum to:]

Fallopia Adams
Various Fallopia species follow, no surviving accounts]

F. dumetorum (L.) Holub  Copse-bindweed  N
[In manuscript given as:]

Polygonum dumetorum L.  15, 16  Copse Buckwheat
Native. Dry woods on sand and gravel, particularly in coppice of chestnut, birch, etc. where it may only appear at long intervals of years. Rare. It is an annual: after the coppice is cut, the light appears to stimulate germination, of a fair number of seeds and the plants may appear in abundance from seeds which have lain dormant for 10 years or more. This plant should be checked experimentally: its capacity for delayed germination seems to be remarkable and precise factors causing break of dormancy should be investigated.

163  Nothing given, but presumably it is the Tunbridge Wells record (1855).

164  Nothing given: it is presumably the 1802 note cited. The 1899 Flora of Kent gives Cooper’s record (1836) – incorrectly, as the text of English Botany (1802) refers to Blackheath, irrespective of the origin of the plant figured.


11) Cuckoo Wood, Sandling, near Maidstone, C. West, 1948 [1948!] MNE.


[Genera and species continue through POLYGONACEAE, to:]

Rumex L.

R. acetosella L. ssp. acetosella (R. tenuifolius) (Wallr.) A. Löve is scarcely a good species. Sheep's Sorrel N

[no further surviving account]

R. hydrolapathum Hudson Water Dock N

Localised sites for district 15: Dyke by the Windmill Channel southwest of Tenterden (tetrad TQ83Q?) and ca 1 mile east of Appledore in 1954 (tetrad TQ92U).

[Genera and species continue through the rest of POLYGONACEAE, to:]

PLUMBAGINACEAE

Limonium Miller

L. vulgaris Miller Common Sea-lavender. N [account to be transcribed]

L. binervosum agg. (G.E. Smith) Salmon165 Rock Sea-lavender. N 15 5/1

ssp. binervosum. (S.E.Kent, Dover Cliffs). N

ssp. cantianum Ingrouille (Thanet cliffs & saltmarshes). N

Native. Ledges of sea-cliffs, and in the uppermost parts of sandy salt-marshes; locally very plentiful on the chalk cliffs from Folkestone to S. of Kingsdown, rare elsewhere; rare and local in Sussex, very rare in Essex; only one location in Pas de Calais (Cap Gris Nez).

1st record, 1597; Margate, Gerard, Herbal, p.333.

2) 06 Shellness, Sheppey, J.E.L., 1938; 1959, abundant! MNE. It occurs here on sandy shingle behind the Ammophila-dominated beach adjacent to saltmarsh, on ground which is never immersed in saltwater but is moistened from below by salt water at the highest spring tides. Isle of Harty, B.D. Jackson (1946, a few plants on a sandy patch on the salt-marsh). [near Sheerness, Syme.]

4) 36 Shellness, N.E. of Sandwich; in the uppermost zone of the sandy saltmarsh, 1946; 1954, MNE.

8) 23 East wear Bay, CPSK; 1956! MNE; 13 Abbots Cliff; 23 Lydden Spout, 55 MNE; 34 Shakespeare Cliff; 34 East Cliff, Dover, 55 MNE; 34 S. Foreland; 34 St Margarets Bay, 58 MNE; 34 S. of Oldstairs Bay, Kingsdown, 58 MNE; abundant on the ledges of the chalk cliffs within the salt spray zone (about 200 feet up the cliffs along the whole of this coast, many observers to 1958!)]


15) 13 Saline gravel pits, Palmmarsh, W. of Hythe, 1956, L.J. Margetts MNE.


Armeria Willd.

A. maritima (Miller) Willd. ssp. maritima Thrift. N [no surviving account]

ELATINACEAE166

Elatine L.

E. hexandra (Lapierre) DC, 16 Six-stamened Waterwort

Native. In the rather peaty, base-poor water of a lake, Extremely rare.


165 Given in manuscript as L. binervosum (G.E. Sm.) C.E. Salmon.

166 Follows Frankenia in the manuscript.
CLUSIACEAE

[Hypericum L.]167

‡ H. calycinum168 15, 16 Rose of Sharon

Alien, now naturalised in many places.

1) Harrington estate, Beckenham, '55 J.M. Sherwood [?].
2) Whitstable Castle RGW. St Thomas' Hill, Canterbury, RGW. Tyler Hill, RGW.
3) Halstead, A.A. (Hb. Geldart). Hill Park Lane, Westerham Hill, RAC.

H. androsaemum L. 15, 16 Tutsan 30/52

Native. Woodlands and hedgebanks, widespread on the Tertiaries, in the chalk districts, and in the Weald, but not generally very common, though locally so in the High Weald and in the woods on chalk about Dover. Often only a single plant occurs in a locality, possibly because it relies upon birds which eat the berries.
1st record, 1632: near Faversham, Johnson, Descriptio, p.36.

2) 05 Bower Wood, NW of Chartham, 1943, DHK. Trenley Park, Dowker. Perry Wood, DHK.
3) Chevening Park, A. Beadell. Knockholt Woods, RAC.

H. Elgar 1915 MNE. Cobham, Lady Bligh. Trosley, wood edge on Downs, Shepherd. H. Elgar 1915 MNE.


9) Shrubberies, Cleve Court Manston, Fl Thanet.
10) 45 Ide Hill, 1949, MNE. 45 French Street, Westerham, RAC. Ide Hill escarpment, J.S.M.

11) 65 Swanton Valley, Mereworth Woods, 1944. 65 S. of Platt, 1946. 75. 44 Hever Castle grounds CAS.
12) 94 Hothfield, 1pl[ant], 1944, C.N.P. 94 On gault, Charing, L Hawkins. 03 Barrow Wood, Ruckinge, J Fenton, test site ES.

Follows Polygala in the manuscript.

Follows H. hircinum in the manuscript.

‡ H. x inodorum Mill.\textsuperscript{169}  
An escape, scarcely naturalised.

5) Jail Lane, Biggin Hill, RAC.

7) Thickets near Selling Station – an escape from cultivation, 1944, D.H.K.

16) Hedge, Hythe, 1889, H. Guermonpré, BM.

‡ H. hircinum L.  
“Kent (not native)” Syme, ii, p.146.

16) Hedge, Hythe, 1936, E.C.W. BM.

H. perforatum L.  
Common St Johns Wort  
Native. Open woods, scrub, grasslands, riverbanks, hedgebanks, roadsides: very common throughout the County; commonest on calcareous and sandy soils, but not infrequent on clay soils too.

1\textsuperscript{st} record, 1627: E of Gillingham, Johnson, \textit{Iter}, p.5. Seed, possibly of this bur uncertain, was found in the late Bronze age site at Minnis Bay: Conolly\textsuperscript{1941} (Goodwin p97).


16) Aldington.

\textit{Hypericum maculatum} Crantz ssp. \textit{obtusiusculum} (Tourlet) Hayek  
N 15, 16 7/15 Imperforate St. John’s Wort  
Native. In grassland, open woods, and scrub; rare, with a very scattered distribution. Much commoner in Sussex and in Surrey, but rare in Essex and in Pas de Clais.

1\textsuperscript{st} record, 1836: Charlton Wood, Cooper, \textit{Fl. Met.}, p.55.

1) Blackness Keston, F. Swain.

\textsuperscript{169} Given as \textit{H. elatum} Ait.
3) Wood by stream 1m S of South Street, Whitstable, 1960, HMW.


10) 45 Near Ide Hill, 1939, C.E. Britton, B M.

11) 75 Penenden Heath, Maidstone 1944, 1952; in scrub on E. side ,MNE.  Wrotham, F. Swain.  85 Harrietsham, bank by station, Mrs B. Dodds.


14) 93 Robins Wood, Cranbrook, 1944.

15) 02 Golf course, N. of Littlestone, in grassland, 1950.

H. x desetangsi Lamotte   H. perforatum x maculatum

Native.  What appears to be a form of this hybrid occurs principally on the banks of the Medway, where it is frequent from Tonbridge to Yalding.


10) E of Dunton Green, in gravel pits, A. Beadell, det. CEB, BM.  Sandy banks N of Greatness, RAC, det. D.P.Y.


13) Near Ferndale Park, Tunbridge Wells, 1942, H.W.P. BM.

H. tetrapterum Fries  15, 16 Square-stalked St John’s-wort


1st record, 1777: Davington Brooks, E. Jacob, Pl. Fav., p.49


2) Holborough Marshes, 1944, 1980! Luddenham Marshes near Ch[urch], HMM.  Graveney Marsh, near Broom Street, REW.  Wood S of Oare Mill Pond, REW.


6) Preston Hill Plantation PCH.

6E) Randall Wood 59, PCH.

8) Browns Wood, Temple Ewell, KDR.


16) Coft P[joint], VFP Day.

170) Square-stalked St John’s-wort in the list of taxa; Square-stemmed St John’s Wort in the manuscript.

171) No records given in manuscript, but notebooks mention Localised sites for district 15: Shirley Moor at and south from TQ 940 320 in 1954; and stream by bridge, Potman’s Heath in 1956 (TQ 872 281).
H. humifusum L. 15, 16 Creeping St John’s Wort
Native. Heaths, acid grasslands, and dry woods on acid soils; common on the teriaries, and the Greensand, and the High Weald; not infrequent on drift soils on the chalk plateau locally; absent from the marsh districts, Grain, Sheppey and Thanet.
1st record, 1632: E. of Canterbury, Johnson, Descriptio, p.29.  Seed, Minnis Bay, L[ower] Bronze Age site; Conolly 1941 (Godwin, p.97).


5) Woods on clay with flints, top of Chevening Park, 1951 MNE.


9) Margate, 1841, A.T. Teuton in Hb. Croydon LNHS.


16) Kiln Wood, Sandling, LJH. Grassy Banks, Hythe, LJH.

H. pulchrum L. 15, 16 Slender St John’s Wort
Native. Dry woods and heaths, mainly on sand and gravel soils, rarer on clay, very rare on chalk; common in all wooded parts of Kent, but absent from the marsh districts, Grain, Sheppey, and Thanet.
1st record, 1632: W. of Cantebury, Johnson, Descriptio, p.33.


3) Denstead Wood, 1950, MNE. Fordwich JG. Church Wood, Rough Common, RGW.

5) Halstead Miss T.... E. of Biggin Hill Jail Lane RAC.


H. hirsutum L.

Native. Grassland, scrub, open woods, wood borders, railway banks, roadsides, hedgebanks, on chalk, ragstone, and clay soils, not often on sandy soils; very common except in the marsh districts; apparently absent from 15) Romney Marsh, and from the Isles of Oxney, 9) Thanet, and Grain.


2) Pine Wood, Littlebourne L.W.W. Shelvingford Wood, MEM.
7) Reiden Wood 58 B Nash.
13) LS of A.249, on steep scree in chalk scrub, Longreach Wood, SW of Stockbury, 1957, 1960, 1965 about 15 plants MNE.
14) Oxney Woods near Snowdown in chalk scrub, 1960; 2,000 P Gay (sp!) 7 locations.

H. montanum L.

Native. Dry hedgebanks, scrub, and wood-borders on calcareous soils, particularly at the junction of the calcareous Thanet Sand (or other overlying sandy strata) and the chalk; rare, and mostly near London. Very rare in V.C.15.


2) Bysing Wood, Faversham, Bateman in Blackstone, 1746, p.38: the locality which is partly on Thanet Sand, is still possible but it has not been refound in spite of search.
3) Byes Wood, Faversham, Bateman in Blackstone, 1746, p.38: the locality which is partly on Thanet Sand, is still possible but it has not been refound in spite of search.
10) Lamberhurst Quarter. Streamside, Vauxhall Lane, Southborough CAS. Wood S. of Highfield Rocks. Blackbush Wood, Cranbrook, DS.
11) Blackbush Wood, D.S. 172
H. elodes L.  15, 16
Native. Valley bogs and acid boggy pools: very rare.
1) [Extinct at Chislehurst (1893, HFP; 1900, SEC), Hayes, Lee and Charlton.] Keston Bog, Cooper Fl. Met.; J.S. Mill 1863; 1916, A.G. Davis MNE; 1917, PHC; 1924, JEL; 1950, JD Lovis, not observed since 1950.
12) "Near Ashford" 1848 in Hb Lamb MNE. Hothfield Common J.S. Mill, 1863; HL 1900 MNE; abundant in several bogs, 1942-56! 1994!). [Extinct at Willesborough Lees; and at Westenhanger (Gibbons Brook, where it was recorded up to 1925 by J. Walton].]

TILIACEAE

Tilia L.
Tilia pollen (probably) all cordata has been found at [lowe] Halstow (Interglacial) Burchell, 1921, and at Neolithi-Mesolithic levels at Northfleet, Burdell & Pigott, 1939.

T. platyphyllos [Scop.] Large-leaved Lime (7N) 16
Possibly native in one woodland: extremely rare. The pollen of this species has been found in peat sealing a Mesolithic site at Addington, by J.P.T. Burchell (see Godwin, H. (1957) The History of the British Flora, p.98) and see Burchell & Erdtman (1950) Nature, Lond., 165, p.411.
1) Chislehurst, Planted GMB.
6) Eynsford Village, Planted, GMB.
8) Planted, Broome Park, Denton, Miss D.A.C.L., 1960.MNE.
13) W.] (hybrid) about 7 trees, scattered along a stream in a small valley, remote from houses, among native vegetation, Combwell Wood, 1959, MNE, 703337, F. Rose. It is just possible that this is a native relic here; the situation is a very natural-looking wood. 174 1954, MNE, Goudhurst. Roundabout Woods, Tunbridge Wells, CAS.

1) Hayes Common, 1901, Hb. Davis MNE. Shooters Hill, GMB. Dartford Hearh, GMB. Ruxley Pits.
2) Love Lane, Minster, 1958, OD.
5) ‡ Halstead, A.A. BM.
6) Darenth Wood, planted coppice, 1949, MNE.
7) Planted, Belmont Park, 1958, DMcC.
12) Stowting, 1956, ES.
16) Saltwood, L.J.M.

T. cordata Miller Small-leaved lime. N
From pollen analytical data it is known that this species was widespread as an indigenous forest tree in S. England in the "Atlantic" period and later, and its pollen was identified on a Mesolithic site at Addington, Kent

173 This list, added without reference to botanical districts, appears to be a précis of sites mentioned in Hanbury and Marshall (1899), whose reference to Farnborough is taken from Phytologist v. 372, where it may be an error for Farningham.
174 This entry appears to have been revisited at least twice in redrafting. Once was to add the grid reference and change 14 trees to seven. Another was to annotate as '(hybrid)', reinforced by another note 'no, hybrid'. This is explained by a manuscript report prepared by Francis Rose under contract headed ‘Survey of Four Woodland sites in Tunbridge Wells District’, relating to a survey carried out 4-6 September 1990 at, inter alia, Combwell Wood: ‘...the stream gill at “J” was reached (704 339) and the Tilia trees that I found here c.1957 were refound. These were identified then by someone at the British Museum (N.H.) as Tilia platyphyllos, and hence published as such in the Bulletin of the Kent Field Club. However, with more knowledge of Tilia spp. gained from Prof C.D. Pigott since then, it was clear to me in 1990 that these trees are hybrids of T. cordata and T. platyphyllos and very likely were originally planted.’
(Burchell & Erdtman, 1950; see above), but it does not occur certainly native any where in Kent today. Regarded as native now in Surrey (Glovers Wood), and in Sussex in Fl. Sussex (p.91). Certainly native and still abundant in many woods in Mid and North-east Essex on glacial gravelly loams. [deleted] native in Pas de Calais, but it appear to be so in the chalk woods of the Somme Valley.

5) Halstead, 1848, A.A. BM.
8) Covert Wood, G. Peterken.
11) Medway bank, below Maidstone, not evidently planted, 1958, E. Philp, MNE.
13) ‡ Tunbridge Wells Common, CAS.

MALVACEAE

Malva L.175
M. moschata L. Musk-mallow. N 15, 16 41/51
Native. In open, well-drained woods, on chalk, sand, and clay, and in hedgebanks and scrub; frequent in the Weald, and on ragstone, chalk and sand; abundant in Oxney, Romney Marsh, Grain, and Sheppey, and the lowlands S. of the Swale; very rare in Thanet, and in district 4) (Lower Stour valley); frequent in Sussex and Surrey, especially on chalk and in the Weald; uncommon in Essex; rather rare in Pas de Calais.

1st record, 1640: Westerham, Parkinson, Theatrum, p.306.
1) 46 Hayes, D.McC, GMB. 47 Foorts Cray, 1945. 36 W. Wickham 1915 Hb. Davis MNE. 47 Abbey Wood, 1922, St.J.M. 47 Ruxley Pits. 37 Beckenham Place Park, PCH. "Keston; Blackheath 56; Bexley.
4) 25 Hedgebank near Wenderton Manor, Wingham, L.W.W.
Farningham; Cobham; Dartford; Gravesend; Cliffe.

Chatham; Stockbury.

175 In the manuscript, species given in sequence: M. moschata, sylvestris, nicaeensis, neglecta, pusilla, parviflora, ambiguа, verticillata.
55; Dover 55; Chartham; Canterbury; Wingham; Sandwich 56.
Glennie (BRIST). Malling; Maidstone; Hollingbourne; Edenbr[idge]; Marden; Headcorn; Woodchurch 56.
12) 04 Bybrook 015440. 04 Blackwell 045437. 04 Boughton Lees 027475. 94 Hothfield Heath. 03 Ham Street, 1890, ESM. 04 Willesborough Lees, 1946. 94 S. of Charing 946475. 94 S. of Charing 950474. 94 Hurst Hill: 945442 / 943439. 95 Lenham Heath, sandy bank Bank E of Lenham. 91 Fagg's Wood 980345. 93 Hunts Wood 960337. 03 Bourne Wood 005335 / 003340. 03 Kingsnorth SE 013 382. 93 Chilhaming 978396. 94 W of Hothfield 961442. 94 Westwell 990347. 94 S of W[est]well 990460. 94 N of Yearsea 987455. 04 Lenacre 005455. 04 Sanatorium 010450. Hothfield; Ashford; Dodington.
14) 83 Wood near Breeches Pond. Cherry Garden, 50 acre Wood, Woodchurch ES. 83 Benenden. 73 Hawkhurst.
15) 01 Dungeness near Old School, 1960, EGP. Dungeness rare.
M. sylvestris L. 15, 16 Common Mallow N 49/51 Native. Roadside, banks, rough pastures, beaches nearly always in very well-drained places; throughout most of Kent, though less so in the Weald than elsewhere. On the Weald Clay tract it occurs mostly by roadsides on the Paludina limestone and sandstone seams.
1st record, 1632: Sandwich, Johnson, Descriptio, p.25.
3) Whitstable.
4) Sandwich.
8) Wye Downs. Bridge JG. Bekesbourne. St. Margarets Bay 1893 HWP BM. River, KDR. Canterbury; Wingham; Sandwich; Elham; Alkham; Dover.
9) Fields W of Cleeve Court Minster '63. Thanet.


14) (Not recorded S. of Hawkhurst or at Sandhurst.) Kenardington Ch[urch] ES.

15) Appledore St(atio)jn, 1958 MNE. Hythe Seafront KEB. Tenterden 59; W Oxney 59; Appledore; (Sandhurst N[n]ot R[ecorded]).

16) Sandgate. Hythe. Dungeness; Romney; Aldington; Hythe; Folkestone.

‡ M. ambigu Guss. 176


‡ M. nicaeensis Ali. 177

1) Field, Avery Hill, Eltham, AHWD, 1892, BM.

‡ M. parviflora L. Least Mallow.

C

1) Old chalk pit, Green St. Green, Farnborough, 1937, JEL (Hb L.) BM.

2) Waste g[round], near Faversham Sation, 1893, AHWD.

4) Manure heap N. of Sandwich, BEC, 1864, p.10, Syme. Shoddy, Sandwich, 1960 DMcC MNE.

11) Edenbridge, Mr. Justice Talbot, 1924, BEC, p.563 (carpel glabrous).

15) Broadwater Down, Tun[bridge] Wells, garden weed, KEB, det. JEL.

‡ M. pusilla Smith 178

Small Mallow.

C

1) Rubbish heap, Plum Lane, Plumstead 1893 A.H.W.D. BM.

2) Cross ness, near Erith, 1892, AHWD BM. Plumstead Marshes, 1915, JE Cooper. Motney Hill, 1951, DMcC. Higham, PCH.

4) Kingsdown, 1890, ES Salmon (J Bot. 1890).

11) Edenbridge, ESS (J Bot, 1890). Shoddy Field, Comp, 1960, DMcC MNE.


M. neglecta Wallr. Dwarf Mallow.

N 15, 16 41/51

M. rotundifolia auct., nec L.

Native, on beaches, dry roadsides, pastures and banks, waste ground, often at foot of walls in or near villages, usually on extremely well drained soils in full sun.

First record, 1632: Sandwich to Canterbury, Johnson, Descriptio, p.30.


Keston 55; Blackheath; Bexley.

2) 57 Edge of Swanscombe Marshes. Otterham quay BC. 87 All Hallows sea wall, AG Side. 06 Faversham. 06 Graveney, 1949. Sheppey DHK; Cliffe; Grain 58/9; Faversham 55.

3) Whistable 55.


Wingham; Canterbury; Sandwich.

176 Not in check-list; since regarded as synonymous with M. sylvestris.

177 Not in check-list.

178 Cited as Sm. & Sow.
6) 57. 66. 67. Cobham; Dartford; Gravesend.
7) 95 Belmont Park Faversham. Highsted Pit HMW. Chatham; Stockbury; Teynham; Doddington.
8) 15 Bridge, Miss T. Webber. Goodnestone JG. Alkham ‘56.

10) By bank NW of Brasted 1957 RAC. Thanet 63.


‡ M. verticillata L.
13) garden, High Brooms, 1900, E.C. Gilbert, TLS.

Lavatera L.
‡ L. arborea L. Tree-mallow.
C (15) 6/52

† Apparently always introduced in Kent, but well naturalised and at home locally on the coast.

1) 1st record, 1860: Walmer, J.S. Mill. Not recorded as native in SE England, though in Sussex it occurs in similar places on the coastal cliffs to the Kent localities. Not recorded in N. France.
3) 16 Coast guard Station, Swalecliffe, 1938, JBM. 16 Whitstable Harbour abundant, RE Wood; H. Wilks, 1958 (on reservoir bank and waste ground near). 06 Thanet Way, 1m W of Bostal Hill, Seasalter HMW.
9) 36 Several places in Thanet, LWW (Cliffs at Broadstairs, Mrs Benson; H. Clifford, 1893 BM; Westgate, FJH; Kingsgate, Withering; Whitwell.).

14) Hedge, Wittersham [probably] bird sown, 1935 ASK.
16) 23 On top of the beach / below the Leas, Folkestone, B.D. Jackson: L.W.W. & F.R.!

‡ L. cretica L.179
‡ L. thuringiaca L. (= L. albia [auct.] non L.)180 Hyeres Tree-mallow.
‡ L. trimestris L.181 Royal Mallow

Althaea L.

179 Entry given in manuscript, but no account.
180 Given in check-list, but no account in manuscript.
181 Given in check-list, but no account in manuscript.
**A. officinalis** L.  
Marsh-mallow  
N  
11/51  
15, 16

Upper borders of saltmarshes, borders of dykes in drained former saltmarsh, and banks of tidal rivers. Formerly in all the estuarine marshes; still locally frequent by the upper tidal Medway, and abundant in Romney Marsh, and occasional in the lower Stour estuary, but extinct in many former localities on the Thames, Swale, and W. of Thanet.


1) Extinct in the Thames side localities at Woolwich, Erith, Cliffe, Greenhithe and Gravesend – first recorded by Gerard.] Alien at Joyce Green, Dartford, GMB.

2) 76 River bank S. of Burham Church, 1943 **MNE**, 1953 **MNE**.  
76 by the ferry, Wouldham.  
76 NE of Halling in Salt Marsh 1956.  
76 Holborough Marshes.  
Reed beds N. of Snodland, NE of Gasworks, 1980.  
76 Marshes S. of Snodland, 1883 E. Bartlett **MNE**; 1901, H. Lamb; 1943 **MNE**; 1946 **MNE**. Below Upnor on river shore below Cockham Wood 1 plant 1999!  
75 By river near the Friars, Aylesford.  
75 [Extinct at Faversham, Ospringe, Graveney, Oare, Luddenham, and Goodnestone, first recorded there by Bateman in Blackstone, 1746.]

4) [Sandwich, H.C. Watson.] Riverside ditches NE of Sandwich, D.P.Y., 1947 (1947l).  
35 S.W. of Downs Farm.  
35 Ditches E of Worth, 1948; frequent by new cut, 1950-53, REW.  
36 R. Stour W of Red Lion, and New Cut / Richborough L.W.W. 1949, REW.  
36 Dikes by R[ailway], S. of Minster CA Roberts.  
[Extinct at St Nicholas, Sarre, and Pegwell.]

12) [Casual inland.  
W. of Orlestone by r[oad]; Westwell, 1 plant, 1947, ES.]

15) Plentiful in Romney Marsh and its adjacent alluvial marshes.  
03 S. of Ham Street JS Mill (1946l).  
03 Newchurch.  
93 S of Kenardington 1959, **MNE**.  
13 Dykes near Redoubt, Dymchurch Rd, Hythe LJM.  
03 W. of Burmarsh.  
13 N. of Dymchurch.  
02 W of Brenzett.  
1945 **MNE**.  
92 W and E of Snargate.  
02 S. of Brookland.  
02 Ivychurch.  
02 Old Romney, 1959 **MNE**.  
93 Shirley Moor.  
03 S. of Bilsington.  
13 S. of Lympne.  
03 S. of Aldington.  
82 S. of Small Hythe.  
92 SW of Appledore.  
SE od New Romney Ch[urch] RAC.  
82 W. of Wittersham.  
92 E. of Appledore, 1954 **MNE**.  
13 Sea front, Seabrook, 1944, DHK.  
S of Wittersham ASK.  
Appledore, 1871, R. Pryor, **MNE**.  
Romney Marsh, R. Pryor **MNE**. Marsh at New Romney, 1909 **MNE**.  
Chatham; Maidstone; Sandwich; E. Thanet; W. Oxney; Hythe; Tenterden; Aldington; Woodchurch; New Romney.

Not recorded as a native in Surrey, though it probably occurred at one time by the tidal Thames; locally abundant in the estuarine marshes of Sussex, of Essex, and of the N. French coast from Gravelines to the Somme.

[Tipped into the manuscript is a sheet in Francis Rose’s hand as follows:]
Althaea officinalis L.

Most Grid refs. approximate, when 6 figures. Dates given when I have them in my records

(Medway)
S of Burham Old Church, 1953 – 716613.
Wouldham Ferry, 1953 706638.
Saltmarsh NE of Halling, 1956, 710644.
Holborough Marshes, 1980, 710625.
N of Snodland, E of Gas Works, Reed bed, 1980, 607623.
S of Snodland 1946 – (maybe gone now) – 7161.
NE of New Hythe Ferry, 1950 – 714604.
River by the Friars, Aylesford, 726588.

(Stour)
Riverside ditches NE of Sandwich, 1947, 3458.
SW of Downs Farm, NE of Sandwich 343587.
Ditches E of Worth, 343566.
New Cut Richborough, 1950, 336612.
Dike by Railway S of Minster, 313642.

(Romney Marsh)

(Althaea was clearly widespread in North Kent at one time but has now largely disappeared there from the Thames marshes.)

A. hirsuta L. (15), 16
Probably native. In rough chalk grassland and arable fields, very rare and local; also as a casual. Persistent near Cuxton since at least 1792*. It has occurred in a rough chalky field near Reigate in Surrey, and in one near the Cuckmere in Sussex: its status at those places is uncertain. It is regarded as native on the chalk in Normandy and has been reported in Nord though not in Pas de Calais or Somme.

6) Corn field near Cobham, J. Rayer, 1792; in Symons Synopsis, 1798: sp[ecimen] in Herb. Ed. Forster (1st record). Numerous records (and specimens) since from this locality, which is now better described as cornfields and rough chalk grassland Brachypodium pinnatifid. S of Great Wood, N. of Cuxton. It has been reported extinct more than once, but is still plentiful in some seasons; seen up to 1962! 4 p[lants] J. Cadbury; 1964; 1 p[lain], Sir Jim Holland; abund[ant] also in '37; 42; 45. Cobham 1838, ex Hb Lamb MNE; F. Jones, 1880 ex Hb Jamb MNE; Hb. Jamb 1880 MNE; 1901 MNE; 1945/1946/1952/1955 MNE; 1933 JEL BM; 1921 HWP BM; 1907 HWP BM. Salvia pratensis and many other interesting calcicoles grow with it. Luddesdown, F. Forsyth, 1930. Dartford, Tagg, 1911. (Hedge at NW corner of Red Wood, Luddesdown, 7 or 8 p[lants] 663669, 1948, Mrs B Welch.)
7) Wouldham, Kent, J.F.Y. (Soc. Bot. Lond. 1840.)

Alcea L. 183
† A. rosea L. Hollyhock. H

---

183 Given as Althoea.
2) Waste ground, Crossness, PCH.
8) Longfield Tip, 1956, P.C.H. Lane End, PCH.
10) Sevenoaks tip, DMcC.

**Arbutinon** Miller

*A. theophrasti* Medikus\(^{184}\) Velvetleaf H

**Hibiscus** L.

‡ *H. trionum* L.
1) Beckenham, H. Davis, 1934; 1935, MNE.

**[SARRACENIAEAE]**

**[Sarracenia** L.**]**

[S. purpurea** L.** seed of this was sown at Gibbons Brook in 1960 by R. Gorer.]

**DROSERACEAE**

**Drosera** L.

*D. rotundifolia* L. 15, 16 Sundew

Native. Wet-heath, and valley-bogs, among *Sphagnum* species; now very rare and in three localities only; formerly much more frequent; on the Tertiaries, the Folkestone Sand of 12), and on the Hastings Sands.


2) “Stone Marshes” Dr. McReddie, 1901-8, teste S. Priest.

12) Hothfield Common, 1848, Hb. Lamb MNE; 1863 J.S.M. (Hb. Mill); to 1956 MNE, very abundant in and by the main valley bog, also in two other bogs on the common! [Willesborough Leas, C.P.S.K.; now extinct, the area having been partially drained; though still interesting, it is not now suitable for *Drosera.* Gibbins Brook, Sydney Webb; G. Walton; AE Webb; 1938; 4 plants, 1945! MNE; 1949, E.C. Green; apparently now gone, 1954.

13) [High Broom [sic] Tunbridge Wells, Miller.] Hawkenbury Bog\(^{185}\), 1942, J.R.W.; (1945! etc.) MNE; 1954, C. Stace. [Tunbridge Wells, Hb. Lamb 1870 MNE.] [Bog round Louisa Lake, Bedegbury Forest, Goudhurst, J.C. Melvill; Clarke; apparently not there now, 1943-52, though habitat appears ideal for it still!]

This species is only really plentiful at Hothfield Common; it is now partly protected from trampling at Keston bog. The Hawkenbury site is protected as a nature reserve. It probably occurred widely at one time, on the Folkestone Sands heaths, and in the High Weald; locally still very common in Ashdown Forest in E. Sussex, and on the Greensand heaths of W Sussex and SW Surrey, very rare in Essex (Epping Forest now) and very rare in Pas de Calais (2 loc[ation]s) and N France generally.

[D. intermedia] Hayne would have been expected in Kent, as it is common locally in Ashdown Forest and in west Surrey, but it has never been reported so far as I know, and certainly does not occur now as a native. I planted this species experimentally in a marked plot at Hothfield Common in 1947, and it has survived to 1964 but not spread.]

[D. anglica] Huds. was planted at 1) Petts Bog, Chislehurst, by Sherard, the plants coming from Westfield Down in E. Sussex (where it is now extinct), and a specimen exists in Hb. Dillenius; a record by Milne & Gordon probably had a similar origin. It is not known now as a native nearer than the New Forest and N. Suffolk (Redgrave and Theinetham Fens).

[Genera and species continue to CISTACEAE]

[CISTACEAE]

\(^{184}\) Given in check-list, but no account found in manuscript.

\(^{185}\) Not in vc16.
Helianthemum L.

Habitat: in old chalk grassland, and hedgebanks and cuttings on chalk; widespread and frequent to common in the chalk districts; also on sunny s-facing banks on the calcareous Thanet Sand.

1st record, 1597: Gravesend, etc., Gerard, *Herbal*, p.1102.


16) [Sandgate, 1816, J.F.Y. BM.] in Hb Coll. Marlborough the label “Sandgate, Kent” appears on a specimen on the same sheet as a specimen labelled from Somerset dated 1869.

[VIOlaceae]

Viola L.
V. odorata L.
[Text missing from manuscript]

V. odorata L. x V. hirta L.


7) Slope of Downs, Detling Hill, 1939, J.B.M. No. 767.


V. hirta L. 189 15, 16 33/52 Hairy Violet

186 Given as *H. chamaecistus* Mill. Follows Hypericum in the manuscript.

187 Anna Atkins' maiden name was Children, so this should have been given as Miss Children if it was her find before marriage, but may have been her step-mother’s find, preserved by Anna.

188 This would have been the first page for *Viola*, which instead starts with *Viola hirta* at the beginning of vol. 2 of the manuscript. This is a loose page, so what preceded it has presumably been lost. *Viola odorata x hirta* was found after *Viola canina*, but is also a loose page and presumably became detached and was re-inserted later.

189 At this point, the second volume of the manuscript begins.
Native. Grassland and scrub on chalk, abundant and very constant: open woods and banks on ragstone, common: local on Thanet Sand: one locality each on Folkestone Sand and on London Clay in Sheppey. Unknown on other soils. Rare in 1), 2), 4); abundant in 5)–8); rare in 9) and 10); locally common in 11); and 16) on ragstone.

1666*; Charlton Wood etc., C. Merrett, Pinax, p.125.

Common on chalk in Surrey and Sussex; rare in Essex; common in Pas de Calais.

1) S. hedgebank of Farningham Wood, 1949 MNE, on Thanet Sand. Open bank SE aspect in Scadbury Park, 1959, on Thanet Sand. Chislehurst by Station GMB.

2) Ash coppice S of Warden, 1959, MNE, 026721, O.D. '56. Old R[ai]l[wajy], Stickfast Lane, Minster, '58.

3) Grassland on London clay NE of Rhode Common, 1946.

4) Wood on Thanet Sand, Wendorton Manor, Wingham, 1959, B.N.


9) Backman's Hill, 1853, A.A. (BM).

10) Rooks Hill scarp woods, 565531, CAS: FR.


12) Smeeith Ch[urch] y[ar]d RAC.


V. hirta L. subsp. calcarea (Bab.) E.F. Warburg 15, 16

Native. Chalk downs, frequent. The taxonomic status of this plant is doubtful.

1st records, 1899: Flora of Kent, p.46.
6) Maplescombe Valley, WDRW. Downs above Paddlesworth, near Snodland, 1946. Wrotham Downs, E.S. Edees.
16) Folkestone, Mrs. R’s HERB.

V. riviniana Rchb. ssp. riviniana
Native. Woodlands, hedges, sheltered grassland. Very common in all parts of Kent except the alluvial marshlands of 2), 4) and 15).
1st records either 1597: Blackheath, Gerard; or 1632: Faversham, Johnson, Descritto. See W.A. Clarke in J. Bot. 1892, p151.


V. riviniana Rchb. x V. canina L.


6) May’s Wood Cuxton, 1938, J.B.M. No. 496.

8) Stelling Minnis ’62.

10) Between Crockham Hill Common and French Street, 1913, E.B.B. Small heath near Westerham, with the parents, C.E. Britton, det. Beeby.

13) Heathy grassland SW of Leigh 1955. Rough ground Weir Field Shaw, Lamberhurst, 1940, JRW, Hb. JRW, det. PMH. Hook Green, JRW.

V. reichenbachiana Bor. Synonyms: Viola sylvestris auct.

Native. Woodlands on more base-rich soils; common on the chalk and ragstone, less so on the Tertiaries and in the Weald, but frequent, very widespread in all wooded areas, 1st record: 1882; North Cray, H. & J. Groves, in Herb. Brit. Mus.


190 Entry is duplicated above.
wood Trottiscliffe Downs (above Wrotham Water). Claylane Wood Cobham 61 HAS. Wood above Shoreham
AJW BM. Maplescombe Valley SEC. Copse N of Berrys Maple 609639 (chalk).
Fristed 1951 MNE. Squirrels Wood, Stockbury 1953 MNE. Copse below Purple Hill, 1955 MNE. Simia Wood,
Ospringe HMW. Roa[ds]ide Stockbury Wood Detling. Aylesford Common. Eccles, 1944. Cox Street, Detling,
1960 MNE, wood on chalk. Wood N of Milsted ‘63. NW of Otterden Place 63. Stockings Wood 803597. Hill
Hawkins Wood Chilham DHK.
Park Wood. 491485 Covert W[oo]d Barham. S of Crundale Ch[urch]. Iffin 191 Wood C. Haes. Thanington N of
scarp Woods.
bourne, Plaxtol. Ragstone copse NW of Gover Hill, 58. Dean Street, E Farleigh HL 1883 MNE. N of Pizien Well.
R[ailw]ay bank Barming Station.
13) 64 Pembury, 1945. 53 Hawkenbury 1945. 63 Tongs Wood Lamberhurst, JRW, 1941. 63 Laneside
bet[ween] Coldharbour and Tong FM, Brenchley, 1941 JRW. 63 Between Uzzards and Clay Hill, 1941, JRW. 63
Wood N. of Parsonage FM, Lamberhurst, 1942, JRW. 53 Tun[bridge] Wells, common, C.A.S. Wood NE of
Cobhambury, Edenbridge. 64 Bank by Waterworks, Pembury, P.C.H. Copse Ash FM, Horsmonden (Wad[hurst]
C[lay]).
16) 03 Aldington Knoll, LJM. Bargrove Wood / Bluehouse Wood, Newington, VFP Day.
V. canina L. 15, 16 21/52
Native. Heaths, grass-heaths, leached chalk downs and sand dunes; widespread but uncommon.
1) 57 Dartford Heath, A.H.W.D.; 1946! G.M.B. ‘54. 46 Hayes Common, DMcC.
3) [Tylers Hill, F.G.E.K. Old Park, Canterbury, FGEK.] 05 Base of Blean scarp on Thanet Sand, Iron Hill, 1960. 16 Sandpit,
between Canterbury and Broadoak, RGW.
[Castle Field, Walmer, F.G.E.K. BM. Deal, Baker.]
6) 55 Kemsing 1 p[lat], CAS.
7) [Rainham, Miss Young.] 86 Heath on Thanet Sand S. of Keycol, Newington, 1958. 14 Down E. of Elham, above chalk
pit, 1950, MNE.
8) 34 Between St. Margaret’s and Ringwold, 1889, E.S.M. 14 Lyminge Forest KDR. 14 Stelling Minnis ‘62.
10) 45 Crockham Hill Common, 1913, EBB; 1921 RNR; 1960, RAC. 55 Knole Park, GMB.
Common, 1946; 1948, Mrs Warnett.
Grass heath, NE Mersham le Hatch Park, 1945; 1960, MNE. [Brabourne Lees, G.E. Smith in FGEK; 1832, JC
1950 MNE.

191 Entry is duplicated above.
192 The manuscript contains two versions of Francis Rose’s grid map for this species, of which the more complete is given here.

14) 83 Grass-heath near Breeches Pond, Tenterden, 1947.

15) 01 By the Long Pit, Dungeness, L.J. Margetts, 1959 MNE.

16) 13 Sandling Park (Kiln Heath) LJM; 1958 MNE.

V. lactea Sm.

Native. Dry heaths, very rare and probably extinct, though its hybrid with V. riviniana still occurs.


11) [Shipbourne Common, Miss H.M. Crampton; not refound by me: possibly V. canina, which occurs there, was meant.

13) Tunbridge Wells Common, 1855, A.G. M., BM; 1870, W.W.N; 1894, C.E. Palmer (Hb. FJH); Dr. Gilbert, 1896, MNE; G.E. Shaw, c. 1936; not since. Between Leigh and Penshurst Park, E.S.M in Vict. Co. Hist., 1906 (what is probably a hybrid of this and V. riviniana found on a sandy grassy bank here, 1955, but no trace of lactea itself, 1955!) MNE.

V. lactea x canina

13) Tunbridge Wells, 1936, G.E. Shaw TLS.

V. palustris L. 15, 16 Marsh Violet

Native. In Valley bogs, and flush-bogs in alder woods with acid drainage water, usually among sphagnum. Confinned to the High Weald where it is locally frequent in 18 localities, and to the Folkestone Sand, where it occurs in six localities.


1) W. Wickham, Petiver.]

3) reported at Hoath by Rev. A.T. Browne.] –Error.


V. tricolor L. subsp. tricolor 15, 16 Heartsease, “Kitty run the Street”

Colonist. Cornfields, waste ground; chiefly on acid soils, frequent.

1st record, 1763: Blackheathe, Martyn, Pl. Cant.

Incl. V. cantiana Drabble, V. lloydii auct., V. lepida auct., V. penseaui auct., V. floribunda auct.

2) Field, Bell Fm., Minster, 1958, O. Davies.

3) London Rd., Canterbury, 1958, MEM.

5) Halstead, A.A. Knockholt, S.E. Chandler.


7) Cornfield E of Burham Church.

193 Duplicated entry.
8) Chartham Hospital, Mrs. B. Cornfield, Chilverton Elms, 55.
11) (V. lloydii) E Malling, FR. Cornfield by path, Ide Hill – Sevenoaks, CAS. The Quest, Harrietsham, Mrs. B. Dodds.
12) Roadside N of Potters Corner, 1956, CNP.
14) Arable Field on loam, W of Wittersham in Oxney, 1956 MNE. Near Beneden, 1889, E.S.M., BM (lepida). Hawkhurst, J. Piper, fide DS.
16) Sandling Park, 1894 ESM (V. lloydii); L.J. Margetts, 1958 MNE. (F[olkestone] sand) old r[ai]l[wa]y banks, SE of Sandling, (blue fl[ower]s) 1962, DACL.

V. tricolor L.: segregate records: V. cantiana Drabble, V. lejeunii auct., V. lloydii auct., V. lepida auct. 194

[tric.] V. anglica Drabble

6) E of Longfield, 1903 CEB BM.
7) Settington, Chatham, CEB 1894 BM.
10) Sundridge, 1933, PMH: Hb. L. BM.

[tric] V. lloydii Jord.
6) Greenhithe, W.W.
10) Sundridge, 1932, JEL: Hb L., teste E.D.
13) S of Combwell Wood 44 JEL.
16) Sandling Park, 1894 ESM.

5) Knockholt, SEC: BEC Rep. 1926
10) Bitchet Common, 1894, AHWD BM. Sundridge, PMH,1933 BM.
14) Sandling Park, 1894, ESM BM.

[tric] V. lejeunii auct.
Sundridge, R.B. Ulman, 1932 BM.

[tric.] V. cantiana Drabble.
Ashurst, 1916, EBB, fide BS.


[tric.] V. lepida Jord.

V. arvensis Murr. [segregate records] 196

---

194 This section is not easy to interpret, and sets out various names, with related records, of microspecies which are now usually subsumed into either V. tricolor or V. arvensis, although some are given varietal status in Sell & Murrell’s Flora of Great Britain and Ireland, vol. 1 (2018). The section is annotated by Francis Rose as to whether the taxa fall under tricolor or arvensis, notwithstanding the tricolor heading. As some of the microspecies are also mentioned in the main accounts of V. tricolor and V. arvensis, it may be that this section should be treated as a working document only; and the general decline of interest in the microspecies since means it is unlikely that they would have found a place in any final revision of the Flora of Kent.

195 Thus annotated, although cf. entry for V. arvensis x tricolor later.
[arv.] **V. arvatica** Jord.S
MNE Field N. of Malling Aerodrome, 1942.

[arv.] **V. obtusifolia** Jord.

[arv.] **V. agrestis** Jord.
1) Grove Park, 1881, H. & J.G. BM.
2) Fields below G[rea]t Wood, Cuxton, 1943, FR CW.

[arv.] **V. segetalis** Jord.

[arv.] **V. latifolia** Drabble
10) Sundridge, 1932, JEL, Hb L., teste ED.

[arv.] **V. ruralis** Bor.
6) E. of Eynsford Church, W.W.

[arv.] **V. deseglisei** Bor.
1) Near W. Wickham Railway Station, 1926, JEL; Hb L., teste E.D.
10) Sevenoaks, 1931, Mrs Wedgewood, BM. Manor Fm., Sundridge, 1933, P.M. Hall BM.

[arv.] **V. subtilis** Jord.

**V. derelicta** Jord.

**V. x wittrockiana**
1) Ruxley Pits

**V. hybrida**
1) Ruxley Pits.

**V. arvensis** Murr. Agg. 15, 16
Colonist. Cultivated ground; common, especially on the chalk.
14th record 1777: Hernhill, E. Jacob, Pl. Fav., p.123.

[incl.] V. latifolia, V. anglica, V. agrestis, segetalis, obtusifolia, ruralis, deseglisei, arvatica, derelicta.
1) 36 W. Wickham Sta[tion], JEL. 47 Bexley Ch[urch] Vand PCH. 37 Beckenham Place, PCH. 36 Ravensbourne, Bromley, Hb. Davis, 1915 MNE. 47 Grove Park 1881, H. & J. G. 47 SE of Bexley, Sidcup NHS.
2) 97 E. of Minster on Sheppey, on Bagshot Sands in fields. 77 Field, High Halstow 2 792753 PCH.
5) 46 Field, Washneys Halstead, PCH. 56 Chalky field W of Eynsford PCH. 36 Well Wood 396642 PCH. 46 Downe, 1962, E. Eagles. Morants Court Hill PCH.

**V. tricolor** segregate records mentioned in previous footnote.
7) Bluebell Hill, H. Lamb, 1889, MNE.  95 Pig Green, Eastling, 954564, C.T.  86 Field S of Purple Hill 1962.  76 Cornfields E of Burham ’60.  75 Arable above Charing Quarries ES.  05 Chilham, DHK, 1945 MNE.
9) 26 Cornfield 298665 Plumstone Fm, 1m NE of Monkton, 1958 MNE.  36 Arable W of Cleeve Court, Minster, ’63.  36 Field by Acol [cross]r[oa]ds, Minster ’63. Cornfield 1 mile SSW of Margate ’59. Cornfield St Peters Rd 369691 SE of Margate ’58.
10) 45 Sundridge, 1932, JEL.  55 Riverhead Sandpit by R[ai]l[wa]y CAS.56 Cornfield by Shoreham Ch[urch], PCH. 45 Cornfield, E. of Ide Hill CAS.
12) 94 Westwell Leacon, 1955 MNE.
13) 64 Kippings Cross Fm., Pembury, CAS.
15) Old shingle, E. of Hythe, 1956, L.J.M.
16) Folkestone, H Lamb, 1884 MNE ?correct.

V. arvensis x tricolor

V. contempet auct., V. variata auct.


8) Temple Ewell, Miss Fawdry, 1961.

10) Manor Fm., Sundridge, 1933, PMH: Hb L.

TAMARICACEAE

Tamarix L.

† T. anglica Webb

Planted by the sea. Records for this species are doubtful and may refer to the next.197

15) Old shingle, E. of Hythe, 1956, L.J.M.

16) Folkestone, H Lamb, 1884 MNE ?correct.

† T. gallica L.

Planted by the sea.


2) Sheerness: Minster in Sheppey, 1944, D.H.K. Seasalter, 1944, D.H.K. Leysdown, AG Davis 1917 MNE.

3) Whitstable: Tankerton, 1944, D.H.K.


8) Walmer to Kingsdown, F.G.E.K. (1946!).

9) Pegwell Bay, F.M. Webb (1946!).

15) Hythe, 1944, DHK. New Romney. Littlestone, CAS; GMB. Seabrook, 1944, DHK. Dymchurch CAS.


FRANKENIACEAE

F. laevis L. 15 Sea-heath

Native. Sandy or shingly salt marshes, above normal spring tide level; st the base of chalk sea cliffs, within reach of salt spray; very rare, though locally abundant. It has become extinct in several localities, particularly in N. and N.E. Kent, and now appears to survive only in the Dungeness area and between Folkestone and Dover.

197 They were maintained as separate species until and including Clapham, A.R., Tutin, T.G. & Warburg, E.F. (1962) Flora of the British isles, 2nd edition. The practice since has been to combine them under T. gallica. Tamarix follows Helianthemum in the manuscript.
First record, 1762: Sheppey, Hudson, Fl. Ang., ed.1, p.120.


8) Lydden Spout CPSK; D. Cooper, BM. E. of Sheerness, J.S. Mill, 1863.


CURCURBITACEAE

Bryonia L.

B. dioica Jacq.

Native. Wood borders, hedgebanks, open woods and scrub; mainly on chalk, ragstone and Thanet Sands, and very common on the soils derived from those strata.


2) Plumstead Sewer Bank.

3) Hedges between Wingham and Ickham. By Swanton Fm, Littlebourne, 1949 MNE.


E) Cockham Wood, Upnor, 1960 MNE.


[Then to SALICACEAE, which includes:]

Populus L.

‡ P. alba L. White Poplar. [account not yet transcribed]
prob. ‡ P. canescens (Aiton) Smith (P. alba x P. tremula) Grey Poplar [account not yet transcribed]
P. tremula L. Aspen. [account not yet transcribed]

P. nigra L. ssp. betulifolia (Pursh) W. Wettst. 198 (by Hothfield Lake, J.Pitt.). N Alien. Always planted in Kent MNE.

1) Shooters Hill Woods (agg.), 1954, G.M.B.

198 This name and citation is taken from the checklist, but in the manuscript it is given as Populus nigra (Duroi) Moench Black Poplar, although that name would normally have been applied to the Lombardy Poplar, which is given separately in the checklist as Populus nigra var. italic.
2) West Court Meadows, Shorne, 1957, P.C.H.
11) 140' at Fairlawne, teste H.L. Edlin, The Living Forest.
13) Angley Wood, 1956, D.S.
16) Stream N. of Saltwood Castle, 1959, LIM.

‡ P. nigra L. var. *italica* Münchh. (much planted). [account not yet transcribed]

‡ *Populus x canadensis* Moench (much planted in various forms)
Localised records for district 15: The form "Serotina" was recorded: one mile northeast of Ivychurch in 1955 (TR037285); and east of Brenzett in 1959 (tetrad TR02D).

....

*Salix fragilis* L. Crack-willow N
Generally planted. Localised records for district 15:
In a meadow west of Appledore in 1956 (either tetrads TQ92P or 93K); on Shirley Moor in 1955 (TQ940320).

*S. x rubens* Schrank (*S. alba* x *S. fragilis*). Hybrid Crack-willow.
Localised records for district 15:
Royal Military Canal in 1956 [probably southeast of Appledore, tetrad TQ92P?].

*S. alba* L. White Willow ?N
Often planted. Present on the Burmarsh road south of Hythe and also south of Ham Street. In Shirley Moor in 1955 (TQ940320).

....

*S. cinerea* ssp. *oleifolia* Macleight N
In relation to district 15: Here and there in the district, quite common in central area e.g. Selby Farm (TR1033). Also on Shirley Moor in 1955 (TQ940320 etc).

‡ *S. laurina* Smith (*S. cinerea* x *S. phyllicifolia* in Stace); (Philp: "S. caprea x viminalis"). [account not yet transcribed]

*S. aurita* L. Eared Willow N
On Dungeness (and in the Weald).

[Genera and species continue through the rest of SALICACEAE, and then BRASSICACEAE, which includes:]

*Rorippa* Scop. (incl. Nasturtium R. Br.)

*R. nasturtium-aquaticum* (L.) Hayek Water-cress N
Localised records for district 15: ditch ½ mile west of Appledore Station in 1954 and 1959 (tetrad TQ92U); Boulderwall (tetrad TR01U); and moat north of Old Romney in 1959 (TR033254).

*R. x sterilis* Airy Shaw (*R. nasturtium-aquaticum* x *microphylla*) [account not yet transcribed]

*R. microphylla* (Boenn.) N. Hylander ex A. & D. Love Narrow-fruited Water-cress H
Localised records for district 15: ditch at Fairfield (TQ92T) [MNE det. F.H. Perring]; and ditch north of Snave (tetrads TR02E and/or TR03A) [MNE det. F.H. Perring].

....

*R. palustris* (L.) Besser Marsh Yellow-cress N
Localised records for district 15: by B2080 east off Reading Street in 1956 (tetrad TQ93F?)

....

*R. amphibia* (L.) Besser Great Yellow-cress N
Localised records for district 15:
TQ83: near Tenterden in 1897 [R.R. Hutchinson – Hb. Croydon N.H.S.]
TQ93: ditch bank by B2080, Shirley Moor west of Appledore in 1954 (tetrad TQ93F) [E. Scott; also 1957 (!) – both in MNE]; Kenardington Bridge in 1950 (TQ9731) [E.S.]
Genera and species continue through the BRASSICACEAE, to:

**Cardamine L.**

*C. bulbifera* (L.) Crantz (= *Dentaria bulbifera* L.) Coralroot N [account not yet transcribed, map exists]

---

*C. amara* L. Large Bitter-cress N [account not yet transcribed]

*C. pratensis* L. Cuckooflower N

Localised records for district 15:
- **TQ82**: Sandhurst Levels
- **TQ92**: By road north of Oxney in 1954; and northeast of Old Romney church by dyke 59 (TR0325)
- **TQ93**: Shirley Farm, north of by-road 62 (TQ9332)
- **TR01**: Halfway Bush (tetrad TR01U)
- **TR02**: Dymchurch in 1882 (J.F.D.P.)

---

*Calluna Salisb.*

*C. vulgaris* (L.) Huds. 199 Heather N

---

199 Part of a series of maps from Francis Rose’s folder marked Kent Flora Maps; the distribution dots appear incomplete.
Erica L.

E. tetralix L.  15, 16  11/52  Cross-leaved Heath  N

Native. Wet-heaths, valley bogs; locally abundant, but generally rare, and absent from wide areas, including all of N.E. Kent, the chalk districts 5) - 9) and the marsh districts 2), 4) and 15). This species must have been much commoner on the Folkestone Sand before most of the heaths were enclosed and cultivated. Its main centres now are the heaths on the Blackheath Beds in 1) at Hothfield Common in 12), and in the large woods of the HighWeald between Tunbridge Wells and Biddenden in 13); 20 localities are still known.

1st record, 1777: Ospringe, E. Jacob, Pl. Fav., p.34.


[3] Unrecorded from the Blean district and almost certainly absent, though it would be expected to occur.]


10) Heathy Wood bordering a pond on 55 Ightham Common, near Crown Point, Miss Worship; 1958! MNE. Whitley Forest, EGP.


12) Hothfield Common, J.S. Mill; 1958, locally dominant in wet-heaths here! MNE.


[16] Shornecliffe Camp, G. Walton.]

....

Vaccinium L.

V. oxyccocus L.  Extinct, if indeed really found). Cranberry [account not yet transcribed]

V. myrtillus L.  N 200  Bilberry


Genera and species continue through the rest of ERICACEAE, then PYROLACEAE, MONOTROPACEAE, PRIMULACEAE as far as:

Hottonia L.

H. palustris L. 15, 16 Water-Violet N 17/51

Native. Ponds and marsh ditches; still locally common on the eastern half of the Weald Clay, on Romney Marsh, and on the Gault about Ashford; now rare elsewhere, it appears to be extinct in N.W. Kent, and it is extremely rare now in N.E. Kent. Rare in the adjoining counties (now rare in Surrey, very local in Sussex, rare in Essex), in the Pas de Calais, locally common the Flanders Plain, rare on the Channel coast. This is an extremely beautiful plant in full flower, with spikes of whorled pink star-shaped flowers rising from the water.

1st record, 1632: W. of Sandwich, Johnson, *Descrip[ti]o*, p.27.

1) formerly in Ponds opposite Coldharbour Farm, S.E. of Mottingham, E of Chislehurst, A.H.W.D. Many old records about Dartford; Greenwich; Woolwich; and Bromley.

2) Faversham Decoy Ponds, E. Jacob, Pl. Fav.

3) Ham Ponds, 330554, 1913-21, G.L. Davidson. 35 Dike, Worth Minnis, 1956, P.C. & J. Hall &F.R., MNE. [Reported formerly in Minster; Monkton; and Sarre Marshes, and in marshes at Sandwich Bay; Sholden; Hacklinge; Ickham; Ham; Deal 1850 MNE; Preston; Sandwich; see Fl. Kent, but there are no recent reports from any localities in NE Kent except at 35 Worth,though it has been searched for repeatedly and extensively.]

4) 64 Pond S of Ryarsh Wood, 1953. Pond, N. Frith Woods, Tonbridge, H.S. Vere-Hodge. 54 Pond at Upper Haysden, Kent, 1946. 94 Ponds 1 ½ m S.W. of G[rea]t Chart, 965404, ES; and 963403 ES. 64 Gravel pit pond 682495 S. of Yalding, by railway, 1948; 1957, CAS. 74 Pond S. of Woolpack, 1½ m. S. of Yalding, 1954. 84 Pond S. of Railway, 1m E of Headcorn, 1944/62. 94, Ponds NE of Vitters Oak, 953407, 952408, Bethersden 1954. 84 Pond, Leighbridge, 2m.NW of Headcorn 1959-62. 74 Pond by Railway, 1m. ENE of Staplehurst. 94 Pond E of Winter Fm, Bethersden 941405, ES. By R[ail][wa]y, Pond 1m W. of Sta[tion], Staplehurst, KEB. 83 Pond at Worsenden, Biddenden, 1954.

35 11) 64 Pond S of Ryarsh Wood, 1953. Pond, N. Frith Woods, Tonbridge, H.S. Vere-Hodge. 54 Pond at Upper Haysden, Kent, 1946. 94 Ponds 1 ½ m S.W. of G[rea]t Chart, 965404, ES; and 963403 ES. 64 Gravel pit pond 682495 S. of Yalding, by railway, 1948; 1957, CAS. 74 Pond S. of Woolpack, 1½ m. S. of Yalding, 1954. 84 Pond S. of Railway, 1m E of Headcorn, 1944/62. 94, Ponds NE of Vitters Oak, 953407, 952408, Bethersden 1954. 84 Pond, Leighbridge, 2m.NW of Headcorn 1959-62. 74 Pond by Railway, 1m. ENE of Staplehurst. 94 Pond E of Winter Fm, Bethersden 941405, ES. By R[ail][wa]y, Pond 1m W. of Sta[tion], Staplehurst, KEB. 83 Pond at Worsenden, Biddenden, 1954.

13) 54 Pond in part of Penshurst Park, Mrs. Warnett (1954!). 53/63 Dunorlan Lake, Tunbridge Wells, C. Stace & KEB, in both 53 and 63. 64 Furnace Pond, Horsmonden, 1899, J. Stirling TLS. 53, 63

14) Pond, in clay pit, Oxney, ¼ m. E. of The Stocks, 1958, 922271, MNE. Pond, Beals Fm, Redbrook Street, Woodchurch, 1960, H.W. Adams.


Cyclamen L.

† C. hederifolium Aiton D. since 1778. Cyclamen H [account not yet transcribed]

Lysimachia L.

L. nemorum L. Yellow Pimpernel N [account not yet transcribed]

L. nummularia L. Creeping Jenny N
In relation to district 15: Recorded from TQ82, TQ93, TR02, TR03 and TR13. Localised records: ditch sides on Shirley Moor in 1943 (TQ93); Brenzett (tetrad TR02D); ditches, Appledore (tetrad TQ92U); dykes at Bonnington (tetras TR03L and/or TR03R), Ruckinge (tetrad TR03G) and Ham Street (tetrad TR03B); and Small Hythe in 1956 (TQ888296).

L. vulgaris L. Yellow Loosestrife N

In relation to district 15: Largely unrecorded from the Marsh except: Dungeness fen southeast of Hamilton Farm, in 1952 (TR01); and dyke near Galloways, Dungeness in 1953 (tetrad TR01J). Other contemporary records: Shirley Moor at TQ940320 and to south (tetrads TQ93F and/or 93K); Royal Military Canal, Kenardington bridge in 1959 (tetrad TQ93Q); dyke, Ruckinge (tetrad TR03G) ["Mrs. M.J. Compp."]; and Small Hythe in 1956 (TQ888296).

Anagallis L.
A. tenella (L.) L. Bog Pimpernell N [account not yet transcribed]

A. arvensis L. ssp. arvensis Scarlet Pimpernell N [account not yet transcribed]

A. arvensis ssp. coerulea Hartman Blue Pimpenell N [In manuscript given as:]

A. arvensis ssp. foemina (Mill.) Schinz & Thell. This sub-species is frequently confused with the blue variety of ssp. arvensis: it has the fruiting pedicels equalling or shorter than leaves (not longer as in ssp. arvensis): flowers always blue, up to 12 mm diameter (up to 14 mm in ssp. arvensis): narrow-obovate corolla-lobes, which are very sparingly (not densely as in ssp. arvensis) fringed with 4-celled glandular hairs (5-celled in ssp. arvensis). It is a rare plant of cornfields on the chalk in Kent. Fl. Kent does not distinguish clearly between this ssp. and the blue variety of ssp. arvensis. Authentic records include the following: 3/51.


7) Cornfield, Westwell: 1 plant, 1947, E.S.


Very rare in Surrey and Sussex; in Essex?; rare on chalk in the Pas de Calais; commoner in Somme. Reported at 4) W. side golf course, Sandwich Bay, 1955, Mrs. Brickenden: “seed caps. 5-veined”.


Glaux L.
G. maritima L. Sea-milkwort N

In relation to district 15: Romney (TR02) and Hythe (TR13) with localised records at: Dymchurch, behind sea-wall (tetrad TR02Z etc); the Wicks west of Dungeness in 1946 (tetrads TR01D and/or TR01E) [MNE]; and 3) brackish meadows by church, Fairlight (tetrad TQ92T).

Samolus L.
S. valerandi L.

Localised records for district 15:

TQ82: dykes on levels, Sandhurst in 1954 [MNE]
TQ92: dyke east of Appledore in 1945 (tetrad TQ92U); and Snargate in 1954 (tetrad TQ92Z)
TQ93: dykes on Shirley Moor near Farm in 1945 (TQ9332)
TR01: old pits near school, Dungeness in 1946
TR02: dyke west of Brenzett in 1945 (TQ9927 and/or TR0027) [MNE]; and Brenzett in 1954
TR03: dyke south of Ruckinge in 1956 (tetrad TR03G) [MNE]
TR13: canal southeast of Burmarsh in 1958 (tetrad TR13A) [L.J. Margetts].
‡ HYDRANGEACEAE

‡ Philadelphia L.
P. coronarius L.
1) Ruxley Pits, A.G. Spooner & B.D. Stoyel.
13) Roundabout Woods, CAS.

GROSSULARIACEAE

Ribes L.
R. rubrum L. 15, 16 Red Currant. N
Native, almost certainly: by streams and in swampy areas in woods, also in drier woods, frequent in all wooded areas of Kent, especially in the Weald.
1st record, 1777: Ospringe, E. Jacob, Pl. Fav., p. 97.

1) 46 Holbrook Wood, Scadbury Park, Chislehurst, 1959 MNE. Ruxley pits. 56 Farningham Wood, PCH, 82! 47 Wood by River, N. Cray PCH. 46 High Wood, Crofton PCH.
2) 06 Davington Osiers, 1956 MNE. 87 Wood NE of Fenn Street 804759, A.G. Side.
4) 396611 PCH.
6) 85 Trundle Wood, Wormshill, on deep calc[areous] loam, 1967 MNE. 033552 Badlesmere CT.
8) Copse, Deerlock, Minster, AGS.
9) 57 copse in Water Meadows, Darent PCH. Idehill in wood 1950 Gardener. The Moor, Greatness, CAS. Westerham Wood 82.
12) 63 Half's Hole Lane, Tunbridge Wells. 63 N. of Lamberhurst Quarter, 1944→, in wet wood. 63 Kilndown Wood, 1946 MNE. 63 S. of Pembury New Church, by stream in Wood. 63 1m SW of Pembury New Church PCH. 64 Pembury Woods, PCH. 44 Stream & Wet Wood on Wadhurst Clay, ½ m SW of Chiddingstone Hoath.

R. nigrum L. 15, 16 Black Currant, “Gazells”. N
Native, probably. Damp ground, Alderswamps, and by streams in woods; not uncommon in the Weald.
1st record, 1777; Faverson, E. Jacob, Pl. Fav., p. 96

2) 06 Davington Osiers, 1956 (Faversham, 1777, E. Jacob).
4) 05 Challock Woods ES.
7) 65 Basted, DMcC. 75 Bydews Wood, Tovil, 1958, E. Philp. By Medway E Peckham to N, AHWD.

Follows Chrysosplenium in manuscript.
In the manuscript given as R. sylvestre (Lam.) Mert. & Koch.
12) Gault wood SW of Bulltown; W. Brabourne RAC. 94 Hothfield Heath. 1948. 03 Park Woosd, Smeth, C.N.P. Chilham, CNP. Shalmsford St[reet], copse by Stour, RGW.


14) Breeches Pond, RAR.

R. uva-crispa L. Gooseberry. N

Probably always an alien, but naturalised in several places in woods and hedges. 1st record, 1777: Ospringe, S. of Whitehill, E. Jacob, Pl. Fav., p.44.


2) 06 Davington Osiers, 1956. 86 Hawes Wood, Newington, 1950, MNE.

6) Wood E of Shoreham Station, 533613, GMB

7) 05 Hedgerows between Old Wives Lees and Upper Ensign, 1945, DHK. 95 Hope Shaw 967561, Eastling, C. Turner. 95 Broomham Wood 970562, Eastling, C. Turner.


10) Hedge, Shoreham GMB.

11) North Wood, Aylesford, CW.

12) By River, Chilham, E.S., 1956. Willesborough Lees CNP.


16) 1 bush by Brockhill stream, Saltwood, 1959, LJM.

‡ R odoratum Wendl. Buffalo Currant.

‡ R sanguineum Pursh Flowering Currant

1) Ruxley Pits

15) 54 Top of Quarry Hill, Tonbridge, CAS.

CRASSULACEAE

Crassula L.

[C. tillaea Lester-Garl.] Mossy Stonecrop. ext N (Sandwich c.1900)

Formerly native. Fixed sand dunes; extremely rare, and probably now extinct.

4) Sandy track on old dunes N. of Deal, c.1908, Tabor & West. Dr. Cyril West tells me that about 1908 Prof. Tabor showed him this plant in quantity on a sandy track about ½ to 1 mile N. of the end of Deal town, and that he is certain that it was this species. It has not been refound, and it has not proved possible to obtain further information from Prof. Tabor.]

‡ C. helmsii (Kirk) Cockayne New Zealand Pigmyweed.

(see Watsonia, 1961)

1) Pond at Sidcup (introduced probably with Pontederia from Perry’s nursery, Enfield); F.H. Jones, 1960 MNE.

Umbilicus DC.

U. rupestris (Salisb.) Dandy 15, 16 Navelwort. N

(U. pendulinus DC.; Cotelydon umbilicus-veneris-auct.) 6 localities now.

Native. Crevices of old walls; very rare. A Mediterranean andW. European species, common in Western Britain, only just extending to a few localities in Kent, on old walls; not in East Anglia. It is very local in Surrey (Chart and Ewhurst areas); and in east Sussex, where it occurs on old walls about Winchelsea. Not in Essex or Pas de Calais.

First records, 1777: Tenterden Church, etc. E. Jacob, Pl. Fav., p29

[2] All Hallows Church, Pocock.]
8) [Barham, F.G.E.K.] Goodnestone, on wall of Church, Miss V.A. Carpenter, 1929, teste Miss E. Day; 1962! about 20 plants MNE. Dover Castle, J.J. Bennett, Hb. Croydon NHS.
10) Old wall, 447507, E. of Crockham Hill Village, R. Clarke, 1958; 1959! Abundant on S facing sandstone wall against bank S. of the Youth Hostel, Crockham Hill, 1960, R. Clarke; 1960! MNE.
11) [Boughton Monchelsea Quarries, on old wall, E. Jacob; W.W. Reeves.] [Maidstone Church, A. Pratt.] The Priory, Leeds, on old wall, L. Musselwhite, 1959; 1960! MNE.
12) Westwell Church yard wall, CN Pope (1946!); only 1 plant, 1962, Miss E. Milward. Old flint wall, East Stour Farm, Godmersham, C.N. Pope, 1947; 1949! MNE. (1957!)
13) On treetrunks, by drive, Scotney castle, 1961, KEB.
14) Tenterden Church, E. Jacob.

[† Sempervivum L.]
† S. tectorum L. House-leeke
Not naturalised in Kent; apparently much planted at one time on walls and roofs, but very rarely now.
Many old records, from 1629 in Johnson’s Iter (E. of Gravesend); not worth repeating in detail.

1) Hayes Place, DMcC. Chislehurst GMB.
2) Faversham, E. Jacob (on a brick pillar, Abbey Street, L.W.W. c.1948.); 1950 Partridge Lane, REW; RGW on old roof.
4) nr. Stodmarsh Church, L.W.W.
5) Halstead, A.A. BM.
6) Eynsford on old roof HMP.
7) Wall, Otterden Place, G.L. Davidson, 1961
9) Haine, L.W.W.
12) Sankey House, Brook, Mrs. Kirby.
13) Bridge House, Lamberhurst, RW, 1941. Cottage roof, Groombridge Hill, CAS.]

Sedum L.
† S. spectabile Boreau Butterfly Stonecrop.

S. telephium L. 15, 16 Orpine. N 31/52
subsp. purpurascens (Koch) Syme (S. purpureum auct.)
Native. Woods and hedgebanks, usually on sand or gravel soils, though not on podsols; widespread, and locally frequent, though nowhere really common. Probably, as stated in Fl. Kent, more frequent than in any other part of England. Frequent in Surrey and Sussex, rare in Essex, very rare in Pas de Calais.
1) [Charlton Wood, Martyn. Bromley, Irvine. Shooters Hill, Curtis.] [St. Pauls Cray Common, AHWD.] [Wood E. of St Mary Cray, Cole.] 46 Hayes, Miss A Mills, 1956. 46 Roundabout Wood, Swain. 36 Nash, to 1946, ASK. 56 Farningham Road, PCH.; 82! Keston, Farningham, Dartford
Chislet ’56, Canterbury, Chilham, Teynham ’56, Wingham


‡ S. spurium M. Bieb. Caucasian- stonecrop. 207

† S. rupestre L. (S. reflexum L.) 15, 16 Reflected Stonecrop. 208

Probably introduced, but completely naturalised. It is possibly native on the Folkestone Sand, on sandy hedgebanks, but also occurs on old walls.

1st record, 1777: Faversham Abbey, E. Jacob, Pl. Fav., p.104.

† S. spurium M. Bieb. Caucasian- stonecrop. 207

1) Ruxley pits.

† S. rupestre L. (S. reflexum L.) 15, 16 Reflected Stonecrop. 208

Probably introduced, but completely naturalised. It is possibly native on the Folkestone Sand, on sandy hedgebanks, but also occurs on old walls.

1st record, 1777: Faversham Abbey, E. Jacob, Pl. Fav., p.104.


3) SW corner Bysing Wood HMW. Whitstable Gas Works HMW.


5) Knockholt, 1840, AA, BM.


7) Bridgar, Pockoc. Boughton Aluph on wall, E.S.M.

8) [Dover, FGEK.] 14 Lynsore Bottom, Miss DACL. 05 Charham Downs, nr Mental Hosp[ital] RGW.

9) [Roof of Smithy, Monkton, Wardale.]

[204] Grid-reference appears to be in error.

[205] Grid-reference appears to be in error.

[206] Grid-reference appears to be in error.

[207] In manuscript given as S. stoloniferum.

[208] Large Yellow Stonecrop in manuscript.


12) 94 Hothfield, bank on sand by A.20, 1946-52→. Wye, Freeman. 03 R[ail]w[ay] bank, Ham Street Station nr Woolpack, 1959, KEB.

13) Garden walls, Cranbrook DS. Well nat[uralised] in hedge, Kibblesha Southorough, KEB.

15) S. forsterianum Smith209 15, 16 Rock Stonecrop. 5/51

Alban? Naturalised completely on shingle beaches, and looking like a native, very rare and local.

1st recorded on the shingle at Walmer in 1875: A. Bennett in Hb BM.

2) [Higham Street, F.J.H.] ‡All Hallows, GMB.

4) 35 Shingle beach, between Kingsdown and Walmer, 1875; 1910, A.B. BM; 1907, F.L. Foord-Kelley BM; 1914 L. Day BM; 1945-54, plentiful! MNE. 36 Richborough sidings, L.W.W.

6) 67 colony in chalkpi, Northfleet, 1962, W.A.S. Green Street Green in pit HMP, 5870.

10) Wall at St. Clere, Kemsing, 1874, Roper.

13) 54 R[ail]w[ay] S. of Tonbridge Sta[tion] CA Stace 1958; KEB. ‡Bayham CAS.

15) 02 Littlestone beach, 1947.

S. acre L. 15, 16 Biting Stonecrop210. N.

Native. Sand-dunes, shingle beaches, cliffs near the sea; bare sandy or gravelly ground; old walls and roofs. Frequent in many parts of Kent.


2) Beaches, Isle of Grain; Shellness in Sheppey; Warden to Leysdown; E. of Sheerness.

4) Abundant on the dunes from Deal to Sandwich Bay and N. to Shellness. Kingsdown Beach MNE. Walls in Sandwich. Pegwell Bay: E. Bartlett, 1884 MNE.


7) Burham Downs, on bare chalk. Hartlip, wall, BC. Highsted pit HMW.

8) Cliffs, Lydden spout; St Margarets Bay.


10) 57 pits S of Dartford, GMB. Old wall, Sutton Corner, Darenth, PCH. 55 Knole Park Wall, B. Sennitt. 55 Sandpit by R[ail]w[ay]y, Riverhead, CAS. (Riverhead, D. Smith, 1906 MNE.)Farningham Village; Eynsford Village, Shoreham Village, GMB.

11) 65 Ragstone walls, Offham; E. Malling. Borou[gh] Green Quarry. (Penenden Heath, Hb. Lamb, 1848 MNE.) 85 Harrietsham churchyard, Mrs. B. Dodds. 54 R[ail]w[ay]y Embankment, Hildenborough, 563482, CAS.

12) 94 R[oa]dsise on F[olkestone] Sand, A.20, Hothfield Heath, 1947 MNE. 03 Mersham near Church, CNN.

15) 02 Old Sand dunes, Romney Warren. 13 Shingle Beach W. of Hythe, 1948 Mrs Welch. 01 On shingle nr old lighthouse, Dungeness, 1962. 01 Between Dengemarsh Sewer and the sea, P. le Brocq, 1950.

16) Folkestone Warren VFP Day. Sandling junction, Sandpit, LIM. (Folkestone, Hb Lamb 1895 MNE.)

‡ S. sexangulare L.


‡ S. album L. (possibly native on shingle & chalk cliffs).

White Stonecrop. ?N, C, H

3/51 as possible native; total, 10/51

Native or introduced. Naturalised on old walls and on cliffs and beaches by the sea; rare. Regarded as native on Carboniferous limestone in the Pas de Calais; possibly so in Kent, on the chalk cliffs.


209 In manuscript given as ssp. elegans (Lej.) E.F. Warb. (S. rupestre auct.).

210 Also Wall-pepper in manuscript.
3) 16 R[oa]dside, Radfall Hill, Whitstable, 1950, REW.
4) 35 Sandwich Bay, 1946. (Walls at Deal and Walmer, Miss L. Day.) 35 Walmer Beach; 34 Kingsdown Beach, 1946.
5) Berries Green RAC.
6) 67 Wall at Shorne, 1948. Dartford by pass, G.N.B. Darent, GMB.
7) (Bredgar Church, F.J.H.) 95 Old wall, Tong Fm., Eastling, 959562, C. Turner.
10) 45 Toys Hill, A. Beadell, c.1936.
15) 02 Littlestone beach, 1946. Hythe pavement, HMW.

‡ S. lydium Boiss. Least Stonecrop.

S. anglicum Hudson 15, 16 English Stonecrop N
Native. Shingle beaches; rare, but locally abundant at Hythe and Dungeness. 1st record, 1777: nr. Sandown Castle, E. Jacob, Pl. Fav., p.103.
[3] Formerly occurred at: Shellness, Mrs. Bryson; beach at Swalecliffe, FJH.]
[8] beach, below Abbots cliff, O.B.G.]
4) (stony places among the dunes) N. of Deal, E. Jacob; (1946!). Not as common here now as it appears to have been last century.
(13) introduced with shingle, Plain nursery, Bedegbury, LJ Davies, 1956.)
16) Sandgate, G. Walton.] At Dungeness it is abundant among the moss-lichen carpets on the stabilised older shingle over a very wide area.

‡ S. dasyphyllum L.211 [Thick-leaved Stonecrop]
Naturalised alien. Old walls; very rare.
16) Saltwood Castle Walls, 1953, C.N. Pope.

‡ S. rosea (L.) Scop.212 (Garden relic or escape). Roseroot H.

SAXIFRAGACEAE

Bergenia Moench
‡ B. crassifolia (L.) Fritsch Elephant-ears.

Saxifraga L

211 Not in checklist.
212 In checklist; not in manuscript.
† S. × urbium  D. Webb  (S. umbrosa × S. spathularis) (S. umbrosa var. crenatoserrata Bab.)
Londonpride.  H

Alien, naturalised in one or two places.

6) Ridge Wood, Meopham, Baker; 1948 MNE.


S. [x] geum
13) Bulls Hollow, Rushall, 1 plant, 1958, K.E.B.

S. granulata
L.  Meadow Saxifrage.  N

Native.  Dry grassland, hedgebanks, and old pits on sandy or gravelly, not markedly acid soils; drier parts of alluvial meadows on valley gravels; only locally common; woods on (?Pliocene) sandy loams on the plateau of the North Downs, rare.

This species has a very peculiar distribution in Kent. It is, or was, common on the Tertiary and river terrace sands and gravels near London and ... the Thames and extends up the gravels of the Darent Valley meadows to the Folkestone Sand E. (but not N.) of Sevenoaks, and extends intermittently along the Folkestone as far E. as Hollingbourne on the plateau of the North Downs. It is found E. and W. of the Darent Valley and NW of the Medway occasionally; at one place between the Medway and the Stour; and in two places east of the Stour. It is unknown elsewhere in Kent, being absent from the Stour Valley; from the Greensand east of Hollingbourne; and from the Hastings Sands. It apparently absent as a native plant in Sussex. In Surrey its localities link up with those in N.W. Kent about Croydon, and it occurs on river terrace gravels near the Thames in S. Essex as it does in N. Kent. Its habitats have in common that they are all on very free draining soils, and of neutral or very weakly acid reaction: both calcareous and very acid soils are avoided.

The pattern of distribution in Kent suggests relatively recent spread from the Thames Valley up the Darent to the Lower Greensand, possibly largely by vegetative means after forest clearance; long range dispersal of some kind may account for the very isolated colonies on the Downs plateau of mid and E. Kent.


113
[12] one plant thought to have been seen from train between Hothfield and Ashford Warren, 1954, FR. A.20, Charing SE, 1948, Miss J. Coast.
[13] Reported at Tunbridge Wells, Baker; probably a garden escape here. [Lamberhurst Churchyard, double fl[ower]s, naturalised; CAS.

‡ S. hypnoide L. An escape. Mossy Saxifrage. H
10) Naturalised on Deep lane bank S. of Farley Green, Westerham, 1958, RAC.

S. tridactylites L. 15, 16 Rue-leaved Saxifrage. N
Native. Fixed sand dunes, shingle beaches, old walls; locally common on the coast, not infrequent on ragstone walls about Maidstone, and Malling, very scattered and rare elsewhere, and absent now from large areas, including the entire Weald, and the N. coast E. to Sheerness in Sheppey.

4) Fixed dunes, Sandwich Bay, 1889, ESM, BM; abundant, 1946-54! MNE. Walmer beach; Kingsdown beach. Old wall, Worth, 1951 MNE. Dunes E of Downs Fm, Sandwich, 1962. Pegwell Bay, REW.
5) [Wall in Queen Street, Gravesend, R. Pocock.] Shorne Village, 1961, on old wall, HAS, NS167. Meopham Green on wall, Mrs. D. Woods.
7) [Denton Rectory, on imported shingle from coast, casual, c.1945, Miss DACL.]
8) Minster Churchyard, 1963. E. Thanet
10) 55 Otford, 1853, A. Atkins BM. 57 Old Wall, Sutton Corner, Darenth. 56 Old wall, Farningham, PCH; GMB. Old wall Lullingstone, GMB. near Westerham; Farningham
12) 85 Lenham Churchyard Wall. Chilham, on roofs and on churchyard wall, D.H.K. Castle steps, RAC. Canterbury on walls, Miss T. Webber, 1958. Chilham; Canterbury

Heuchera L.
‡ H. sanguinea Engelm.213 (Escape on waste ground).

Tellima R. Br.
‡ T. grandiflora( Pursh) Douglas& Lindley (Garden escape).

Chrysosplenium L.
C. oppositifolium L. 15, 16 Golden Saxifrage
Native. Damp shaded woods, mostly alder coppice, by springs and on wet stream banks. This plant is abundant generally in the county wherever spring lines occur, except in the Isles of Thanet, Sheppey, Grain and the N. side of the Chalk dip slope from Orpington to E. of Faversham. It occurs abundantly throughout the High Weald in every one of the 100 gills visited, all along the chalk and greensand springlines, in many places by springs and streams in the Blean district, but is absent from the main level tract of the Weald Clay, where there

213 Not in manuscript.
are no S facings, and only occurring where well marked valleys are cut into this by streams along the margin of Romney Marsh. It appears to depend upon physical rather than chemical factors for its successful establishment.\footnote{An account of this species is also given as follows, in Rose, F., Distribution maps of Kent Plants (Exhibit), in Lousley, J., ed. (1951) The Study of the Distribution of British Plants (1950 conference report), B.S.B.I, Arbroath. Occurs only in those areas where permanently moist but well-drained stream banks or springs occur, and thus is widespread in the dissected, well watered Hastings Beds country of the Weald. It also occurs elsewhere along the springlines at the junction of pervious and impervious strata. Its distribution map is very complex as a result; besides the dry chalk and sand, both the low-lying Weald Clay and the alluvial marshlands of the coast are avoided, for in both there is a lack of permanently damp, well-drained, shaded habitats.\footnote{Erroneously given as J. Jacob.}}

1st record, 1633: Woods at Chislehurst, G. Bowles, in Gerard's Herbal, revised by T. Johnson. It still occurs there abundantly.


4) Reported at North(bourne) Court, n eaer Deal by G.C. Druce.]

7) Juds Wood, Ospringe, 1777, E. Jacob\footnote{Erroneously given as J. Jacob.}; long extinct here.]


C. alternifolium L. 15, 16 Alternate-leaved Golden-saxifrage217

Native. In springs and flushes, and by streamlets, in alderwoods on strata yielding base-rich water; confined in Kent to the spring areas on the Thanet Sand and the Ragstone, both of which yield water which is somewhat calcareous but also contains other salts as well. Absent from the chalk springs, which yield water containing abundant calcium salts but mere traces of othersalts, and from the springs of the non-calcareous but also contains other salts as well. Absent from the chalk springs, which yield water containing abundant calcium salts but mere traces of othersalts, and from the springs of the non-calcareous rocks of the central Weald.

Rare generally, but very locally abundant in the ragstone areas across Kent from Toys Hill to Selleridge, and in two places on the Thanet Sand near Canterbury; commonest in the valleys of the Len and Stour. 18 modern localities.

[1] Charlton Wood, Blackstone, 1746 – the first record: probably in Thanet Sand springs here. L.W. Dillwyn did not believe this record (see O.B.G. p.346) but it is very likely.


12) By the R. Stour in Alder copses, at Bowley, Lenham, 1954, MNE. Copse 916481, at Charing Heath, E. Scott (1958!). W. of Little Chart Church, 1946; 1962 ES. W. of

217 Two maps are given here. The larger one was present with Francis Rose’s papers made available to other botanists; the smaller one is taken from Rose, F. (1955) The new Flora of Kent. The South-Eastern Naturalist and Antiquary 60: 9-19. An account of this species is also given as follows, in Rose, F., Distribution maps of Kent Plants (Exhibit), in Lousley, J., ed. (1951) The Study of the Distribution of British Plants (1950 conference report), B.S.B.I, Arbroath. Although it appears to require exactly similar physical conditions, and usually grows with or near C. oppositifolium, has evidently narrower chemical requirements. It is confined to springs and streamside flushes on the Kentish Ragstone and on the Thanet Sands. It is noteworthy that these two strata yield water of alkaline reaction, moderately calcareous, but containing many other soluble minerals as well, particularly iron, unlike the Chalk.


ROSACEAE

Sorbaria (Ser. ex DC.) A. Braun

† S. tomentosa (Lindley) Rehder (natd. in N.W. Kent.). Himalayan Sorbaria H [account not yet transcribed]
† S. grandiflora (Sweet) Maxim (natd. in W. Kent.). H [account not yet transcribed]

Spiraea L.
S. salicifolia L. 218 [Bridewort]
1) Chislehurst GMB. Crayford GMB.
5) Downe Tip DPY.
6) Otford GMB.

‡ S. billardii Herincq (S. alba x S. douglasii). (natd. in W. Kent). Billard's Bridewort. H
1) Ruxley pits.

‡ S. douglasii Hook. (natd. in W Kent.). Steeplebushe. H
1) Ruxley pits.

‡ S. canescens D.Don 219 (natd. Longfield). Himalayan Spiraea.

‡ S. x arguta Zabe 220 (natd. Darent Wood).

Aruncus L.
[‡] A. dioicus (Walter) Fernald 221
6) Cotton La[ne], Stone HMP.

Holodiscus (K. Koch) Maxim.

Filipendula Miller
F. vulgaris Moench 15, 16 Dropwort N
Native. Old chalk Downland; very local, but locally abundantly east of the Medway Gap, east of Wye, and from Dover to Kingsdown. Its rarity in West Kent today is hard to explain: it appears to have been far commoner formerly.

First record, 1632: Thanet; Johnson, Descriptio, p.21.
[2] Reported in "Broom fields" at Hernhill; and Oare, Bateman in Blackstone; probably erroneous.
[5] [Morants Court Hill, etc.; common on the chalk, W.W. Reeves. Extinct, if correct: no other records.]

218 Not in check-list.
219 Given in check-list, but not in manuscript.
220 Not in check-list; in manuscript given as A. sylvester.
222 Given in check-list, but not in manuscript.
F. ulmaria (L.) Maxim.  15, 16  Meadowsweet  N

Native. Wet meadows, river- and stream-sides, fens, swamps, and wet woodlands, always on fairly base-rich substrata; it avoids stagnant waters and is favoured by a fluctuating water table. Very common in suitable habitats, except in the North Kent marshes, where it is known only in two places between Northfleet and Hernhill E. of Faversham. Absent from the chalk country, except from Reiden Wood, Hawkinge.

First record, 1629: between Grain and Cliffe, Johnson, iter.


8) 24 On moist calcareous loam in valley bottom, abundant, Reiden Wood Hawkinge, 1958 B Nash; 1962!  05 Track made up with chalk, SW part of Denge Wood, 1963, Mrs. B.


var. denudata  Boenn[i]ng.

1) Orpington Park PHC.

3) Tyler Hill, RGW ...form by str[eam].

10) Lane, Chevening S., PHC. lightham, AHWD. Kemsing DMcC.

11) Horish Wood; Longham Wood; Snarkhurst Wood; Ryarsh Wood; Hoads Wood.

12) Copses on Gault E. of Lenham, 1944.

13) Bedgebury BM; Chittenden Wood ESM; Ashour Wood, 1944; Ditch below Timberlog Wood, Lamberhurst, 1940, WRW.

Rubus L.

[The manuscript includes a separate sheet of Rubus records marked by Francis Rose as 'det. B.A. Miles 1964'. These records have not been integrated as a whole with the species account (although some are already included), and are transcribed separately here:]

R. albionis WCRW – S. of Acrise –scrub on Pliocene loam 1950; FR, WCRW.
R. ulmifolius x caesius – Woods S of Cliffe 1950 FR.
R. lindleianus – Farleigh Common Medway bank, MNHS 1847.
R. idaeus – Snodland Brook Dr J. Evans-Smith 1894. Penenden Heath H Lamb 1885. Maidstone Medway Bank VC15 1988 EGP.
R. caesius x idaeus – Ham Ponds 1950 FR. Seen there 1900 ESM (CGE).

R. idaeus L. 15, 16 H. & M. Raspberry N
Native, but often an escape from cultivation. Fens, Alder carr, heathy woodland; and as an escape in hedges. 1st record, 1597: Thanet, near Quex, Gerard, Herbal p1090; or 1777: near Lees Court, etc. E. Jacob, Pl. Fav. p.98.


3) R[a][i][l], Seasalter, 1956, H.M.W.


5) 3964 Well Wood PCH.

6) Swanscombe Wood, 1946. Wood, Beechy Lees PCH.

7) Challock Lees, CNP.


10) 55 Broadhoath Wood. Oldbury Hill, GMB.

12) Willesborough Lees, CNP.

13) 63 Hook Green, Lamberhurst, J.R.W., 1937. 44 Boggy Wood, N. of Highfield Rocks, Chiddingstone, ‘54. 63 Boggy Wood SW of Pembury 614395 CAS.

16) 13 Pedlinge, LJM (?escape).
‡ R phoenicolasius Maxim. **Japanese Wineberry** H

‡ R spectabilis Pursh **Salmonberry** H **[Alien, N. American]**.


8) Puckland Wood, Sibertswold.

16) 152363 Wood E of Sandling Station, 1956 John Field, det. EFW; and by old r[ail]w[ay] to SE, DACL, 1962. Grange Alders, Willow Wood, LJM.

‡ R loganobaccus L. Bailey **Loganberry** H

R fruticosus agg. (not covered here)223. **Bramble** N


3) Bigberry Wood. Chartham Hatch.


5) 396611.


11) SE of / NW Oaken Wood, old copp[ice].

W) Pond NW of Buckhall Bethersden.


R. laciniatus [Willd.]224


3) Bats Oak Hill Sturry, Miss E. Millward ’63. Bigbury ’59 DKR. SE corner Oldridge Wood REW.

13) T[unbridge] Wells Common, KEB. Angley Wood DS.

16) Sandling, R[ail]w[ay], L.J.M.

R. ulmifolius [Schott]225

*Native. Woods, chalk downs, heaths, scrub, hedgebanks, etc.; our commonest bramble.*

R. fruticosus agg. Fruit stones of this were found in a late Bronze level at Minnis Bay, Conolly, 1941; and in Bronze Age and Roman levels at Crossness, Spurrell, 1889; Reid, 1899 (Godwin, p.112).

226

2) E. end Minster cliffs. Furze Hill Minster. 67 Higham Canal, PCH. 77 Sharnal Street.

3) 15 Bigberry Wood. 06 E edge Bleak Wood, Dunkirk BN. 25 Elmstone (Preston) near Ch[urch] by R[ail]w[ay], BN. 26 Highstead. 16 Hoath E Bleak Wood R[ail]w[ay]. Sturry Broadoak near Pond BN.

4) 35 Sandwich Bay. 26 Preston. 26 SE of Sarre.

5) 46 Darwins Bank, Downe. 45 Westerham Hill. W. of Shoreham.


6E) 77 Northward Hill.

7) 76 Burham Downs. 75 Boxley Warren. Queen Down Warren. 85 Hollingbourne Hill. Thurnham. 86 Berengrave pit, Rainham. 06 OspringeDown. 94 Westwell chalk pit. Timbolds Hill. Downs E of Lenham. Park Wood Molash. 95 W. of Doddington. 05 Chilham Downs N of Down Wood BN.


---

223 ‘Not covered here’ is what is stated in the check-list. In the manuscript, R. fruticosus agg. has relatively few records and some microspecies which would fall under R. fruticosus agg. are given separate records.

224 Not in check-list.

225 Not in check-list.

226 Another version of this note appears under R. fruticosus agg. above.
35 Eastry B.N.  34 St Margarets Bay.  23 Folkestone Downs and Warren.  23 Hawkinge S of Terlingham BN.  
Pean, Chalk scarp BN.
9) 36 Roadside, Sevenoaks Minster BN.
11) 54 Rails[ai][wai] Hildenborough CAS 563482. 75 E. Malling.  65 W. Malling.  84 S. of Headcorn.  84 Chart 
Sutton.  94 Pluckley Brickworks.  75 Aylesford Meadows.
12) 16 Sturry, Miss MEM.  04 Withersdane, Wye, BN.  04 Roadside hedge.  04 Roadside N of Brabourne 
Coombe, BN.  03 Bonnington – Allington on wet clay and sand by R[oa]d, BN.
14) 93 Kenardington.  82 Wittersham.  92 Stone in Oxney.  02 St Mary in the Marsh hedge by R[oa]d S of 
Ch[urch], BN.  92 SW of Brookland.
15) 02 Lydd Common.  01 Denge Beach, frequent.  02 Romney to Greatstone.  13 Hythe Beach.
16) 23 Eastwear Bay.  13 Shepway Cross Lympne, on ragstone BN.

R caesius  L.  H.& M.  15, 16  Dewberry  N
  Native.  Scrub, hedgebanks, open woods; widespread and frequent.
  1st record, 1777: Faversham, E. Jacob, p.96.
2)  Sea wall, Grain, E. Coast, 1958, A.G. Side.  Streamside copse, Bell Fm, Minster, 1958, OD.
4)  Ham Fen.
6)  Dartford E, HMP.
8)  River; Dover E. Cliff, KDR.  Kingston, RGW.  Chartham, RGW.  Stelling Minnis, Miss T. Webber.  Hacklinge 
  chalk pit.
11) 578488 Hilden Brook, Hildenborough, ’55, CAS.
14)  Cole Wood, Woodchurch, ES.

Rubus caesius × idaeus
4)  Ham Ponds, 1893, E.S.M. BM.

Potentilla L.
P. palustris  (L.) Scop.  15, [16]  H.& M.>  Marsh Cinquefoil.  N
  Native: swamps, fens, lake borders; very rare, and apparently confined at present to 15) Dungeness, where it 
is however abundant in the fens and swamps of the Hoppen Pits, also in a shingle pit S.W. of Lydd.
  First record, 1836: Keston, Cooper, Fl. Met., p.79.  ?Achene, Late Bronze Age, Minnis Bay; Connolly 1941 
(Godwin, p.117).
[4] [Minster Marshes, Dr. Hunter, in Fl. Thanet.][Stodmarsh, dike by Lampen Wall, R.E.Wood, 1952; det. E. 
Scott.]
[12] near Ashford, Mitchinson; unconfirmed.]
[13] near Tunbridge Wells, Wollaston; unconfirmed.]
15)  Hoppen Pits, Dungeness, Dowker, Fl. K.; (H. Lamb, 1901 MNE; H. Elgar 1912 MNE); 2 large pits MNE; small 
adjacent one; fen E of Hamilton Farm MNE.  Shingle pit, Dengemarsh Rd, S of Lydd, R.M. Payne.  Old shingle 
pits near School, Dungeness, 1962.

‡  P. alba ²²⁷
  Alien
16)  “Grassy bank of garden, until recently virgin woodland, evidently not intentionally planted”; Hythe, Mrs. 

P. anserina  L.  15, 16  H.& M.>  Silverweed.  N
  Native.  Roadside, waste ground, damp meadows, damp woodland rides, dune slacks, marshes.  Very 
common throughout Kent.
  1st record, 1629: Gravesend to Rochester; Johnson Iter, p.2.  ?Achene, Late Bronze Age, Minnis Bay; Conolly, 
1941 (Godwin, p.116).

²²⁷ Not in check-list.
1) Ruxley pits. Chislehurst Common PCH. 36 Pickhurst Mead, PCH. Elmers End Hb Davis 1915 MNE. R. Cray, N Cray, PCH.
2) Holborough Marshes 1944.
3) Dune Slacks, Sandwich Bay; Shelling; N. of Deal; Pegwell Bay. Hacklinge. Worth. Wingham.
4) Horstead, Biggin Hill. S. of Timberden Bottom, on ploughed ch[alk] g[round], PCH. Chevening Park, PCH. W. Wickham Ch[urch] y[ar]d SEC. Darwin’s Bank, Downe, JEL.
7) by A249 below Stockbury Church 54. Berengrave pit Rainham PM Roberts.
8) Copse at base of Broad Downs, Brook ‘44. River, KDR.
9) R[iver] path below Shoreham PCH. R[iver] above S. Darent, PCH. St John’s Jerusalem PCH. Dartford HMP.
10) R[iver] path below Shoreham PCH. R[iver] above S. Darent, PCH. St John’s Jerusalem PCH. Dartford HMP.
11) Leybourne Castle Lakes. 1m E of N. Pole ByR[oad], Oaken Wood ‘54.
13) 63 Lane 1m SW of Pembury New Church, PCH. 64 Pembury Wood, PCH.

P. argentea L. 15, 16 H.& M.> HoaryCinquefoil
Native. Dry sandy or gravelly banks, open grassland, and old pits; frequent on the Eocene and later sands and gravels N of the Downs, but local; very rare S of the Downs, unrecorded in the Weald, on Folkestone Sands in 11] only.

1st record, 1746: Blackheath; Blackstone, p.70.

1) Keston Common, E. de Crespigny; 1945→154! MNE. Holwood Park, Hb. Davis 1916 MNE. old records: [Swanley Junction, F.M. Webb; Crayford, E de C; Erith, H Trimen 1861 BM; Blackheath, Blackstone; Dartford Heath, St J M; Abbey Wood, FJH, St J M 1925; Bromley, Pampam; Belvedere, FM Webb; Sidcup, EMH; Plumstead, Sherry; Bickley, W W Reeves, 1900 LBH; W. Wickham; Beckenham, E de C; Hayes Common, Prebble; Bexley, 1871, F.J.H.; Pauls Cray Common, W.W.]
2) [Bysing Wood, Cowell FI. Faversham.] Bank on Dartford Marshes, 546761; 1931, PHC; 1956, G. Brown; 1962! Near Uralite Halt, Miss E. Burrows. Woods N of Newington, 1918, Hb Davis MNE.
4) Bretts Gravel Pit, Sturry, REW 1951.
5) E) Gravel pit E. of Chalk, AHW (1945, abundant!) MNE. Shorne, behind windmill on gravelly grassland, 1945 MNE, 1954. On gravel heap, Green Street Green, 578708, 1960, HMP; PCH.
6) Putt Wood, Ospringe, in gravel pit, 1950-65 MNE; 6 pl[ants], 1980! [gravel pits, Newnham, J Jacob; Sandbanks Wood; Coxett Wood, Stowell.]
7) Plateau above Juliberry Downs, Chilham, 1958, Mrs.B; ES.

‡ P. inclinata Villars Grey Cinquefoil.

‡ P. recta L. 15, 16 H.& M.> Sulphur Cinquefoil 4/51
1) [Hayes to Beckenham, 1897, Scargill.] [Langley Park, Hb. Davis, 1918 MNE.]
2) Graveney, 1959, R.Th.
3) 36 N. of Red Lion, Richborough, (E of R[oad]), L.W. Wilson, 1949 MNE.
5) 36 St. Stephens College, Broadstairs, Mrs. B. Dodds. Botany Bay, LWW.
6) [near Brasted Chart, 1910, C.E.S. BM.] Sevenoaks sandpit, Mrs Spear.
7) Ryarsh Roughetts 1954 DMcC.
13) Pantiles, in garden, 1958, KEB.

var. sulphurea –

6) Swanscombe, 1948, H. Milne-Redhead BM.

‡ P. intermedia L. Russian Cinquefoil.

10) Sandpit, Riverhead, 1964, E.S. Hewson, det. D.McC.

‡ P. norvegica L. (H.&M.>) Temple-leaved Cinquefoil.

1) Bickley, 1907, R. Beer BM. Woolwich Common, 1963, G.M.B.

2) Woolwich Arsenal, 1893, A.H.W.D. BM. Murtons Fm., Graveney, R. Theobald, 1959 MNE.

12) near Stour, Shalmsford St[reet], RGW.

14) Railway St[ation], Tenterden, 1962, R. Elphick.

P. erecta (L.) Raeusch. ssp. erecta 15, 16 Tormentil. N

Native. Heaths, dry open woods, nearly always on light, acid soils. Common inland, but absent from the Hundred of Hoo, Sheppey, and the coastal Marshes, except on shingle at Dungeness and on sand dunes at Sandwich.

First record, 1632: Sandwich to Canterbury, Johnson, Descriptio, p.31.


4) Richborough, 1960, Mrs B.

5) Halstead PCH. Andrews Wood, S. of Badgers Mount PCH.


10) 55 Oldbury Hill, Ightham, 1945 MNE. 55 Ightham Common (Rose Wood). 55 Seal Chart. 45 Westerham Wood, B. Sennit; (82i).


12) 04 Willesborough Lees '45 MNE. 94 Hothfield Heath '45 MNE; '62. 94 Ashford Warren.


15) Denge Beach Hoppen Pits 1938 SEC.


P. x suberecta Zimm.

P. anglica Laich. 15, 16 Trailing Tormentil. N

Native. Wood borders, rides, heaths, and scrub, usually on lighter soils, but occurring on heavy loams and even on Weald and Wadhurst Clays; well distributed, especially in the Weald and on the Greensand, but uncommon generally.

First record, 1777: Hernhill, J. [sic] Jacob, if correct.


3) Honey Wood, Tyler Hill; RGW.

4) Gilling Drove, MEM.
5) In woodland on plateau drift loam, near Shepherds Barn, Timberden Bottom, SW of Shoreham, 1947, plentiful; 1956 MNE; HMP. 396611, Highams Hill in copse, PCH.
7) Otterden, 196-.
10) S. of Sundridge, R.A.C., 1958.
13) Tunbridge Wells, E.D. Forster BM. Angley Wood, ESM; Brenan 1957 MNE.
16) Saltwood, L.J. Margetts, 1958 MNE, det. F.H.P.

P. x mixta Nolte ex Reichb. (P. reptans x P. anglica, plus P. reptans x P. erecta) 229. N [P. reptans x erecta]


1) Orpington, 1896, C.E.B. BM.
13) Chittenden Wood, 1889, E.S.M. BM.
16) Sandling Park, 1958, L.J. Margetts, MNE, det. F.H.P.

P. reptans L. H&M. 15, 16 Creeping Cinquefoil N Native. Hedgebanks, wasteground, open coppice woodland, scrub, and grasslands, on neutral or basic soils; abundant throughout the county.

1st record, 1632: Faversham to Gravesend; Johnson, Descriptio.

4) Sandwich Bay dune slacks.
5) Chalk W of Eynsford, PCH. 396611 PCH. Chevening Park PCH.
8) Foot of Broad Downs, Brook ’44. Covert Wood, Mrs DKR [sic], 1960 MNE.
9) River, KDR. Shakespeares Cliff, KDR. Minster Ch[urch] y[ard], 1963.
10) Farley Common, Westerham (mostly 4-petalled), 1948 DPY. R[iver] above S. Darenth PCH. St John’s Jerusalem, PCH. N of Bat & Ball CAS.

229 This is the heading in the check-list. In the manuscript there are separate treatments, in different places as (a) P. erecta x reptans = Potentilla x italica Lehm. and (b) P. anglica x reptans = P. x mixta Nolte ex Reichb.
125

14) Old R[ai]l[y], High Halden Sta[tion], 1960, BN.
15) Dungeness Lighthouse, 1938, S.E.C.

var. microphylla Tratt.


P. sterillis (L.) Garcke 15, 16 Barren Strawberry. N

Native. Dry woodlands, scrub, and hedgebanks; very common in most parts of Kent, but absent from the Hundred of Hoo east of Chattenden Wood, from Grain, Sheppey, Thanet, the Thames, Medway and Stour Marshes, and Romney Marsh.


5) Rushmore Hill, Halstead PCH. Chevening Park, 1950 MNE. 3964 Well Wood PCH.
7) Bredhurst Hurst 1944. Simia Wood, Ospringe, HMW. Berengrave pit Rainham PM Roberts.
9) absent.
10) S S Westerham Wood, PCH; 82!
11) E 65 Mereworth Woods N. of Swanton Valley; ride neutral loam; and cop[p]ice ’54. 75 SE Part Oaken Wood in fresh and old cop[p]ice ’54 MNE.
W) 54 R[ai][wa]y, Hildenborough, 563482, CAS.
16) Addington Knoll, LJM. Cherry Garden VFP Day.

Fragaria L.

F. vesca H&M. 15, 16 Wild Strawberry. N

Native. Woodland, hedgebanks, scrub., and rough grassland, especially on base-rich soils; common generally, but absent from Grain, Sheppey, Thanet, Romney Marsh, and the Thames, Medway, and Stour alluvial marshes. Particularly common on the chalk and ragstone.

1st record, 1629: Gravesend to Rochester; Johnson, Iter, p.3.

10) S S Westerham escarpment Woods 1953. Westerham Wood, B. Sennitt, 82!

W) 94 Hoads Wood '54.  54 R[ai]l[wa]y, Hildenborough 563482 CAS.  65 Shipbourne Forest(Golden Stable Wood) '54.


16) Postling Wents Wood (Gault).

‡ F. muricata Miller230 (F. moschata Duchesne nom. inval.)  Hautbois Strawberry.  H
(F. elatior Ehrhart natd. from cultivation.).


‡ F. x ananassa (Weston) Lois., Vilm., Nois. & J. Deville231 (garden escape). Strawberry.  H


Duchesnea Smith

‡ D. indica (Andrews) Focke Yellow-flowered Strawberry.  H (Fragaria indica Andr.)

11) Roadside by Nut Orchard, Brungers Farm, S. of Ulcombe, Mrs Bamborough, per L.R.A.G., 1956, MNE.  

Geum L.

G. rivale L.232 Water Avens  

G. urbanum L.  H&M.  15, 16  Wood Avens233  N

Native.  Woods and hedgebanks on base rich soil; very common generally, absent from the Marsh districts; Grain; and Sheppey.

1st record, 1629: Gravesend to Rochester, Johnson, Iter, p.3.


230 In manuscript given as Fragaria moschata Duchesne.
231 In manuscript, Fragaria x ananassa Duchesne (F. chiloensis x F. virginiana).
232 Not in check-list.
233 Also as Herb Bennet in manuscript.


† G. chiloense Balbis234

Agrimonia L.

A. eupatoria L. H&M 15, 16 Agrimony. N

Native. Roadsides, hedgebanks, open woodland, scrub, downland; very common throughout the county, on all soils except very wet, v[ery] acid, or saline areas. In all 10km sq[uare]s of National Grid in Kent.

1st record, 1629: between Grain and Cliffe, Johnson, Iter.


2) Farningham Wood; 82! Scrub E. of Scrapsgate, Minster. Grain. All Hallows GMB. Higham Canal, PCH. Brambledown; East Church Cliffs, 1955. Bank by R[iver], Cuxton, PCH.

3) Gravel pit, Bigberry Wood, '54.


8) Iffin Wood C. Haes.

9) Banks W. of Cleeve Court, Minster, 1963.

10) R[ai][wa]y cutting Gault E of Kemsing Station '54.


234 In check-list; no account in manuscript.
A. procera Wallr. \( ^{235} \) (A. odorata auct. non (L.) Miller) H&M 15, 16

Fragrant Agrimony. N

Native. Hedgebanks, scrub, woodland rides and woodborders on acid, often damp, soils; locally frequent in the High Weald (13 and 14), and in the Blean 3); scattered and rare elsewhere, but occurring on the Tertiaries near London, and on the Gault and Greensand.

1st record, 1855: Rusthall Common; A.G. More in Phyt. N.S. 1, p.294 BM.

1) S. side Petts Wood, 1930, R.W.R.

2) Plumstead Marshes, Bot Cray Ravensbourne & Thames -- probably an error.


4) Sandy scrub, Brabourne Lees, (on Folkestone Sand) 1950, MNE. 03 Wood on Weald Clay, NW of Bilsington, 1958 MNE. Near Seely, Marsham, 1950, ES.


6) Sanguisorba L.

[S. officinalis L. \( ^{236} \)]

There is no real evidence for the occurrence of this plant in Kent. It has been reported at 2) Sittingbourne, Grayling; 6) Roadside, Dartford to Green Street Green, Cooper Fl. Met.; 8) Petham, Hookham; 10) near Ightham, Gasson; 13) Redleaf, C. Cox; and Cranbrook, Crowden. No specimens are known. It is not a likely native of Kent; its nearest known native localities are about Perivale, Kingsbury and Hendon in Middlesex, and, S. of the Thames, at Frimley in N.W. Surrey by the R. Blackwater. It is unknown now in Wessex and Sussex. It occurred at Nazeing, Essex, in the late-Quaternary (Godwin, p.118).

‡ S. canadensis L. (an escape, J. Wallis, 1943.)


S. minor Scop. ssp. minor \( ^{237} \) H&M.

Salad Burnet. N

Native. Chalk grassland, scrub and hedgebanks on chalk, abundant and completely general on the chalk, though now very rare in Thanet, due to its intensive cultivation; also on the Folkestone Sand Cliffs at W. end of Folkestone Leas, where other calcicoles also occur; Thanet Sand at Scadbury Park, Chislehurst, and in an old ragstone quarry S. of Preston Hall, Aylesford. Absent elsewhere.

1st record, 1629: Chalkedale, Dartford, Johnson, Iter, p.9.

1) Scadbury Park, in grassland on Thanet Sands, R. Button.

---

\( ^{235} \) In the manuscript given as A. odorata (Gouan.) Mill.

\( ^{236} \) Not in check-list.

\( ^{237} \) Given in manuscript as Poterium sanguisorba L., to which name it has reverted since the check-list was drawn up.
2) old R[ai][wa]y, Abbey Fm., Faversham, 1960, HMW.
8) Leas Cliff, W. end Folkestone Leas, 1947-58, abundant locally.

‡ [S. minor] ssp. muricata (Gremli) Briq. (=Poterium polygonum Waldst. & Kit. 236). H&M 15, 16 Fodder Burnet
Alien, completely naturalised on the chalk downs above the cliffs from Dover to Kingsdown. A native of the Mediterranean, naturalised in C. and N.W. Europe.

1st record, 1866: St Margarets Bay, Syme.
1) Rough field, Green St[reet] Green, near Farnborough, 1937, JEL.

‡ A. novae-zelandiae Kirk 239 (introd. (?with shoddy) natd.). 16 Pirri-pirri-burr.
Alien from E. Australia and New Zealand, now completely naturalised in woodland rides and rough grassland.

1st record, Mereworth Wood, 1937, CA Rylands in K.
11) Prestwood, Darenth, 1963, W.A.S.

Alchemilla L.

‡ A. vulgaris L. sensu lato 240 Lady’s Mantles.

Alchemilla vulgaris L. sensu lato 240 Lady’s Mantle
There are several old records for the aggregate as follows:
1) Old Park Wood, E. Wickham, Milne & Gordon. Hayes Common, 1899, CE Britton.
3) Trenley Park Wood, Miss WLB Tower, 1956.
4) Brooks meadows, Margate; woody meadows at Minster and Monkton, Dr. Hunter, Fl. Thanet.

236 The name under which the manuscript account was written.
239 In manuscript given as Acaena (anserinifolia) (J.R. & G. Forst.) Druce.
240 Not given as such in the check-list, but the manuscript assigns this name to records where the Alchemilla species is uncertain.

7) “Kings Wood, near Faversham”, Parkingson, 1640, Theatrum Botanicum (1st record).

8) Roadside, NW of Iffin Wood, Nackington, Miss WLB Tower, 1956.


In the absence of specimens, these records cannot be assigned to the segregates.

[\textit{A. glabra} Neyg.\textsuperscript{241} 16 (SW of Snodland, 1947)].]

Native. Damp meadows; very rare.

11) Alluvial meadow, Birling Marshes, 1951, det. S.M.W. MNE.

\textit{A. xanthochlora} Rothm.\textsuperscript{242} Lyminge Forest, R Gorer. N

\textit{A. filicaulis} Buser ssp. \textit{vestita} (Buser) Bradshaw [15, 16 (Cobham G[rea]t. W[o]o[d., Oaken Wd. Barming). Native, grassy woodboundaries, very rare, though probably most of the records for the aggregate belong to this species.


† \textit{A. mollis} (Buser) Rothm.\textsuperscript{243} (Garden escape).


\textbf{Aphanes} L.

\textit{A. arvensis} L. s.l. Parsley-piert. N
First record for aggregate, 1629: Gravesend to Rochester, Johnson, \textit{Iter}.

\textit{A. arvensis} L. s.s. 15, 16
Native. Arable land, bare ground on chalk grassland, rides in woods, mostly on basic soils, common.

First record for segregate, 1843: Ramsgate, W.N.N. in BM; or 1833, Dartford (Brent,) (Heath) JB Tuck, in BM.

1) Shortlands, 1882, H.&J.G. BM. Shooters Hill GMB. Keston, 1923, JEL, Hb. L teste SMW.

2) E. End Minster, on Bagshot Sand, '54. Higham, PCH. Wall at Upnor, HMP.

3) Trenley Park Wood, '51 MNE. Dengrove Road, Sturry, '55 MNE. 15 Hoath Court, Blean, RGW. Whitstable Harbour Sta[tion] HMW.

4) Fields N. of Wingham, 1947 MNE.

5) Rushmore Hill, PCH. Wood on chalk, W. of Shoreham, PCH. Salt Box, Cudham, Hb Davis, 1916 MNE. Arable 396642 S of W Wickham PCH.


9) Ramsgate, 1843, W.W.N. BM.

10) Cornfield, Ide Hill, CAS.


12) Ride SSE of Kingsnorth, 1956 MNE.

13) Cranbrook, Weed, DS.

\textsuperscript{241} From the inclusion of this species in square brackets in the check-list, it would appear that it was intended to treat as extinct; the manuscript does not recognise this.

\textsuperscript{242} Given in check-list but no manuscript account.

\textsuperscript{243} Given in check-list but no manuscript account.

\textsuperscript{244} Given in check-list but no manuscript account.
A. (inexpectata) Lippert now A. australis Rydb.  

Native, cornfields, open ground, and damp woodland rides and heaths on acid soils. Common in suitable habitats.

1st record for segregate


4) Gravelly field, N. of Preston Church, 1958 MNE. Stodmarsh / Fordwich Gravel Pits, 1950, REW.


14) 83 The Brogues, Biddenden. 82 Church Wood, Wittersham, 1964.

16) 13 Klin Wood, Sandling Park, 1958 MNE. Sandy track S. of Summerhouse Hill ‘60 BN.

Rosa L.

It has been decided for the purposes of this flora to adopt a modern treatment of this genus on the lines of the List of British Vascular Plants (1958). Varieties and forms have therefore been ignored, and only hybrid records authenticated by Dr. R. Melville have been accepted.

---

245 Given as A. microcarpa (Boiss. & Reut.) Rothm. in manuscript.
246 No entry.
It is now generally accepted that many of the varieties and forms recognised previously are in reality hybrids between various species of the genus.

‡ R. multiflora Thunb. ex Murray Rare escape (E.P.) Many-flowered Rose. H
13) Roundabout Woods, Tunbridge Wells, CAS.


R. arvensis Hudson (H&M>) Field-rose. N
Native. Woodlands, hedgebanks, and scrub, chiefly on rather heavy soils, but widespread and very common throughout the county, except in Thanet, where it is not recorded.
3) Hales Place, ’64 R. Rorer & F. Hubbard.
5) Darwins Beech Wood [c[lay] w[i]th f[lints]] Downe JEL. 397604 hedge W of Blackmans PCH.
7) Squirrels Wood, Stockbury, on clay w[i]th flints drift ’54. Simia Wood, Ospringe HMW.
9) Wet copse, Dunlock, Minster! AGS.
10) Copse on alluvium, above Darent, 1943, 1944 MNE. Westerham Wood, B. Sennitt; 82!
11) Leybourne 46 MNE; SE Oaken Wood ’54; Warren Wood; Springhead, East Malling. Mereworth Woods (W Malling end; Offham end; Swanton Valley. On Gault, Platt DMcC. Horish Wood ’44. Snarkhurst Wood. Copses S. of Woolpack, Yalding, ’44. Pond NW of Buckhall, Betersden, ’54.
12) Damp wood, Willesborough Lees.

R. rubiginosa x arvensis
6) Ryarsh Downs, 1943, MNE.

R. arvensis x canina = R. x wheldonii W.-Dod
11) Maidstone, E.G. Philp, 1958, MNE.

‡ R. sempervirens L 247

R. pimpinellifolia L. (H&M>) 15, 16 Burnet Rose. N
Native. Chalk grassland and scrub, locally common on both sides of the Medway gap on the downs from Trottscliffe to Cuxton and from Wouldham to Detling; elsewhere only known now on shingle at Dungeness. Old records from near Dover are unconfirmed and are probably errors. Locally common on chalk in Sussex, very rare in Essex, very local in Surrey and confined to the heaths near London, common on fixed dunes in Pas de Calais.
1st record, 1763: between Milton and Chulk, Martyn, Pl. Cant.

247 Not in check-list; heading given in manuscript but no account.
About Dover, plentiful, Mrs. S.; FGEK; probably an error.

W. of Hope & Anchor Inn, on shingle, Dungeness, 1954, B. Axell; 1955, P. le Brocq, MNE 054173, near Herring Gull Colony, 4 patches each c. 4 sq. m. By track to Hoppen Pits, 1948 Mrs B. Welch.

R. pimpinellifolia x tomentosa = R x involuta Sm.
[reported at 10] Guildables Fm, Crockham Hill, Dickinson; Southborough Common, More, in Phyt N.S. i 294, but doubtful because R. pimpinellifolia is not known there.

R. pimpinellifolia x rubiginosa = R. x cantiana (W.-Dod) W.-Dod.
7) Boxley Warren, 1875, Beeby; 1894, ESM: Hb. AHWD, (with the parents) BM.

Native of N. China, Korea and Japan.
6) Kemsing Downs, Mrs. C. Rogers, 1955 MNE.
15) Railway E. of New Romney Sta[tion], KEB.

R. rugosa x tomentosa?
8) S. of Kingsdown Golf Course, 1954 MNE. ]check.248

R. stylosa Desv. (H&M>) 15, 16 Short-styled Field Rose. N
Native. Scubland, on chalk and clay, formerly widespread, but I have seen little of it in my survey of the county.
2) In scrub near Saltings at: 86 Horrid Hill, Rainham, 1951, MNE; 86 Motley Hil, Rainham, 1949. 76 Scrub near Cuxton Station, 1944, C. West & J.E. Lousley; (FR & DMcC 1951!). 77 By Medway, Cockham Woods 249, Upnor, 1951, DMcC; 1960, FR.
4) Plucks Gutter KDR.
7) Boughton Aluph, E.S.M. Borstal, Dr. St. Brody, det. W.M. Rogers.
9) Hedge off Margate-Deal Road, Dr. Hunter, Fl. Thanet.
10) Ightham, A.H.W.D.
11) Edenbridge, ESM. Near Snodland, AHWD. Ryarsh, W.M. Rogers.
12) Westenhanger, E.S.M. Ham Steet, ESM.
14) Kenardington, E.S.M. BM.

R. canina L. (incl. R. dumetorum auct. non Thuill.). H&M> 15, 16 Dog-rose. N
Native. Woods, scrub, hedgebanks, grassland; on all soil types; abundant throughout the county. Immensely variable, much of the variation being due to its hybridisation. The cytology of the Caninae Roses is very peculiar (see C.T.W., p.520).
1st record, 1777: Faversham, E. Jacob, Pl. Fav, p.97.

248 This may have been what has since been identified as R. villosa.
249 Presumably this entry was placed in district 2 as being estuarial, rather than on the chalk, which would fall within district 6, where Cockham or Cookham Wood entries are generally placed (as immediately below).

2) Horrid Hill, Rainham, 1951 MNE. Frindsbury, 1949, MNE.

3) Hales Place, R. Rorer.

5) Knockholt, 1852, A.A. BM. Westerham Hill, RAC, 426577. Darwins Bank, Downe. 396611, PCH.


10) Westerham Wood; 82!


Rosa dumalis Bechst.250

10) Sevenoaks, W.M.R.


vars. of R. canina L.251

var. blondeau (Dir.) Rouy


var lutetiana (Lém.) Baker

6) Greenhithe, 1951, D.H.K.

var. sphaerica (Gren.) Dum

14) near Kenardington, E.S.M., 5.7.1893; Hb. AHWD BM.

var. collina Jacq.

13) Tunbridge Wellls, Hb. E.D. Forst.

var. senticosa (Ash.) Baker

12) near Smeeth, E.S.M., 5.7.1893; Hb. AHWD, BM.

var. decipiens (Dum)

10) Fawke Common, 1895. E.S.M. BM.

var. ramosissima Rau.

8) Between Lyminge and Elham; hedge, Elham, 18.7.1893, E.S.M., det. & Hb. AHWD BM (AHWD had somw doubts).

12) Between Westenhanger and Smeeth Stations, E.S.M., 15.7.1893, Hb AHWD BM.

var. verticillacantha (Mérat) 11) Headcorn, 1893, ESM BM.

var. forsteri Sm.

250 Not in check-list.

251 These varieties are listed in the manuscript, although the heading to Rosa indicates that it was not intended to include them in the Flora.
135

5) Halstead, 1852, A. Atkins. BM.

var. sylvarum (Rip.) Rouy.
10) Fawke Common, AHWD, 1.7.1894; Hb. AHWD BM.

var. andegavensis (Bast.) Desp.
Lodge, Clock Farm, “W Kent”, 1900, Hb AHWD BM.
11) Aylesford, E. Kent, 14.7.1894, Hb. AHWD BM.

var. pouzini (Tratt.) W.-Dod
10) Roadside, Bitchet Green to Stone Street, 1.7.1894 (type specimen), Hb. AHWD BM, also J. Bot. 1924, p.204. Fawke Common, E.S.M. 3.10.1895, Hb. AHWD BM, also BEC 1925, p.1047; J. Bot. 1924, p.204.
12) Sneeth, 15.7.1893, Hb AHWD BM “some doubt in absence of fruits”.

vars. of “Rosa dumetorum” Thuill.

var. typica AHW-D
6) Upper Halling, 1951, R. Melville. Mapie Bottom, GMB.
14) Kenardington, E.S.M. 5.7.1893; Hb. A.H.W.D.; BM.

var. rumealis (Pugsl.) W.-Dod
11) E) Headcorn, E.S.M., 15.7.1893; “probably this”, AHW-D; Hb AHWD BM.

var. gabrielis (F. Gér.) R. Kell

R. canina x pimpinellifolia = R. x hibernica Templeton

R. canina x tomentosa = R. x curvispina W.-Dod
Mote Park, Maidstone, F. Rose, 9-1950.

R. obtusifolia Desv. (H&M>) 15, 16 Round-leaved Dog Rose.

1) N. of Shooters Hill F.M. Webb. S. of Shooters Hill; Charlton; Belvedere: AHWD.
6) Dartford, 1947, D.H.K.
7) near Selling, F.M. Webb (?Perry Wood).
10) Kemsing, 1894, A.H.W.D. BM. Fawke Common, AHWD. R[oa]d NE of Bitchet Green, AHWD.
15) S. of Ham Street, F.M. Webb.

R. tomentosa Smith (H&M.) 15, 16 Harsh Downy-rose.252

Native. Open woods, hedges, chalk downs and scrub; frequent on the chalk, scattered through the Weald. 1st record, 1763: Charlton Wood, Martyn, Pl. Cant. p.52.
1) Town Court, near Orpington, H.&L.J. Groves, 1877, Hb AHWD BM (as var. dimorpha (Bess.) Déségl.). Keston, E. de C. Eltham, AHWD.
3) near Hoath, E.S.M.

Given in the manuscript as plain Downy Rose.


9) R[oa]dsidse near Fawke Common, 1894, Hb AHWD BM (as var. scabriuscula Sm. forma foetida (Bart.) Ser.).

10) near Aylesford, 1894, AHWD BM (as var. pseudocupulata (Crép.) Rouy.). E end of Boughton Quarries, 1949, MNE. Birling AHWD. Trottiscliffe Shepherd. Ryarsh WMR. N of Marden FJH. Yalding FJH. Edenbridge ESM. Hildenborough ESM. Marden Thorn FJH. E of Marden FJH; ESM. E of Staplehurst FJH.


R. sherardii Davies253 (R. omissa Déségl.; R. glaucoides W.-Dod.; R. shoobredi W.-Dod.)

Native. Vey rare.

11) Staplehurst, E.S.M., 5.7.93, det. & Hb. AHWD, BM.

(R. mollis Smith – reported by EP (northern species- -not likely to occur). (Culverston Green - garden escape?) Soft Downy-rose.

R. villosa L. (R. pomifera Herrm.; R. mollis Sm.)254

8) near Deal, 1903, G.C. Druce; Hb AHWD, BM. Bush below cliffs, Kingsdown, H.E. Fox, 1916; Hb. A.H.W.D. BM, (both as R. villosa var pomifera (Herrm.) Desv.

R. rubiginosa L. 15, 16 (H&M.) Sweet Briar. N Native. Chalk downs and scrub, common; very rare on other soils.

1st record, 1777: Oare, E. Jacob, Pl. Fav., p.97. In Hb. Dill. From Greenhithe.

1) Dartford Heath 1894, AHWD BM (as var. rotundifolia Rau, but “untypical”, AHWD.). [Erith, Fl. Met.] Charlton, E. Forster BM. Hayes Common E de C.

2) [Oare, E. Jacob.]


4) N. of Sandwich ESM.


6E) Northward Hill, High Halstow, on London Clay, 1950, MNE.

253 Not in check-list.

254 Not in check-list.
7) 75 Boxley Warren, 1894, ESM; Hb. AHWD BM (as var. *typica* W.-Dod & *jenensis* M. Schultz); 1944! 75 Boarley Warren; 76 Bluebell Hill; 76 Burham Downs; 86 Queendown Warren. 86 Three Squirrels Down, Stockbury Valley ‘44. 95 Lenham Downs. 96 Ospringe Down. 95 Charing Old Quarries, ES. Westwell, CWP. Darland/ Luton, Miss Young. Rainham, St. Brody. Belmont, Stowell. Lees Court, Stowell. Boughton Aluph, ESM.


11) nr. Medway, Tonbridge, P Gratten. Lane nr Boxley Abbey AHWD & ESM. Hadlow, Miss Peers.

13) Hedgerow nr. Marsh Green, 1958, PC Hall.

15) Hythe Station, L.J Margetts, 1958 MNE.


1) Dartford Heath, 1894, A.H.W.D., BM (as var. *hystrix* (Lam.) Baker).

5) Halstead Park, W. Moyle Rogers, 1899; Hb. A.H.W.D. BM (as var. *typica*, Chr.).


8) Roadside scrub 1 ½ m. S. of Adisham Station, 1949. [Newington, 1894, E.S.M.]

11) Hedge, Liverton Street, Harrietsham, 1943.

13) Bayham Chapel, 1939, J.R.W., det. A.H.W.D. (as var *typica* Chr.). Kilndown, 1899, J.S. TLS.


R. *micrantha* x R. *rubiginosa*

7) Boxley Warren, 1896, E.S.M.


8) Bekesbourne, 1875, H. & J. Groves BM. Between Chilham & Crundale, E.S.M., 1890, BM. Penny pot Woods, S.E. of Chilham, E.S.M., 1896, Hb. AHWD BM; (as var. *typica* R. Kell., forma *arvatica* (Pugs.) Rouy.). Roadside edge of chalk scrub, 1 ¾ m. S. of Adisham Station, F.M. Webb, 1875, Fl.K.

11) Sutton Valence, F.M. Webb, Fl.K.

R. “*permixta*” Désègl. 256 16

6) Halling Downs, 1894, A.H.W.D. BM.

R. “*carpencaria*” Désègl. 257 16

1) Chelsfield, 1876, J. Groves BM.

*R. cinnamomea* L. 258 14


R. *japonica* 259

1) Ruxley pits

---

255 Sweet Briar in manuscript; Small-flowered Sweet-briar in check-list.

256 Not included in check-list, presumably to be treated as subsumed into *R. micrantha*.

257 Not included in check-list, and is a somewhat puzzling name; the handwriting in the manuscript is clear and cannot be construed as, e.g., *R. crepiniana*.

258 Not in check-list (but then, this is not a Kent record) and presumably relates to an introduced rose, *R. blanda* or *R. majalis*?

259 Not included in check-list; query if the cultivar *R. ‘Japonica’* was intended.
Prunus L.
‡ P. persica (L.) Batsch (planted - rare escape). Peach. H
1) Ruxley Pits.

P. dulcis (Miller) D.Webb (ditto) Almond. H [account not yet transcribed]
‡ P. cerasifera Ehrh. (planted and now well naturalised). Cherry Plum. H
  Alien, in hedges, either planted or bird sown.
1) Ruxley pits.
6) one p[lan]t by Watling St., Cobham, ’61, HAS. Boxley, Mrs. B. Dodds.
7) by track in wood on chalk, Bredhurst Hurst, 1962, FR & CAS.
10) nr Ightham Mote, 584537, CAS.
11) nr Basted, 607550, CAS. Roadsile, idenborough, 571485, CAS.
13) hedge E. of Printstile, Bidborough, 1945, F.R. & C.W.

P. spinosa. Abundant. N. H&M. 15, 16 Blackthorn., sloe N
  Native. Woodland and scrub, on heavy soils, where it is an important seral dominant in succession to
  woodland; abundant throughout Kent. A stunted, semi-prostrate form occurs as a scrub former on the
  Dungeness and Hythe shingle beaches, where the bushes bear interesting bryophyte and lichen epiphytes
  1st record, 1777: Faversham, Pl. Fav., p.90.
1) Abbey Wood, GAM. Blackheath, GMB. Chislehurst Common, PCH. Crofton Heath, PCH. N. Cray, PCH.
  Shooters Hill GMB. Ruxley pits. Dartford Heath, GMB.
2) Sewer Bank, Plumstead, PCH. Below Barnes Cray ’44. Higham Canal, PCH.
3) Fishponds Wood, Dunkirk, 1960 MNE.
5) PilgrimsWay Polhill, PCH. 396611 PCH. Sepham, Polhill, D. Smith, 1909 MNE.
6) a[bundant] in hedges, Gravesend area 61 HAS. Stone HMP. Horton Kirby, PCH. Greenhills Wood, Otford
  PCH. Mounts Rd, Greenhithe, PCH. Buckland Rd, Luddesdown, PCH. Whitehill E of Shoreham, PCH.
  Hougham.
9) Copse, Durlock, Minster, AGS.
10) Westerham Wood 82.
11) SE Part Oaken Wood Barming by R[oa]d on loam ’54. N of E Sutton by ridge road ’54. R. Eden bank N. of
  ½ m E of Dunks Green, ’54. ½ m. E of Vitters Oak / ½ m NE of Vitters Oak / E of Buckhall by Pond – 1 ½ m. E of
  Bethersden ’54. 1 mile WSW of Smarden ’54.
12) ½ m NE of Chilham by A.28.
13) S3 Gill, Stone Cross, Ashurst 518381, CAS. 63 Wood 1m SW of Pembury New Ch[urch], PCH.
15) Dungeness Beach, locally abundant where the water-table is fairly high; SE of Boulderwall; SE of Hamilton
  Fm; W. of Lade; Hoppen Pits; Midrips; Forelands. Shingle beach W. of Hythe.

P. x fruticans Weihe – (P. spinosa x P. domestica). Common now.
‡ P. domestica L. (old introduction - now common). H
a) subsp. domestica 15, 16 Wild Plum, Damson, “Scad”260
  Alien, more or less naturalised in hedges.
  1st record, 1777: Faversham, E. Jacob, Pl. Fav., p.90.
1) Hedge W. of Puddledock (former orchard) A.H.W.D. Abbey Wood, GMB. E. of Crofton Court, Orpington,
  1923, E.B.B. R[oa]dside SW of Wilmington 505672, HMP. War Bank, Keston, ASK.
2) Hawes Wood, Newington.
3) Whitstable Harbour HMW. 122605, Blean, R.G.W. Hedge, Broadoak Rd, Sturry, 1938, HMW.
5) Nr. Downe, 1921, E.H. Ellis BM; 1937 JEL. Rushmore Hill, Halstead, 1861, A.A. BM.
  604676, HMP.

260 The last two English names given in manuscript, not check-list.
7) Luton, Miss Young. 032546, 032555, nr. Badlesmere, C.T.
8) Wye, E.M.H. St Margarets, Free Down, DPY. Hedge, Stowting, ES.
10) Lullingstone, FJH. Darent, GMB. Farningham PCH.
12) Willesborough CNP.
15) Frequent about Appledore; SW of Small Hythe; Snargate; Brenzett; Burmarsh; Dymchurch, often planted in hedges in the Weald. Where this and the next were planted was legally an orchard and could not be dug for roadstone by the parish overseers, teste ASK.

b) subsp. insititia (L.) C.K. Schneid. (P. insisitita L.) 15, 16

Bullace
Native or denizen. Scrub, open woods and hedgebanks; nt common, except in Romney Marsh.
1st record, 1777: Selling, E. Jacob, Pl. Fav., p.90.

3) N of Thornden Wood, P. Bell, 1947. Frequent in Blean area, RGW.
4) E of Stodmarsh, F.J.H.
5) Hedge, nr Morants Court Hill, 1943, JRW.
9) Manston; Cheesmans Fm, Fl. Thanet. Monkton, Dowker. Pegwell Bay, H. Lamb, 1863 MNE.
12) Ashford, W.R.J. Mersham, E.S.M. Westwell CNP.
13) Chiddingstone, ESM. Hook Green, JRW, 1938. [Kippings Cross, 1902, ASK].
14) Reading Street, nr. Tenterden, 1945, by roadside MNE. NW of Tenterden, BDJ. Stone in Oxney, 1933 ASK.
15) R[oa]side SW of Hythe, 1958 MNE.
16) Court at Street, Lympne, 1947. Below Fort Lympne LJM.

P. avium (L.) L. 15, 16
Wild Cherry

Native. Woodlands, especially abundant in the chalk and ragstone districts, but very common on the Tertiaries and on the Weald clay and Hastings Beds. Absent from Romney Marsh and Grain, rare in Thanet and Sheppey.
1st record, 1666: Kent. Merrett, Pinax. p.244. Fruit stones found in Bronze age and Roman levels, Crossness, Reid, 1899 (Goddin, p110).

2) W. of Warden Point, 1955.
9) Small damp wood SW of Minster Village, 1958.
10) N. of Bat & Ball CAS.

261 Gean in manuscript.
12) 03 Bourne Wood, Orlestone, 1957.

‡ P. cerasus L. 15, 16 Introduced Dwarf Cherry. 262
 Native or denizen. Woodland, usually on sandy or loamy non-calcareous soils, hedges. Rare.
1st record, 1899: Fl. Kent. Jacob’s 1777 record (see Fl. Kent, p.107) probably refers to P. avium, which can have red fruits.
2) nr. Minster, Sheppey, F.J.H.
4) Nr. Sandwich, 1864, J.B. Syme BM. Hedge, Plucks Gutter, 1962, KFC.
5) Chevening Park, Miss Worship.
10) E. of Westerham, B.D. Jackson. Sevenoaks, F.JH.
12) Willesborough Lees, E.S.M.
14) Hawkhurst, Melvill. Banks nr. Small Hythe, 1949 MNE.

‡ P. mahaleb L. (Introduced and well-naturalised esp. by railways; N. France native) St. Lucie Cherry. H

‡ P. padus L. Bird Cherry.
 Alien. Several old records, some probably erroneous; one modern record as an established alien.
2) Faversham A8 Turner.
6) Garden, Stone, 1949 HMP.
7) Westwell, Miss D’Ombrain.
10) Lullingstone, EMH.
11) Sutton Valence, Mrs Petley.
13) Matfield Ch[urch] y[a]r[d], 1935, G.E. Shaw TLS.

‡ P. serotina Ehrh. 263 Rum Cherry. H
‡ P. lusitanica L. 264 Portugal Laurel. H
‡ P. laurocerasus L. 265 Cherry Laurel. H

Oemleria Reichb.
‡O. cerasiformis (Torrey & A. Gray ex Hook & Arn.) Landon 266 Oso-berry. H

262 Morello Cherry in manuscript.
263 Given in check-list, not in manuscript.
264 Listed in manuscript, without any account.
265 Listed in manuscript, without any account.
Cydonia Miller
† C. oblonga Miller\(^{267}\) (rare escape, hedges and waste ground E. P.) Quince. H

Chaenomeles Lindley
† C. speciosa (Sweet) Nakai (occasionally naturalised: E.P.) Japanese Quince. H
1) Ruxley pits.

Pyrus L.
† P. pyraster (L.) Burgsd.\(^{268}\) Wild Pear. H

† P. communis L. 15, 16 Pear.\(^{269}\) H

Probably introduced, but possibly native.

1\(^{st}\) record, 1777: S. of Kennaway, S. of Faversham, E. Jacob, Pl. Fav., p.9[1].
8) 13 Hedge, Postling Downs, L.J.M. Bridge, J.O.
12) Ham Street Woods, 1956, ES.
13) N. of Sissinghurst, 1949.

Malus Miller
M. sylvestris (L.) Miller\(^{270}\) 15, 16 Crab Apple.\(^{271}\) N

Probably native. Woodlands, scrub and hedges on various soils; occasional to locally frequent.

1\(^{st}\) record, 1777: Faversham, E. Jacob, Pl. Fav., p.66.
3) Blean, N of Dunkirk. Trenlsey Park Wood.
7) Bredhurst Hurst, ’44.
8) Nr. A.A. Box A2, Denton, DACL 1960, det. F.H.P.
16) Grange Alders LJM.

† M. domestica Borkh. Apple. H

In hedges, frequently bird-sown.
1) Ruxley pits. Dartford Hill GMB. Bexley GMB,
8) Gutteridge Denton, DACL. LodgeWood, Lydden, KDR. Hedge, Frogham, Nonningtion, BN.

† M. spectabilis (Aiton) Borkh.\(^{272}\)

\(^{266}\) Given in check-list, not in manuscript.
\(^{267}\) Given in check-list, not in manuscript.
\(^{268}\) Given in check-list, not in manuscript.
\(^{269}\) ‘Wild Pear’ in manuscript.
\(^{270}\) All the following records were headed ‘a) subsp. sylvestris (M. pumila auct.)’ and these continued with records under ‘b) subsp. mitis (Wallr.) Mansf.’. In this transcript, the latter have been placed under M. domestica, which would accord with the check-list treatment.
\(^{271}\) ‘Wild Apple’ in manuscript.
\(^{272}\) Not in check-list.
Alien; native of N. China


‡ M. purpurea (Barbier) Rehder  (Natl. in W. Kent: garden origin c.1900\textsuperscript{77}). Purple Crab.  H

Sorbus L.
S. domestica L.\textsuperscript{77}

8) N. of Elham Park Wood, 1958 MNE.

S. aucuparia L..  15, 16 Mountain Ash; Rowan  N

Certainly native.  Woodlands and scrubbyheaths on sand, sandy loam and gravel; calcifuge, and a characteristic associate of the sessile oak and birch in the dry oakwood association; common on the Tertiary sands and gravels and drifts of [districts] 1) and 3), on the Greensand (Folkestone Sand and Hythe Beds plateau drifts) and on the Hastings sands: [very] rare on the chalk plateau drifts, apparently absent on the Weald clay and Gault and in the alluvial marsh districts, the drift-free eastern chalk plateau, Thanet, Grain and Sheppey.

1\textsuperscript{st} record, 1597: Weald of Kent, Gerard, \textit{Herbal}, 1290.


5) The Larches, W. of Farnborough, PCH.  3964 Well Wood PCH.


7) Above chalk pit, Preston, 018602, CTanc[?].


12) Willesborough Lees.


14) Robins Wood, Cranbook, 1945 MNE.

16) Parkland, Brockhull; nr. Stream, Sandling Park, L.J.M.

S. aria x aucuparia = S. x thuringiaca (Ilse) Fritsch  N

6) Darent Wood, E. Forster Hb. BM (labelled S. aria var. pinnatifolia).


‡ S. intermedia (Ehrh.) Pers.  Swedish Whitebeam.

1) Ruxley pits.


12) 2 fine trees, nr. UP[pe]r Cricket [ground], Tun[bridge] Wells Common, CAS.

S. aria (L.) Crantz  Common Whitebeam.\textsuperscript{275}  N

Native.  Woodlands and scrub; abundant on the chalk; frequent on the western Greensand (on ragstone, Plateau chert drift and Folkestone Sand) as far east as Mereworth Woods; locally common on the sands and

\textsuperscript{275} No further account in manuscript.
\textsuperscript{274} Not in check-list, and manuscript entry is marked ‘check’ with record details deleted.
\textsuperscript{275} ‘Whitebeam’ in manuscript.
gravel drifts of the Blean, very rare in Thanet; absent elsewhere, except where planted. Common on the chalk in Surrey, more local in Sussex; extremely local in N. France (only on chalk scarp between Samer and Desvres!).

1st record, 1666: Sandwich, Goodyer in Merrett, Pinax, p.10.

1) 57 Joydons Wood. Hayes, GMB.
2) 1959, e o ant]
3) 1950, 1953 freq-uent, Swanton Valley, l e.
11) 65 Comp Woods, Mereworth, on plateau and in Swanton Valley on ragstone. 65 East Mereworth Woods, frequent.
12) 54 Southborough Woods, 1 tree, Miss H.M. Crampton, 1945, MNE; 1 large tree, 1960, CAS.

S. terminalis (L.) Crantz Wild Service-tree. N 20/51

Native. Old woodland, on Weald Clay, London Clay, superficial gravels, Hastings Sands and Clays, and (rarely) on chalk; widespread but very scattered; usually only a single tree occurs in one place, though larger colonies occur locally in the Blean Woods. Single trees of great size are occasionally found: they appear to be left when coppicing is carried out. Probably once common in the primitive Wealden forest.

1st record, 1597: Southfleet and Gravesend, Gerard, Herbal, p.1287.


4) 26 E. of Stodmarsh, 1955, MNE.


10) 74 Ragstone Scarp S. of Amberfield, Boughton Mochelsea, 1959, MNE. 65 on ragstone, Swanton Valley, Mereworth, 1960, MNE.

11) 84 Moatenden Fm, NW of Headcorn, 1944, one large tree, 818464, MNE. 54 Hildenborough, J.B.M. 54 By Medway, Leigh, three, A. Graseman. 94 N. of Bethersden, 936416, E.S. 84 Golden Square, Smarden, 1962, 885415. 84, Brook Wood, 825423, SW of Headcorn, 1960. 84 R[oa]dside ridge, N. of Morley Fm, Smarden, 863439, 1962. 74 R[oa]dside, nr. Spenny Fm, Collier St[reet], 709452, 1956. 44 roadside N. of Chiddingstone, 1960, CAS. W. of Bethersden, RAC. 94 R[oa]dside on Gault, W. of Westwell, Mrs. B. Dodds.
03 Bourne Wood, Orlestone, a few trees, J. Archibald; ES. Smallman's Wood. 93 Burnt Oak, 1 mile NW of Ham
Street, ES. 93 Birchett Wood, ES. Chiddingstone, 1902, H.F.P. in Hb. Croydon NHS. 44 Shernden Wood,
447428, S. of Edenbridge, one fine tree, 1958, PC Hall.
13) 73 E. of Louisa Lake, Bedegbury Forest, one very large tree, 1947, 733329, MNE. 54 Ashour Wood,
Bidborough, Miss H. Turnbull. 64 Cornford Lane, Pembury, 1939, J. Guthrie, TLS. 44 Shernden Wood,
447428, S. of Edenbridge, one fine tree, 1958, PC Hall.
14) 83 Gill N.E. of Benenden, one gigantic tree, 1954, 825333. 1 large tree Coever Fm., Knock Wood, RAC 1958.
82 NE of Alderden, Sandhurst. Owley, Oxney KFC. 92 Beales Fm., Red-Brook Street, Woodchurch, Mrs. Adams;
1961, CA Lister. 92 Lords Wood, Stone in Oxney, 1937, ASK.

Amelanchier Medikus
‡ A. lamarkii F.-G. Schroeder (Amelanchier confusa Hyland., Amelanchier laevis auct., A. intermedia auct., A.
canadensis auct.) Juneberry. H
Palmer.
3) Wood 2m. N. of Canterbury, 1946, DACL BM.
Kenward Green, Pembury, 1962, CAS.

Photinia Lindley (Stranvaesia Lindley)
‡ P. davidiana Deene Stranvesia. H

Cotoneaster Medikus (all introduced)276
‡ C. ellipticus (Lindley) Loudon [C. lindleyi] Steudel, nom. illegit.).

‡ C. affinis Lindley Purpleberry C.
‡ C. frigidus Wallich ex Lindley Tree C.
‡ C. salicifolius Franchet Willow-leaved C.
‡ C. pannosus Franchet Silverleaf C.
‡ C. lacteus W. Smith Late C.
‡ C. integrifolius (Roxb.) Klotz (C.microphyllus auct. non Wallich ex Lindley). Small-leaved C.
vc15: BEC, 1934, p.826.
8) Folkestone Warren, 1960, MNE. E. Cliff, Dover, 334418, DCL, KDR, Mrs. B. Dodds. Fan Bay, 353428, P. Le
Brocq, 1953.

‡ C. cashmieriensis Klotz Kashmir C.
‡ C. horizontalis Deene. Wall C.
6) 598752 Pit E of Empire Paper Mills, Swanscombe, HMP. Naturalised on chalk down, below A.20, Wrotham
Hill, DMcC; 1953 MNE.
8) Hawkshill Down, Walmer, 1955 MNE. River, K.D.R. E. Cliff, Dover, KDR. S. Foreland Road, St. Margarets Bay,
Mrs B. Dodds.

276 All the following species are given in the check-list, but the only ones given in the manuscript are those for which accounts are
transcribed, plus C. frigidus (no account).
13) By Brighton Lake, Tunbridge Wells, C.A.S.

‡ C. divaricatus Rehder & E. Wilson
Spreading C.

‡ C. simonsii Bois
Himalayan C.

7) Highsted Pt, DMCC.
9) N. Foreland, 1948 DMCC.
16) One plant in stonework, Brighton Lake, Tunbridge Wells Common, to 1959, KEB

‡ C. bullatus Bois
Hollyberry C.

‡ C. franchetii Bois
Franchet's C.

‡ C. zabelii Schneid.
Cherry-red C.

Pyracantha M.Roemer
‡ P. coccinea M.Roemer
Firethorn.
1) Ruxley pits
‡ P. rogersiana (A.B-Jackson)Coltman-Roger
Asian Firethorn.

Mespilus L.
M. germanica L. (Pyrus germanica (L.) Hook. f.) Medlar. ?N or H
Possibly native in the Weald; certainly planted, escaped from cultivation, or bird-sown, elsewhere; very rare. The status of this is not clear. It may be a genuine relic from the “primaeval” Wealden Forest about Tonbridge; it has been suggested that it may have a similar status in the E. Sussex Weald about Dallington, Ashburnham and Hastings, and in Surrey at Redhill. It is not recorded in Essex. It occurs scattered in N. France (Pas de Calais and Nord) in woods and in hedges; if native there, it may be also so in SE England. The evidence is however inconclusive at present.
1st record, 1777: “Between Tonbridge town and the Wells, common in woods thereabouts” R. Waring, Phil. Trans. LXI p.376.
1) Holwood Park, D.McC. Near Chelsfield, on Lullingstone Rd, F.J.H. Wood E of Bexley Church, PCH.
10) corner of field, Ightham Mote, Mrs Warnett. Edenbridge, Mead Waldo. N Medway NE of E Peckham ’34 AHWD.
14) Doubtfully wild at Hawkhurst, J.C. Melville.

Crataegus L.
Charcoal of this genus was found in the Iron Age site at Bogbery Camp. Harbledown; Jessup & Cook, 1936 (Godwin, p.120).
‡ C. coccinoides Ashe

C. monogyna Jacq. 15, 16 Hawthorn
N

277 Given in check-list, not in manuscript.
278 Given in check-list, not in manuscript.
Native, but universally planted in hedges. As a wild plant in open woods and scrub; particularly common as a seral scrub dominant, both on the less shallow loams in chalk scrub areas, and on clay and sand.

1st record as a wild plant, 1777: Faversham, E. Jacob, Pl. Fav., p69.


6E) S of Cooling 44.


9) Copse SE of Minster AGS.


12) (Red) Lane S of Sellinge by str[eam] RAC.


14) Mopesden Gill '55.

C. x media auct. C. x oralis Kittel (C. monogyna x C. laevigata). 280 N

Common with the latter, e.g.


8) Little London, Lyddon DPY.

11) The Forest; H... Wood; Bradshaw. Horish Wood / Honeyhills Wood, Bradshaw. Wrotham Heath, AHG Alston BM.

13) Wood W of Bidborough, 1945 MNE.

C. monogyna x Mespilus germanica 281

13) Planted, in wood N. of Bidborough, 1942, J.R.W.

C. laevigata (Poiret) DC. 282 15, 16 Midland Hawthorn. N

Native. Old woodlands, especially on heavy soils; very common in well-wooded parts of the county, particularly in the Blean, on the plateau woods of the chalk districts, the Gault, the Weald Clay, and the Wadhurst Clay; absent from the marsh districts, Thanet and Grain; very rare in Sheppey.


279 In manuscript given as Common Hawthorn, “Haggazells”.

280 Given as C. monogyna x oxycanthoides in manuscript.

281 Not in check-list.

282 In manuscript given as Crataegus oxycanthoides Thuill (C. oxycantha auct.).
2) 97 One bush in small oak wood N.E. of Brambledown Farm, S.E. of Minster, Sheppey.
5) 46 Jewells Wood, Biggin Hill. 46 R[oa]dside. Holwood Farm, PCH. 45 Hogtrough Hill, Brasted, 1958 MNE.
10) Seal, 1902, C.E.B., BM. Darent St. J. M. BEC, 1923, p.183 (var. eriocarpa Dr.). Westerham Wood 82. N. of Bat & Ball CAS. N of Franks Lane by Darent 556680, PCH.
16) Lymnp Park Wood, Postling Wents (Gault) (Thorn Wood).

‡ C. iciniiata Ucria Oriental Hawthom E

CAESALPINIACEAE

Cassia L.
‡ C. occidentalis L. Oil-seed casual. [account not yet transcribed]

Cercis L.
‡ C. siliquastrum L. Judas Tree. Waste ground, Hythe. H [account not yet transcribed]

FABACEAE

Robinia L.
‡ R. pseudoacacia L. False- acacia. 284 Widely naturalised in woodland, quarries, roadsides etc Alien, planted in parks, etc. and on railway banks.
1) Mount Mascal, Bexley, PCH. Gattons Plantation, PCH. Ruxley Pits. 36 Hayes, tip near sta[tion], PCH. Langley Park 1955 JM Sherwood.
5) The Larches, W. of Farnborough, PCH.
7) Belmont Park, planted, 1958, DMcC.

Phaseolus L.
‡ P. vulgaris L. French Bean. Casual on rubbish tips.
10) Sevenoaks tip, CAS.

283 Given in manuscript as PAPILIONACEAE, starting with Lupinus.
284 Given as Locust Tree in the manuscript.
285 Given in check-list, but no manuscript account.
‡ P. lanatus L. 286 Casual.

Vigna Savi
‡ V. radiata (L.) Wilczek 287 Mung-bean.

Glycine Willd.
‡ G. max (L.) Merr. Soya-bean Casual

Galega L.
‡ G. officinalis L. 15, 16 Goat’s-rue. Naturalised on waste ground.

Galega, naturalised in waste ground near houses.
1) Hayes Common HMP. Ruxley Pits. 57 Joydens Wood PCH; FR; PBS. 47 near Belvedere Sta[tion], PCH.
2) 47 Woolwich Arsenal, 1944. 57 By ruins of Longreach Tavern, Dartford Marshes, 1961, HMP 544779. 47 Erith Marshes, 1937, PHC (Hb. LNHS). 47 Crossness, PCH. 57 Stone Marshes, 1962, HAS.
5) 46 Waste ground, Orpington Bypass, PCH. Badgers Mount, E Armstrong.
6) 57 near Greenhithe, 1937 PHC. 57 Green St[reet] Green, Darenth, PCH. 77 Cliffe Chalk pit, 1958. Snodland, PCH. 67 Northfleet in chalk pit 1962 (pink & white) WAS. Moodys Lane, Crossing, Stone HMP. 640610 Trosley DMcC.

Galega, naturalised in waste ground near houses.
10) 55 waste ground., W. Kent Cold Storage W[or]ks, Dunton Green, R.C. Palmer. Whitley Forest RAC.
12) 94 A.20, Charing, Mrs B. Dodds. Canterbury Bombed sites, DHK.
16) 23 Folkestone Warren, KDR.

Colutea L.
‡ C. arborescens L. 15, 16 Bladder-senna. Naturalised on waste ground.
2) 67 Denton Marshes by canal, 1962, HAS.
6) 57 Greenhithe, P.H.C. 57 Swanscombe chalk pit, 1950, H.M.P. 67 Gravesend, 1962, Has. 76 Halling, roadside, Mrs. B. Dodds.

‡ C. x media Willd. Orange Bladder-senna. Naturalised on waste ground.
1) Eltham, 408708, 1951 DMcC. (Kidbrook P[ar]k R[oa]d corner)

Astragalus L.
A. glycyphyllos L. 15, 16 Wild Liquorice. 288 N 11/52 [14/52]
Native. Hedgebanks, scrub, woodborders, on chalk and ragstone, widespread but rather rare, with a scattered distribution, although abundant locally; also on a bank on Folkestone Sand.
1st record, 1620: Erith to Gravesend, Johnson, Iter, p.3.
1) Charlton Wood, Tournefort; Blackstone; Hb. Lambert.

286 Given in check-list, but no manuscript account.
287 Given in check-list, but no manuscript account.
288 Also named as Milk-vetch in manuscript.

7) 75 Pilgrims Way, E. of Boxley, 1954, S.E.U.S.S. Excursion; above Boxley. 95 Belmont Park, near golf course, Mrs Verschoyle; 1958; F.C. excursion; 1959! MNE. Peasdown, near Whitehill, Ospringe, E. Jacob. Middle of Farm Selling, 1960, B. Neame. [Rodmersham; Milsted; Selling Lees, H&M.] [Cades, Cowell.] 95 Hedge, Barn Wood, Eastling, C. Turner, 1958. 05 Park Wood border, Chillham, 1946-62, MNE. 95 Scooks, Ospringe, C. Turner.


11) 75 Ragstone Quarry, 1 mile S. of Ditton, C. Stace, 1957 (1958!). 75 E. Malling, J.S. Mill, 1865 (½ m. SE of, 1942-5?).

75 The Rocks, E Malling 1953 LARG. MNE.
65 Hedge of lane SE of Mereworth Park, 1943-61, MNE.
65 Edge of Woods S. of Platt, Miss Hayton; E. [sic] Elgar 1893 MNE.
[65 1m SE of W. Malling, Gray; apparently destroyed.]


14) 83 Tenterden, R[ai][wa]y embankment, ES; 1959! MNE. Potmans Heath, Maytham, E.P.

16) [13 near Sandling Junction, by A.20, Miss Long; destroyed by road widening.] 03 Between Lymne and Aldington, H.B. Maceson (Copperhurst, Postling Green), on ragstone roadbank, 1954-58! MNE. [23 Sandgate; Cheriton, C.P.S.K.] [13 Hythe, GE Shaw.]

Onobrychis Miller
(O. sativa Lam.)
Probably native in chalk grassland in the areas indicated below, but rare and local, except in 8). Frequent elsewhere on the chalk as an escape from cultivation. The native plant is smaller than the cultivated strains.

1st record, 1629: Gravesend to Rochester, Johnson, iter, p.3.


2) Woolwich Arsenal PCH. Stone Marshes HMP.

3) Thanet Way near Roman Galley REW.

5) NW of Leaves Green, 1917, PHC; BENA. Chalk cutting, A20, Farningham, PCH; HMP. W. of Shoreham, 1946. Chalk W. of Eynsford, PCH.


7) appearing native atWoudham ...RGW; Burham Downs,’ 47 MNE; W of Bluebell Hill, 44 MNE; Down E of L[owe]r Bell, 44; and Queen Down Warren, 535460, MNE. Bilting Downs, C.N.P. Walderslade Downs, apparent[ly] native. Alien, 038600, S. Side A.2


Anthyllis L.
A. vulneraria L. ssp. vulneraria 15, 16

Native. Downs, cliffs, and banks on the chalk, particularly in sparse vegetation, very common in old ragstone quarries and on dunes and chalky shingle, occasional; otherwise absent, except on imported chalk of railway banks, etc. A very characteristic species of chalk in Kent; it is most plentiful in seral communities colonising bare chalk, less common in mature closed turf.

1st record, 1597: by roadside, on Blackheath, half a mile from Greenwich, Gerard, *Herbal*, p.1061.

9) Roundabout, St Nicholas at Wade. Gr[ass][an]d on cliff tops, Kingsgate, Thanet, 1959 MNE. Minnis Bay, on cliff top, G.G.P. (near *Tetragonolobus*).
11) Old ragstone Quarry, Offham.
12) Old ragstone Quarry, by A.20, Mershams, 1946.
16) Sandgate, 1815, J.F.Y., BM.

Lotus L.
L. glaber Miller (L. tenuis Waldst. & Kit. ex Willd.) 15, 16

Native. In grassland on heavy clay and on alluvial mud or silt esp[ecially] near the sea; locally frequent in the coastal and estuarine marshes, rarer inland.

1st record, c.1700: Greenwich, 1696, Doody, MS.
1) [Greenwich, Doody.] Near Orpington Railway Station on clay cutting, W. Watson. L[owe]r Sydenham, 1948, D.McC. Joyce Green, GMB.
3) Whitstable Harbour HMW. Swalecliffe Brook, REW. By “Red Lion” S of Whitstable; near Church & State P[ublic] H[ouse] Denstroude REW.

289 The subspecies are given in the check-list, but not in the manuscript account. The latter gives an alternative English name for the species, Lady’s fingers; also “Granny’s toenails, Folkstone”.
290 Normally, Hacklinge is assigned to district 4).
291 It is under this latter name that the manuscript account is given.

9) Old R[ail][wa]y Cuttings, N. of Haine, Ramsgate, on chalk, 1959 MNE.


12) Kingsnorth, W.R. Jeffrey.


16) Newington, C.P.S.K.

L. corniculatus L. 15, 16 Common Bird’s-foot-trefoil N Native. Grasslands, roadsides, scrub; abundant throughout the county on all types of soils, both fry and damp, only absent on very wet or very acid soils.

1st record, 1629: Chatham, Johnson, Iter, p.4.


4) Sandwich Bay 1960 MNE. Deal Links 1954 MNE. Walmer Beach.


9) Down on cliff top, Kingsgate, Thanet, 1959 MNE.


14) Sandy R[oa]dside hedgebank ¼ m W. of Conghurst, Hawkhurst 1955. 50 Acre Wood Woodch[urch], ES. R[ail][wa]y track, Tenterden Sta[tion], 1959 MNE.

15) Romney Warren. St Marys Bay, 1881, J.F.D.P. Shirley Moor ES.


---

292 In the manuscript given as Bird’s-foot Trefoil.
**L. pedunculatus** Cav. (**L. uliginosus** Schk.)\(^{293}\) 15, 16 Greater Bird’s-foot-trefoil

Native, marshes, fens, streamsides, ditches; damp woodland rides, wet meadows, drier pastures also on heavy clay soils; common generally, abundant in the Weald.

1\(^{st}\) record, 1632: W. of Sandwich, Johnson, *Descriptio*, p.29.


**L. angustissimus** L. 15, [16] Slender Bird’s-foot-trefoil

Native, open sandy or gravelly ground, very rare.


4) Reported at Richborough, C. Cloke; and 16) Folkestone, G. Walton (possibly L. tenuis was meant.)

Appearing native in Surrey on a sandy bank near Albury, very like the Hernhill habitat; probably extinct in Sussex. More frequent in the SW of England, in France, absent N.E. of the Cotentin peninsula.

**Tetragonolobus** Scop.

**T. maritimus** (L.) Roth 15, 16 Dragon’s-teeth.

(*Lotus maritimus* L., *L. siliquosus* L.)

Alien? completely naturalised on the cliffs of London Clay in Sheppey, and on cliffs in Thanet.

1\(^{st}\) record, 1910: Birchenhig, W.H. Hammond. Warden, 1918, AE Davis.


\(^{293}\) The manuscript treats this species under the second name; and is Englished as Marsh Bird’s-foot Trefoil.
6) on chalk N. of A.2, Stone, 1950-51, HMP, 585737. by bomb crater by diagonal path between St[one] Castle and Bean Roads. Old Rectory grounds, Longfield, AG Side, 1956 MNE.  

9) Birchington, Thanet, 1910, W.H. Hammond; = 1919 Mr. Tatham; = Minnis Bay, on top of Cliffs, 1950, L.W.W.; just about to be destroyed by building, 1960, AC Cawston & J.E.L.; 80 plants moved to garden by old Puddle Mill, Minnis Bay.  

11) Tovil, H. Green, 1936, MNE.  

[Dorycnium] Miller  


6) 1 ½ m S.E. of Meopham, 644636, WH Pearsall 1933; C.E. Baker, 1934 BM J. Bot. 1934, p.349-350, in wild valley, on eastern slope of downland – now gone.]  

Ornithopus L.  
‡ O. compressus L. Naturalised on road bank nr. Swanley. (Not in E P. area, but in VC 16). Naturalised alien (Mediterranean).  

1) Sandy bank on N. side of A.20, ¼ m. W. of “The Bull”, Hockenden, Miss Poulter, det. (B.M.N.H.), (1957!).  

O. perpusillus L.  
15, 16 Bird’s-foot N Open sandy and gravelly ground, on heaths and roadsides, or leached dunes. Common locally on the Tertiary sands and gravels; on the Folkestone Sand; not very common on the coastal dunes and shingles; very rare elsewhere.  


12) on Folkestone Sand:  

294 In the manuscript given as D. gracile Jord. (D. herbacea auct.; D. suffruticosum auct.).
W. of Chatham REW
16) Folkestone Leas cliff top. Shornecliffe, G. Walton; 1955, w. end, abundant MNE. Sandling Park, H.&M. (!).

[*O. pinnatus* (Mill.) Druce.]
Reported in *Sci. Goss.* 1891, p.69; and as being found by a visitor in Folkestone Warren by G. Walton in litt. to H.&M. 1877: he had a specimen but had not seen it growing. Most improbable records for this Southern species.]

**Coronilla** L.
‡ *C. scorpioides* [(L.) W.D.J. Koch]
‡ *C. emerus* L.
2) Hedge of this species, Grain, 1947, H. Donesthorpe, BM.

**Hippocrepis comosa** L.
15, 16 Horseshoe Vetch H&M-EP \(\rightarrow\) N
Native, old chalk grassland, and roadside banks and cliffs on chalk; exclusive to, and generally very characteristic of (*Festucetum ovinae* and *Brometum erecti*) chalk grassland, but absent from areas of the chalk where there is no old grassland now, as between Dartford and Cobham, north of a line from Farningham to Longfield and Nurstead.

[‡ Not in check-list.
‡ Not in check-list.
‡ Not in check-list.

Hollingbourne Hill. (Bredhurst 1885 H.L. MNE.) 86 N. of Bredhurst Hurst. 76 Walderslade Bottom. 76 Horsted Valley ’52 MNE. 86 Rainham Park. 86 Longreach Wood, Stockbury. 86 Stockbury Valley, W of [Three Squirrels, ’44. 95 Pilgrims Way, E of Lenham ‘56 MNE. 95 Foxbury Down, Lenham. 94 Charing Hill. 95 Charing Chalk pits. 94 Westwell chalk pits, ES 94 Scarp foot NW of Westwell ES. 94 Lane SW of Suomi, Westwell ES.


9) Not recorded for Thanet.

Securigera DC. (= Coronilla L.)
‡ S. varia (L.) Lassen (C. varia L.) Crown Vetch. Well naturalised in a few places. H

Naturalised alien. Rare.

1) 47 Ruxley pits.
7) 76 Chalkpit, Bluebell Hill, among native vegetation, 1943, J.H.L. (1944!), MNE.
9) Westgate LWW.
11) 64 near Sir Thomas Wyatt, Allington, Miss Bunyard. Hadlow P Grattan.
12) 05 near Chilham Sta[tion], Mrs B.
14) R[ai][wa]y N of Hawkhurst Sta[tion] ’54 DACL.

Scorpiurus L.
‡ S. muricatus L. Casual: tip and wool alien. 299

Vicia L.
V. cracca L. 15, 16 Tufted Vetch N

Native. Hedgebanks, roadsides, scrub, wood rides and borders, fen-carr, shingle beaches, on a wide range of soils; it requires a fairly high illumination to flower; very common.


2) Woolwich Arsenal, PCH. Higham Canal, PCH. [Snedall Marshes, E. Bartlett, 1883 MNE.]
5) NW of Biggin Hill, 3961, PCH. Farningham R[o]ad Sta[tion] by R[o]ad PCH.
6) (Gadshill, Cobham to Luddesdown, R.P. BM.) Dartford E., HMP. Romney St[reet], PCH. Mounts Wood Greenhithe PCH. The Thrift, Bean, PCH. Cornfield, Buckland Rd, Luddesdown, PCH. 7) Berengrave pit, Rainham PM Roberts.

299 In check-list; no account in manuscript.

10) S. Darenth, PCH. Westerham Wood, ‘82. Dunton Green FSEF.


15) Dungeness, Oppen Pits, 1947 MNE.


V. tenuifolia Roth Fine-leaved Vetch. Naturalised: V[ery] R[are]: [Aylesford], Dover cliffs

8) Golgotha, Shepherds Hill, B. Nash, 1960 MNE.

11) N. of Aylesford Station, 720587, 1962, D.McC.

V. parviflora Cav. 300 (V. gracilis Lois.) 15, 16 Slender Tare.

Possibly native, more likely alien. Hedgebanks, tracksides, scrub; very rare indeed, and only seen recently in one spot.


6) Between Cobham Park and field in a lane (now A.2) Quekett in Hb. Borrer K.

13) Formerly abundant at Southborough, W. Fawcett (J. Bot. 1869). Disused track, to Gilridge, N. of Penshurst, 1953 MNE.

16) Folkestone, Miss V.F.P. Day.

V. sylvatica L. 15, 16 Wood Vetch N

Native: borders of woods, and of rides in woods, and in copppice, on chalk, base-rich loam over chalk, and on ragstone; very local, and now confined to district 8) in its central part, and to Aldington Knowle in 16). Formerly it appears to have been more widespread, if the records are all correct. The Kent distribution is very isolated; it is probably only naturalised in Surrey, and absent from Sussex and Essex. The nearest native localities to Kent are Wain Wood near Hitchin in Herts, and in central Hampshire. It is unknown in N. France.


This very beautiful plant only appears when there is sufficient light and it appears to be a short-lived perennial. When coppice is cut, it may soon festoon bushes with its showy racemes of flowers, which are white, pencilled with purple veins. Unlike V. cracca, it is quite glabrous.

‡ V. villosa Roth
1) Beckenham, Hb. Davis, 1934 MNE.
4) Near Hotel, Sandwich Bay, 1957, DACL, det. Kew; 1960, K.E.B.
5) Leaves Green tip, ‘53, DPY.
15) Hythe, 1903, H.J.R. BM (as var. glabrescens Koch).

‡ V. villosa?
8) Rough grassland on chalk, ½ m. NE of St Margarets [at] Cliffe, 1959, RB Codd MNE; 1960, E.G. Philp MNE; 1961, 1962! MNE.

‡ V. pseudo-cracca Bertol.
1) Beckenham, Hb. AG Davis, 1934, MNE.

V. hirsuta (L.) Gray 15, 16 Hairy Tare
Native. Hedgebanks, scrub, rough grassland, field borders, especially on sandy soils, but found also on chalk and clay soils: common.
1st record, 1632: Between Sandwich and Canterbury, Johnson, Descriptio. C.1580: plaster from house, Bicknor Court, JRB Arthur in Plant Remains (seeds and pods).
1) Ravensbourne, Bromley, 1918 MNE, Hb. Davis. Beckenham Place PCH. Ruxley Pits. Crofton Heath. Sandy area W. side Farningham Wood, PCH, 82!
2) Higham Marshes, 1944. Grain fort, 1946; S. beach ’55 MNE. Minster in Sheppey 1946. Graveney DHK.
4) Sandwich Bay. Deal Links 54 MNE. Walmer Beach. Ebbsfleet on old dunes ’63. Kingsdown Beach, KDR.
7) Gillingham, 1938, JBM. (Sittingbourne Hb Davis 1918 MNE.)
8) Kingsdown, 1902, CEB BM, MNE. Swanton Banks DACL. Bridge; Kingston JG.
10) N of Ide Hill, by roadside, ’44.
12) Hoathfield Common. Verge N of Potters’ Corner, ES.

V. tetrasperma (L.) Schreber 15, 16 Smooth Tare.
Native. Hedgebanks, rough grassland, scrub, field borders; common on clay soils, but found frequently on chalk and on sand and gravel; common.
1st record, 1777: near Faversham, J. [sic] Jacob.
1) Bromley Common, DMcC. Hayes gravel pit, 1909, Hb. Davis MNE. N Cray tip PCH. Near Falconwood Sta[tion], G.M.B. Ruxley Pits. Farningham Wood W edge, 82!

301 In the manuscript there are separate accounts for V. villosa and V. varia, but these are combined here on the basis that they are synonymous.
302 This record was given as V. varia.
303 This was originally entered in the manuscript as V. pannonica, then changed to ‘V. villosa?’.
304 Not in check-list, and may be treated as part of V. villosa.

3) Grassy slopes NW of Dunkirk '55 MNE. Fordwich JG. Whitstable Miss T. Webber. Tankerton cliffs, C.T.

4) Deal Links, '54 MNE. Ebbsfleet on old dunes '63.

5) Cudham GMB.


7) Grassland, Waldeslade, '52 MNE. W. of Chilham. Putt Wood gravel pit ES.

8) N. of Broome Park, Barham, 1942. Bridge JG. Covert Wood '50 MNE. Duskins, Kingston, 56 MNE. Woolwich Wood, KDR. Swanton Banks, DACL.

10) Westerham Wood, B Sennitt; 82!


12) Sandy verge N. of Potters Corner E


15) Dungeness.

var. tenuissima Druce


V. sepium L. 15, 16

Native. Woodlands, hedgebanks; abundant throughout Kent, except in Sheppey, where it is unrecorded. Sometimes white or cream flowered. In deep shade it often fails to flower.

1st record, 1632: Aracus Galegae silvestris Dod. E. of Cantebury, Johnson, Descriptio applies, I think, more probably to this species than any other.


2) Farningham Wood, PCH; 82! Bunkers Hill, N Cray, PCH.

3) Perry Wood DHK.

5) Mace Lane, Cudham, PCH. Woods, Darwins Bank, Downe, JEL. Hedge, 399611, PCH. Pilgrims Way, Polhill, PCH. Wood W. of Shoreham, PCH.


13) Stone Cross Gill, Ashurst, 518381, CAS. 54 NE Corner Ashour Wood, Bidborough '54. 54 R[oa]dsidel S. Park, Penshurst 54. 44 Wood ¼ m SW of Chiddingstone Hoath 54. 64 (white) Kippings Cross to Bush House, CAS. Bayham CAS. (white) Hawkenbury CAS. Bidborough Ridge (alba) KEB. 64 Roadside 1m SW of Pembury New Ch[urch], PCH. 64 Wood by Pembury W[ater] Works, PCH. (T[unbridge] Wells Hb Lamb 1838 MNE.)


var. ochroleuca

11) Egerton, 1952, EH Bowles, det. BM.
**V. pannonica** Crantz  Hungarian Vetch. Naturalised in Dartford: formerly at St.Margaret's at Cliffe.

The following records, made originally for *V. lutea*, probably refer in the main to this species. It is a very hairy, more or less erect, plant, with primrose-yellow flowers. Sepals entire. Flowers 2-4 together (pod + adpressed hairs).

1) Allen, Lower Sydenham, 1912. H. & J.G. **BM.**
4) Chalk turf, Gravesend, 1962, H.A.S. (“alien form” of “*V. lutea***
5) ***) Rochester Rd., N. of Maidstone, Mrs H. Brice, 1960 **MNE.
6) Abbot's Cliff top, 1953 **MNE.** Chalk grassland N.E. of St Margarets Bay, J. Codd etc. det. E. Melderis.
7) Cliff top, Pegwell Bay, 1961, Mrs Dodds. (“*V. lutea***
8) “Alien” near Ashford Warren, 1984, E.S.M.
9) Old allotments, Tj[unbridge] Wells, 1962, Mrs M.W. Page. (“*V. lutea***

**V. sativa** L. ssp. **nigra** (L.) Ehrh. 305 15, 16 Narrow-leaved Vetch

Native. Dry banks, hedges, wood borders, heaths and commons, roadsides; common throughout Kent.

1st record, 1777: Hernhill, E. Jacob, p.122.

3) Gravel pit Swanton Fm Littlebourne 1955 **MNE.** Grassy slopes NW of Dunkirk (L[ondon] C[lay]) 1955 **MNE.** Canterbury Golf Course REW.
5) Jewells Wood, W of Saltbox, Hb Davis 1915 **MNE.** 3964 Well Wood PCH.
7) Chestnut St[reet], Newington, on Heath Eocene gravels, 1957 **MNE.**
8) Cheriton Downs, ES Edees. Julliberry Downs, DHK.
11) 73 Cranbrook, High Street, 1955. 64 Bank by Pembury W[ater] Works, PCH.
13) 02 Romney Warren. 01 Dungeness. NE Littlestone, ‘62, ES. Hythe Shingles.

var. nigra L.

2) bobarti Koch 306
3) Keston Common, SEC.
5) Stelling Minnis, 1953.

**V. sativa** L. ssp. **segetalis** (Thuill.) Gaudin 307 15, 16 Common Vetch

Colonist, also naturalised on waste ground and roadsides, borders of fields, railway banks, etc.; common throughout the county.

---

305 In the manuscript given as *V. angustifolia* (L.) Reichard.
306 The manuscript has two sets of records for this taxon, which are combined here.
307 In the manuscript, this is treated as plain *V. sativa*. 
1st record: Uncertain.

1) St. Mary Cray, 1878, H.&J.G., BM. Dartford Heath GMB. Orchard NE of Farningham Wood OCH. Crofton Heath PCH.


4) alluvial grassland behind dunes, Sandwich Bay, 1962.

5) Pilgrims Way, Chevening, PCH.

6) Dartford E, HMP. Lane End, Darenth PCH. Lords Wood, Darenth PCH. Mounts Rd., PCH. Pilgrims Way, E of Wrotham, PCH. Otford, PCH.

10) Darenth.

11) Boxley, 1943 MNE.

12) Rail[way], Hildenborough, 563482, CAS.

13) Bayham, CAS.


V. sativa L. ssp. sativa

Casual

‡ V. cordata Wulf.


V. lathyroides L. 15, 16 Spring Vetch N

Native, fixed dune turf, bare sandy ground, consolidated shingle beaches; rare but locally abundant on the coast; very rare inland. This species can be readily confused with small forms of V. angustifolia [V. sativa ssp. nigra] in the vegetative condition.


4) Sandwich Bay, abundant on fixed dunes, 1946; 51 MNE. Dunes of Downs Farm, Sandwich, 1962. Dunes N. of Deal, 1887, E.S.M. BM; 1954, abundant! MNE.

6) Shorne Warren, D.Mcc., 1948, (sp[ecimen]).


V. lutea L. 15, 16 Yellow-vetch N

Native, on shingle and shell-sand beaches, very rare, though locally common about Dungeness. The native species is an almost glabrous, more or less prostrate plant with linear leaflets and cream-coloured flowers which become pale rose-tinted as they fade.310


2) Grain, S. Beach, 1955 (native form) MNE.


‡ V. hybrida L. 311

Naturalised, alien (stipules toothed; [lea][fl[et]s emarginate]; fl[ower]s solitary, yellow; standard pubescent dorsally; pod + spreading hairs).

308 In check-list, but no separate manuscript account.

309 Not in check-list, and generally treated as part of V. sativa.

310 The original manuscript account as first drafted went on to mention a different, alien form; and subsequently records for the latter were transferred to V. lutea.

311 Not in check-list.
5) Railway bank, E. of Swanley, W. Watson.
8) Downs between Dover and Deal, 1908, S.H.B. BM.

**V. bithynica** (L.) L. 15, 16 Bithynian Vetch N
Native. In grassland or scrub on clay soils, especially near the sea and tidal waters; very rare.
1) Woolwich Common, c. 1960, G.M.B.
4) Deal, Duthie (var. angustifolia Syme)
8) “Reported at Lydden Spout”, Mrs Walton.
10) Sevenoaks tip, CAS.
11) Platt Brickfield DMcC.

‡ **V. faba** L. BroadBean. Escape from cultivation.
(F. vulgaris)
1) Ruxley Pits.
8) one plant in wood on Downs between Chilham and Chatham, 1945, DHK.
10) Sevenoaks tip, CAS.
11) Platt Brickfield DMcC.

‡ **V. cassubica** L. Formerly naturalised at Greenhithe; now extinct.
Alien, naturalised in a gravel pit at Stone, near Greenhithe.
6) Old pit, Greenhithe, 1931, F. Druce BM; Pit near Greenhithe, A.J. Wilmott BM; gravel pit, E. of Horns Cross, 1946-54, F. Rose MNE; 1956, HMP; destroyed by 1965.

**Lens** Miller
‡ **L. culinaris** Medikus Lentil. Casual alien on tips, etc.

**Lathyrus** L.
Naturalised, Railway bank, W. of Tunbridge Wells West Station, K.E. Bull, 1957; CAS, 1960.

**L. japonicus** Willd. (L. maritimus (L.) Bigelow). 15 Sea Pea N
Native. On shingle beaches: very rare and local.
First record, 1640: New Romney, Parkinson 1060.
4) Plumpudding Island, W. of Minnis Bay, Birchington, L.W.W., (1949!); 1950 REW; 1962 MNE. Many old records on the Beach from Walmer to Kingsdown (Dillwyn, O.B.G. (1802) BM; J. Sowerby BM, etc. Hb. J.F.Y. BM; J.B. Syme 1963 BM; 1886, FJH BM; H. Lamb, Kingsdown 1850 MNE; Kingsdown, CP Hurst 1901 MNE; Kingsdown, H. Lamb 1916 MNE. Beach opposite Walmer Castle, 1945-54! MNE.
[8] Formerly near Dover (1838, CE Broome, Hb. R.J.S. BM.) [St Margarets Bay, 1883, Hb. EF Linton BM.]
15) Dungeness, Camden(opposite the Low Light, 1946-62! MNE). Beach near Pilot Inn, Dungeness, 1947 MNE. E of Midrips, Miss E. Burrows (near Suaeda fruticosa); 1952, KEB. Shingle Beach W. of Hythe, J.E. Lousley; 1954 at 144332 LJM; 2 colonies, 1955 & 1956 LJM; and near Redoubt, B. Clay, teste LJM; 1958, B.J. Brooke MNE. [Extinct at New Romney (Parkinson).]

**L. linifolius** (Reichard) Baessler (L. montanus Bernh.).312 15, 16 Bitter Vetch N 36/51
(L. macrorrhizus Wimm.; Orobus tuberosus L.)

---

312 Given as L. montanus in the manuscript.
Native. Dry woods, wood borders and hedgebanks. Frequent in wooded parts of the county, particularly on sands, gravels and loams; commonest in the High Weald, and on the Folkestone Sand, and in the Hythe Beds plateau woods.

1st record, 1670: Kent, Ray, Cat. Angl.


5) 45 Westerham Hill, MMW, L.


12) 03 Ruckinge, 1882, J.F.D.P. BM. 93 Burnt Oak, Orlestone, ’51 CNP.


16) Woods N of Aldington Knoll LJM var. tenuifolius Druce:

3) West Blean Wood; Church Wood + type,REW.


1st record, 1629: between Grain and Cliffe, Johnson, Iter.

1) Keston Common, 61, HAS. Shooters Hill GMB. Elmser End, Beckenham, Hb Davis 1915 MNE. Crofton Heath, PCH. R. Cray, N. Cray, PCH. Ruxley Pits.

2) Woolwich Arsenal, PCH. Higham Canal, PCH. Holborough Marshes ’44. Grain, PCH.


5) Halstead, 1852, A.A. BM. Darwin’s Bank, Downe, JEL. 396611 PCH. Pilgrim’s Way, Polhill, PCH. Chalk W. of Eynsford PCH.

---

313 Yellow Pea given as an alternative in the manuscript.


15) St Marys Bay, 1881, J.F.D.P. BM.


‡ L. tuberosus L.

| 15, 16 | Tuberous Pea. Naturalised at Sandgate. |


1) By pond, Darrick Wood, Farnborough, 440650, to c.1959; M. Swain.

3) Orchard, Neats [sic, for Neals?] Place Farm, Canterbury, GMC Mount 1955 MNE.

6) Well naturalised around refuse tip, Longfield, P.C. Hall 1956 MNE.


10) Waste ground, W. Kent cold Storage Works, Dunton Green, R.C. Palmer, 1961, OXF.


‡ L. grandiflorus Smith

| 315 | Two-flowered Everlasting-pea Naturalised Trenley Park Wood |

L. sylvestris L.

| 15, 16 | Narrowleaved Everlasting-pea. Naturalised Trenley Park Wood |

Native, scrub, borders of woods, glades, and hedgebanks, principally on chalk, but occurring also on the Tertiaries and on a railway bank on Folkestone Sand; rather rare and very local, but locally frequent on the chalk plateau of East Kent, east of Watling Street, where it occurs, usually in abundance, in at least nine localities.

First record, 1597: Swanscombe Wood, Gerard, Herball, p.1053; it is still plentiful there!

[formerly found at 1] Erith (E. de C.) and E. Wickham (Cooper Fl. Met.). 2) Minster cliffs, c.1940, Mrs Bryson. 3) NE of Canterbury; Bigberry Wood. 6) Cobham Park. 7) Faversham; Rodmersham. 11) Fant Woods, Maidstone; Sutton Valence. 16) W. of Hythe; Aldington; Lympne Castle. Apparently extinct in these places.

4) Between Preston and Grove Ferry, L.W.W. Richborough, L.W.W.


---

314 Earth-nut Pea in the manuscript.
315 Given in check-list but no manuscript account.

9) St Peter’s, L.W.W.

A broad-leaved form of this described as L. heterophyllus occurs in Swanscombe Wood with the type, and with intermediates; it may be a hybrid with L. latifolius.


| Alien, naturalised well now on railway banks, etc. |
| 1) By Railways at Erith; Plumstead; Bromley. St Mary Cray, 1946 PHC, L. Ruxley Pits. Green St[ree]t Green DMcC. Belvedere Station, PCH. Dartford Heath, 1962 WAS. |
| 4) R[ai][l][wa]y, Grove Ferry, REW. |
| 7) [Cobham: J. [sic] Jacob, 1777.] 75 Newnham, C.T. |
| 8) 35 Walmer Station. |
| 10) Sevenoaks tip ‘48 DMcC. Sevenpaks Forest, Mrs. Hewson. |
| 12) 94 Hedgebank, Little Chart, ES. 94 Hothfield, Mrs. B. Dodds. S of West Well Leacon ES. |
| 15) Old Salting, Dymchurch, LIM. |

A Gravesend schoolmaster used to sowseeds of this, Campanula medium, Antirrhinum majus, etc, on r[ai][l][wa]y cuttings; this may account for their present distribution in such habitats.


‡ L. sativus L. 317
1) Beckenham, Hb. Davis, 1934 MNE.

‡ L. annuus L. 318 Fodder Pea. Casual.

‡ L. articulatus L. 319 Casual.

L. nissolia L. 15, 16 Grass Vetchling²⁵² N Native. Grassland and scrub, on heavy clay soils particularly; also on alluvium and sandy shingle near the sea; commonest on the London Clay and alluvium of the N. coast of Kent, very rare in the High Weald, but very widespread in the county; probably commoner in Kent than anywhere else in Britain. Frequent in Surrey and Sussex, common in most of Essex, quite rare in Pas de Calais.

¹ 1st record, 1670, Ray, Cat. Angl., p.61.

1) 47 Etham Park; 46 near Farnborough, W.W. 46 Grass[an]d S.E. of Bickley, 1944, JEL. 46 Crofton, Swain. 46 Orpington, PHC, BENA. 46 E. of Chelsfield Station, 1945. 47 Ruxley Pits.
5) Chalk SE of Orpington, Leaves Green, BENA. Near Knockholt Station, Chelsfield Rd, E Armstrong. Darwins Bank, Downe, '55, JEL. 56 Farningham. 57 Cotton Lane Chalkpit, Stone, 564747, 1962 HMP. 66) 57 Lane End to Green St[reet] Green, Darenth, 1954 MNE; PCH. [Longfield, 1901, SEC]
7) 86 by main road below Stockbury Church. 86 Berengrave pit Rainham PM Roberts. 86 Down behind “Three Squirrels”, Stockbury, 1943 MNE. 76 Wouldham Rectory Quarry, 1946. 96 Putt Wood, Ospringe ES.
Walderslade / Fort Horsted, BC. 95 Sharted Park, ES. 027575 Badlesmere, C.T. 05 SE of Park Wood, Chilham, ES. 94 Dunn St[reet], Westwell, in field, E. Scott.


9) 26 Birchington. 36 Pegwell Bay, on cliffs, 1946 MNE.

10) 57 Hawley, A.G. Tagg. 55 W. Kent Cold Storage Works, Dunton Green, RC Palmer, 1961. 55 Otford, Miss E Waley.


L. aphaca L. 15,16 Yellow Vetchling

Alien 323, occasionally naturalised on roadsides, banks, pits, and waste ground, mainly on chalk and sand: with a long history in the county, but not of long standing anywhere.

1st record. 1632; Faversham to Gravesend, Johnson, Descriptio, p.37.


3) 1 plant in grassland N.W. of Dunkirk, 1945.

323 In the check-list it is given as 'Doubtfully native, but established'.

6) Greenhithe; chalkpit E of Mounts Road, 1950, E.C.W. & R.A.B. Lane End (Gravel pit) to Green St[reet] Green 578708 IS6, HMP; PCH. Verge of Wrotham by-pass in chalk turf, 300 yds E.S.E. of roundabout, 1950-63. [Copse by Nurstead Church, R. Popcock, BM.]

6E) Green Street Green in gravel pit, 1947, H.M. Pratt; roadside, P.C.H. 1954. Lane End, on green, PCH.


14) Appledore waste ground, D.A.C.L.

15) Dungeness, teste D.A.C.L.

Pisum L.

‡ Pisum sativum L. 325 Garden Pea. Casual.

10) Sevenoaks tip, CAS.

Cicer L.

‡ C. arietinum L. Chick Pea. Casual.

1) Beckenham, Hb. Davis, 1934 MNE.

Ononis L.

O. spinosa L. 15, 16 Spiny Restharrow N

[version 2] Native. Grassland or scrub, almost confined to heavy clay soils; locally frequent on London Clay and on alluvial clays along the north coast of Kent and the Stour, very rare elsewhere, though apparently formerly in several places in the Weald and on the Greensand.

[version 2] Native. This species is today distributed rather thinly along the N. and NE coasts of Kent, where it occurs on heavy clay soils, on London Clay or alluvium, in grassland or scrub, particularly on cliffs and banks near the sea. Formerly it occurred on the Weald Clay; near London; and about Folkestone but it seems to have disappeared in most of these areas, probably due to building, or ploughing of grassland. Commoner in Surrey and on clay soils in Mid-Sussex than in Kent; rather common in Essex, common in Pas de Calais.

1st record, 1632: between Sandwich and Canterbury, Johnson, Descriptio, p29.


324 There is some duplication here as regards entries under 6).

325 In the manuscript given as Pisum arvense.
6) On London Clay, abundant in grassy, scrubland, Lodge Hill, S. of Cooling, 1944; 1954). (Cliffe, Hanbury.) (Cobham HN Ridley.) (St[r]ood, Miss Young.) 65 Chalk Downs (1 pl[ant]) N of Blacksole Field, W. of Wrotham, H.M. Pratt. I have not seen this here, but it occurs on chalk in e.g. Bucks.


O. repens L. \textsuperscript{326} Common Restharrow N

Native. Chalk grassland, sand dunes and sandy and shingle beaches, sandy cliffs, very common; less common on grassland on ragstone; very rare on other soils, though occasionally found on disturbed roadsides or in quarries, where there is little competition.

1\textsuperscript{st} record, 1632: Thanet, Johnson, Descriptio.

1) Chislehurst W.W. Dartford Heath, PHC. Ruxley pits.

4) abundant on dunes, Sandwich Bay to Shellness, 1954 MNE. Only a little, N. of Deal on the dunes. Kingsdown Beach. Spinosa form, recorded as repens x spinosa, on dunes, Sandwich, H.M.P. 1961.


9) Margate Rd NE of Sarre, MEM.


12) Goldwell Quarry (ragstone) ES. Shodddington, by rd., ES.


14) abundant on the ancient sea-cliff of Ashdown Sand, Stone Cliff, Oxney, 1958, MNE.

15) Blackwall Fm, Dungeness, 1956 MNE. Romney Warren, A.J. Wilmott, BM; 1945-62!

‡ O. mitissima L. \textsuperscript{327}


‡ O. alopecuroides L. \textsuperscript{328} Casual, on tips, v[ery] r[are] (E.P.).

Melilotus Miller

M. altissimus Thuii. \textsuperscript{329} 15, 16 Tall Melilot. ? N or C or D 28/51

Probable native, usually in closed vegetation (grassland scrub or open woodland) on clay or chalk, also in waste ground as an adventive; widely distributed but local.

1\textsuperscript{st} record, 1627: between Grain and Cliffe, Johnson, Iter, still found about Cliffe.


2) 57 Erith, waste g[rout]d, St J M. By railway, Cotton Fm., Stone Marshes, 1 plant, 1953, H.M.P. 06 Faversham.

3) 16 Hales Place, M.E.M.

\textsuperscript{326} Given in the manuscript as O. repens L. ssp. repens E.B. (O.arvensis Fries.).

\textsuperscript{327} Not in check-list.

\textsuperscript{328} Not in check-list.

\textsuperscript{329} Melilotus altissima Thuii. Wild Melilot (M. officinalis Lam. Ex Hague)in manuscript.
5) 46 Chalk grassland and scrub W. of Saltbox, Biggin Hill, 1955, MNE. 46 R[ai]|wa|ly, Knockholt, CAS.
6) 77 Ladies’ Close Wood S. of Cliffe, ESM BM; (1946!); grassland, R. Pocock, BM. 77 Cliffe chalk pits, 1949.
10) 55 Sevenoaks Brick Works, 1951, D.RcC.
75 E. Malling. Maidstone, 1882, E. Bartlett, MNE. 94 By M.20, Sandling, 1960, E.G.P. 75 N. of Aylesford in pit, 1955 MNE. 75 S. of Aylesford in pit, EGP. 85 Headcorn Sta|ion| Mr B Dodds. 54 R[ai]|wa|ly, Hildenborough, 563482, CAS. 94 Birch Wood, Bethersden ’62. 85 Harrietsham Station, 1962 Mrs B Dodds. 64 By Medway, E. Peckham, CAS. 75 Maidstone E. Station 1960 EGP. 77 W of Staplehurst ’63 FR & KFC.
12) 94 Hothfield Common, 1961 EGP.
15) 01 Dungeness. 13.

‡  M. albus Medikus330 15, 16 White Melilot. C  36/51

[first version] [alternative version]

[1st record: Faversham, Atkins BM.]

[1st record, 1860: Beckenham, Wollaston in Phyt N.S. VI. P.63.]

3) Seasalter, Miss T. Webber. Whitstable Harbour REW. Harbledown REW. Oare Mill ’50, REW.
4) 36 Richborough. 35, 36 Sandwich Bay v|ery| abundant on the dunes N. to near Shellness: JEL 1925; 1954! 36 Ebbsfleet. 34 Kingsdown. 25.
5) 46 Orpington Bypass, waste g[roun]d, PCH. Down W of Saltbox, JDL.
7) 05 Between Old Wives Lees and Shalmsford Street, 1 plant, 1943, DHK. 66 Sole St[reet] Sta|ton| CAS.
8) 24.
9) 26.
10) Dartford. 45. 55. Farningham [cross] r[oa]ds PCH.
12) 05 Riverside, Chartham, Mrs. B., 1958. 15 Precincts, Canterbury MEM. 16 Sturry 51 DMcC. 94 Roadside Hoads Wood. 04 Wye, Lady D. 15 Canterbury RGW.
13) 64 R[oa]dside, SE of Tonbridge, 611424, M. McFarlane. 73 Bedgebury Forest, LJ Davies.
15) 01 Denge Beach, shingle pits. Lydd, KEB.

‡  M. officinalis (L) Lam. 15, 16 Ribbed Melilot331. C  44/51

(M. arvensis Wallr.)

330 Given as M. alba Desr.
331 Given as Common Melilot.
Alien, completely naturalised on dunes, chalkpits, wasteground, etc. Common.


2) 47 Woolwich Arsenal area AHWD; 1944-47, v[ery] a[bundant].

76 waste g[round], Holborough Marshes, Snodland, 1945 MNE.

77 Cliffe. 77 Higham. 87 Grain. 97 Sheerness. 07 Warden. 06 Shellness. 06 Faversham AHWD (57!). 86 Otterham Quay / Motney Hill, BC.

3) 16 Whitstable, Miss T.W. 16 Swalecliffe, E. Robinson. Blean, freq[uent], RGW.

4) 35 Abundant, Sandwich Bay to 36 Shellness on the dunes; JEL, 1925; completely naturalised. 36 Richborough 1946 MNE. 36 Pegwell Bay. Deal-Walmer beach. 34 Kingsdown beach. 25.

5) 56 Lullingstone.

6) Eynsford. 57 Stone. 57 Dartford. 57 Darenth. 57 M[ou]nts Rd, Greenhithe 1954 MNE. 66 Longfield Hill Mrs D. Woods, 621679. 67 Swanscombe. 67 Northfleet. 67 Gravesend. 57 Horns Cross tip 62. 76 Cuxton. 76 Halling. 66 Cobham. 57 Lane End to Green St[reet] Green, PCH.

7) 76 Burham. 76 Wouldham. 76 Rochester. 76 Strood. 76 Chatham. 76 Bostal. 95.

8) 39 Kingsdown. 15.

9) 36 Ramsgate. 36 Broadstairs.. 36 Cliffsend, abundant. 26.

10) 57 Dartford. 55 Greatness, RAC. 515568 NE of Riverhead, F.S.E.F. Pits E of Longford FSEF. 45.

11) 64 S. of Yalding. 65 Yalding Station. 75 Ditton. 75 Aylesford. 44 Edenbridge Tip DPY. 54 Main Rd, Hildenborough, CAS. 64 Brambridges, E. Peckham, CAS. 74. 85.

12) 94 Charing, near Swan Hotel, ES. 05 Chilham, near River, ES. Canterbury, RGW. 04.


15) 13 Hythe. 02 Romney Warren. 01 Dungeness, 1947, MNE. 92. 93.

16) 23 Folkestone brickworks 1949. 13 Sandpit, Stone Farm, Newington, LJM. 03.

‡ M. indicus (L.) All.15, 16 Small Melilot. C 10/51
(M. parviflora Desf.)

Alien, now well naturalised, though not abundant, on rubbish tips, sand dunes, shingle beaches.

1st record, 1864: Kent, Syme.

1) 46 Green Street Green, Farnborough, 1936, P.H.C. Hb. LNHS. St Mary Cray, Swain. 47 Lessness Abbey, 1948, RAB. 36 Beckenham, Hb. D[avis], 1934, MNE. N Cray tip PCH. [Well Hall, Eltham; Plumstead; E. Wickham, AHWD.]


4) 35 Sandwich Bay, 1 plant near Hotel, 1946, DMcc; now in several spots, locally common, 1957. 34 Kingsdown beach, locally frequent, 1946. 36 Richborough '56 BN.

6) 66 Longfield Tip, 1956, D.McC. 77 Hoo Brickworks DMcc.

8) Chalky r[oad] verge, Kearnsey, RD English.

10) 55 Kemsing station, 1948, D.McC.


12) Sturry, DMcc.


---

332 Given as M. indica (L.) All. Small flowered Melilot.
‡ M. sulcatus Desf. 333 Furrowed Melilot. C

Trigonella L.
‡ T. corniculata (L.) L. 16 Sickle-fruited Fenugreek. Casual.
1) Beckenham, 1934, Hb. Davis, MNE.

‡ T. procumbens (Besser) Rchb. 334 16
1) Abbey Wood, St J.M. BEC 1925, p.870 (1926).
2) Thames Wall, Erith, R.A.B.

‡ T. hamosa L. 335 16
1) Beckenham Place Park, 1934, E.J.B., Hb. L.

‡ T. caerulea (L.) [Ser. 336] 16

‡ T. monspeliaca L. 337 16
1) Beckenham, 1934, Hb. Davis, MNE.

‡ T. corniculata ([L.] L.) 338 16
1) Beckenham, 1934, Hb. Davis, MNE.

1) Beckenham, 1934, Hb. Davis, MNE.

Medicago L.

M. lupulina L. 15, 16 Black Medick. N Native. Chalk grassland, grassland on ragstone and Folkestone Sand, sandy beaches and dunes, roadsides, very common throughout Kent.
3) Bigberry Wood Pit.
4) abundant on the dunes, N. of Deal; Sandwich Bay; Shellness. Pegwell Bay. Track bank 271692, N. of R[ai][l]y[wa], N. of St Nicholas ‘62. Sea Wall 1m. W. of Minnis Bay ‘62.
8) 23 Folkestone Downs. 23 Lydden Spout. 04 Brook Hillock (fuciflora site) 1962.

333 In check-list; no account in manuscript.
334 Not in check-list; cited as T. procumbens Reichb. In manuscript.
335 Not in check-list.
336 The manuscript has two entries for this taxon, one with (L.) as authority; the other with (Ser.) Druce.
337 Not in check-list.
338 Not in check-list.
13) Forest near Hawkenbury 594383, 1958, E. Shorrocks. Bayham CAS.

var. Willdenowiana Koch
1) Holwood, 1921, E.B.B.
10) Force Green, Westerham, BTW, 1932. 339

M. sativa L. ssp. sativa 340 15, 16 Lucerne. Naturalised

A frequent escape from cultivation, becoming naturalised in field borders.

1) 46 Hayes, D.McC. Ruxley Pits. Near Charlton, 1819, J.F.Y. BM. Blackheath NE GMB. Abbey Wood St J M. 47 Woolwich Arsenal PCH. 47 Sewer Bank, Plumstead, PCH.
2) 76 Wouldham, by River Medway, 1945. 06 on shingle, Seasalter, 1926, TF, BM. 96 Iwade, HM Musselwhite.
3) 16 Seasalter ‘56 HMW.
5) 46 Halstead, F.R. 56 Chalk W. of Eynsford PCH. 55 Morants Court Hill E side in pit PCH. 3964 Well Wood PCH.
6) 57 Stone. 57 Dartford, E. of. 67 Southfleet. 76 Cuxton. 76 Halling. 76 Snodland. 57 Greenhithe, 1882, F.H.W. BM. 67 Gravesend 60 HAS. 67 Swanscombe 61 HAS. Claylane Wood 61 HAS. 66 Pilgrims Way, E of Wrotham, PCH. 57 Green St[reet] Green, Darenth, PCH.
7) 76 Wouldham, Burham. Thurnham 1847, M.N.H.S., Hb. L. MNE. 8) frequent in the east of the district (35 Eastry; 25 Knowlton; 24 Eythorne; 24 Sibertswold; 34 St Margarets; 15 Chartham; 15 Bishopbourne; 14 Lynsore Bottom; 24 Derringstone, Barham). Rhodes Minnis, BN.
9) 26, 36 very commonly naturalised in Thanet.
14) Cranbrook near Robins Wood, crop relic, DS.
16) 13 London Rd., Hythe crop relic, LJM.


var. tenuifoliata [sic]

Alien, now naturalised in rough fields, on dunes, riverbanks, and roadsides.

1st record, 1829: Ramsgate, C.P.S.K.
4) 35 Sandwich, 1937, F. Hyland (var. tenuifoliata) BM. 35

339 Marked “Delete”, although not actually deleted.
340 Plain M. sativa L. in the manuscript.
341 M. falcata L. in the manuscript.
Walmer Beach 1932 Miss F. Clarke. 36, 2m N. of Sandwich Bay on dunes, Miss E. Day (1947!). 36 near R[oa]d N. of Ramsgate Rubbish Dump, Pegwell Bay, Miss DAC Long, 1956.

6) 76 Strood, 1950, on chalk bank of Cuxton Rd., MNE.

9) 36 Dumpton Gap, C.P.S.K. 36 Clifftop, Broadstairs, R.E. Wood, MNE.

10) Dartford By-pass near Gravel Ponds GMB.

11) 76 Between Leybourne and Ham Hill, 1900, H.L. MNE. 76 Strood, 1950, on chalky bank of Cuxton Rd., MNE.


12) 3m. from Tunbridge Wells, Kent, 1896, F. Roberts; in hedgerow bordering a former hop garden.

12) 04 Sevington, E.S.

ssp. varia (Martyn) Arcang. 15, 16 Sand Lucerne. Naturalised. Has arisen naturally in Kent where the parents grow together: back crosses and segregates occur.

1) Barnes Cray to Slades Green, 524754, HMP.

2) Wouldham, river Medway bank, 1945 with the parents, MNE. New Hythe, 1947, DMcC. [Dartford 548748, on gravel, 59., F. Swain – gone since.]

4) By roadside, N. of Ramsgate rubbish dump / Pegwell Bay, 1956, Miss D.A.C. Long.


13) 3m. from Tunbridge Wells, Kent, 1896, F. Roberts; in hedgerow bordering a former hop garden.

12) By Sevington Water Mill, 1950 ES.

‡ M. ciliaris L. All. Wool alien, very rare casual.

‡ M. truncatula Gaertner Casual.

‡ M. laciniata (L.) Miller Casual.


4) Sandwich, shoddy, 1960, DMcC MNE.


M. minima (L.) L. 15, 16 Small Medick Native. N Native, on fixed dunes and on sandy or shingly turf by the sea, very local, but locally plentiful. First record, 1968: Sheerness, Rand.

1) [Blackheath, Irvine; E.J.] St Mary Cray 1925 JK Spearing.


Alien plants:

1) Hextable, 48 DMcC & JEL.

3) Bigbury, Harbledown, P. Furneaux, 1955 MNE. S. of Bysing Wood, in arable field, 1958, MNE.

4) Sandwich, in shoddy area, 1959, DMcC. MNE; 1960 MNE.

6) Stubbile N. of Shore 694724 PCH. Sharnal Street 783737 shoddy PCH.

9) Station Yard, Birchington, E.G. Philp, 1960 MNE.


342 Given in manuscript as as Medicago x varia Martyn; M. falcata L. x M. sativa L.; M. sylvestris Fries.
343 Given in check-list but not in manuscript.
344 Given in check-list but not in manuscript.
345 Also given with M. polymorpha account as M. laciniata (L.) Mill. 1) Hextable, shoddy alien, 1948, DMcC & JEL.
346 These last two locations are also given for M. aschersoniana Urb., although this is since regarded as synonymous with M. laciniata.
‡ M. praecox DC.\textsuperscript{347}
1) Hextable, “Shoddy” alien, 1950, D.McC.
3) By Bysing Wood Faversham 1945, FR, det. DMcC \textsuperscript{MNE}.
4) Sandwich, Shoddy field, 1960 DMcc \textsuperscript{MNE}.
9) Station Yard, Birchington 1960, E. Philp, det. DMcc \textsuperscript{MNE}.
11) Offham, Shoddy field, 1960 DMcc \textsuperscript{MNE}.

M. polymorpha L. 15, 16 Toothed Medick. N

(M. hispida Gaertn.) (M. denticulata Willd.)
Native, on fixed dunes and sandy or shingly open ground near the sea. Casual alien inland.

1\textsuperscript{st} record, *1666: Romney Warren, C. Merrett, \textit{Pinax}, p76.
1) [Blackheath, Irvine; E.J.] ‡ Beckenham Place Park, 1934, EJB, Alien. ‡ Hextable, a “shoddy” alien here, 1948, DMcC. Beckenham, 1934, Hb. Davis \textsuperscript{MNE}. Alien: st Mary Cray JK Spearing 1925.
6) [Dartford, F.J.H., Fl. K 87; the alien var. denticulata (Willd.) Burnat. Stubble N of Shorne 694724 PCH.] 76 Alien: Broomhill allotments, Strood, Mrs MH Dolling. 77 E. end CockhamWoods, Mrs MH Dolling.
8) ‡ Bridge, JG.
10) Force Green bean field, '58, RAC.
9) [cliff top, Langnose Stairs, 2 miles E of Margate, FJH (Fl K); not refound, L.W.W.]
11) § casual, E. Malling, 1945.) Fieldside N. of Vinters Quarry, Maidstone 1956, LRAG, \textsuperscript{MNE}. Basted in shoddy field, 1960, DMcc \textsuperscript{MNE}. Wrotham Station 1968, shoddy, DMcc MNE. Yalding Station, 1961, DMcc.
13) casual, Hopgarden, Hoathly, Lamberhurst, JRW, 1940, det. Kew. Sandgate, G.E. Sm., inland on cliffs, Shornecliffe (1955!) \textsuperscript{MNE}).
15) 02 Romney Warren, C. Merrett 1666 (1946! \textsuperscript{MNE}). 02 Littlestone, beach, 1946. 13 W. of Hythe, F.J.H.; 1955! \textsuperscript{MNE}; 1958! \textsuperscript{MNE}. Dungeness, G. Dowker, Fl. K.
16) 23 Folkestone Leas, E Forster \textbf{BM}; W. Borrer; (1945! \textsuperscript{MNE}).

M. arabica (L.) Hudson 15, 16 Spotted Medick. N

(M. maculata Sibth.)
Native. In dry grassland, on roadsides and baks, dunes; mainly on sand and gravel, but on chalk near the sea. Common near the coast, up the Thamdes and Medway estuaries, and locally on the Folkestone sand and on river banks inland.

1\textsuperscript{st} record, 1777: Faversham, E. Jacob, \textit{Pl. Fav}. P.115.
2) 57 Erith Marshes. 87 allHalls [sic] 60 HAS. 77 Higham. 77 Cliffie. 87 Grain. 07 Leysdown. 06 Shellness. 76 Cuxton, J.B.M. 77 by Medway Below Upnor, 1960 \textsuperscript{MNE}. 77 Higham Canal PCH. 07 Leysdown, 1917, Hb. D[avis] \textsuperscript{MNE}. 06 W. of Seasalter. Dartford, 1860, Hb. T. \textbf{BM}; 1886, E de C \textbf{BM}. Motney Hill 1951, DMcc. Luddenham Marshes HMW. Canal SE of Sheerness, OD.
4) 35 N of Deal. 35 Walmer. 35 Sandwich Bay. 36 Pegwell. 26 Reculver. 36 Dunes, Downs Fm, Sandwich, 62. 35 Shoddy field, Sandwich, 1960, DMcc \textsuperscript{MNE}.

\textsuperscript{347} Not in check-list.
7) 05 Chilham (Mulberry Hill) DHK. 05 Old Wives Lees, DHK, 1945, abund[ant].
8) 34 Dover. 34 St. Margarets. 23 Capel le Ferne. 24 River, KDR. Bridge JG. Lower Hardres, abund[ant] DHK. 24 By R[ail]way bridge, Woodville, Temple Ewell, DACL. 24 Swanton, near Lydden, DACL. Sutton Downs, DPY.
9) 36 Minster Churchyard ’63. 36 Field SE of [cross] r[oad]s N. of Minster 63.
14) Woodchurch ch[urch] Yard [?] d, and Village Green RAC. St Michaels Tenterden RAC.
15) 13 Shingle beach W of Hythe, 1958 MNE. 02 Romney Warren 1881 JFDP BM; 1945-’62!. 13 Ancient dunes W. of Hythe 62. Dymchurch. 02 Littlestone 1946 MNE. Dungeness. 02 Lydd Common. 02 Brezlett. 92Fairfield. 93 Snave. 13 Appleford. 13Burmmarsh, KDR.

Trifolium L.

T. ornithopodioides L.348 15, 16 Bird’s-foot Clover. N
Native, very local on paths, banks and open turf on sandy or gravelly heaths inland, and on dunes or consolidated shingle near the sea.
1st record, c.1780: Blackheath, Curtis.


2) 77 Sandy g[round] by Medway, by Cockham Wood 773715, below Upnor, 1960, MNE. 87 Tracks behind Sea wall, and on banks near it, Isle of Grain, 1945, MNE. 87 behind sea wall, All Hallows, 1945, MNE. [Queenborough, E.S.M., 1889, BM.] 06 Bank by Faversham Creek, 1958, H. Wilks, 026637 & 050635, on disturbed soil.

3) Whitstable Harbour Sta[tion] HMW.


7) 96 Gravel pit, Putt Wood, Ospringe, 1958, H. Wilks, MNE.

10) Chert pits E of Riverhill RAC.


14) 92Top of sandstone cliff, Stone Cliff, Oxney, 1949 MNE, a sea-cliff, before Romney Marshes were reclaimed.


16) Sandgate C.P.S.K. 13 Sandy turf N. of Seabrook, 1955 MNE.

T. repens L. 15, 16 White Clover. N

348 Trigonella ornithopodioides (L.) DC, Bird’sfoot Fenugreek in manuscript.
Native but also extensively sown in leys. Meadows, pastures, roadsides, wasteground, dunes, etc.; very common and abundant throughout Kent.

1st record, 1632: Thanet, Johnson, Descriptio.


3) Bigberry Gravel pit.


5) Halstead PCH. 396611 PCH.


7) A249 verge below Ch[urch], Stockbury. Field below Church Wood Stockbury.

8) Brook “fuciflora” hillock (ley) ’62.

9) Minster Ch[urch] y[ar]d 63.


14) By Parish Church, Hawkhurst 1955.

15) Lydd Airport, DMcC. Dungeness ballast workings, Romney Warren.


4) Walmer Beach, BS Furneaux.

† T. hybridum L. 15, 16 Alsike Clover. Well naturalised - Introduced: often sown in leys, etc., but naturalised on banks and roadsides; common.

1st record, 1863: between Stowting and Smeeh, Hb. J.S. Mill.


2) Stone Marshes by Power Sta[tion], HMP. 87 Isle of Grain. 76 Snodland Marshes. 77 Higham Marshes.

3) 15 Field by Brotherhood Wood, Canterbury, C.A. Roberts.

5) 56 Chalk W. of Eynsford, PCH. 398611 field edge PCH. 45 Chevening, Pilgrims Way PCH. 45 Knockholt PCH.

6) 65 Wrotham PCH. Farningham StJM. 57 Green St[reet] Green, PCH. 67 Swanscombe Wood, PCH. 66 Cobham Warren, PCH.

7) 86 Stockbury, 3 Squirrels, 1943 MNE. 95 N. of Newnham, C.T. 95 Belmont Park, Faversham, 1958, DMcC. 05 Challock Woods, E.S.

11) Addington Place DMcC. 75 E. Malling. 75 Larkfield. 65 Ryash. 66 Birling. 75 Maidstone, Elgar MNE; E.G. Philp, 1958 MNE. 79 Cornfield S. of Marden 1958. 85 Fairbourne Lane, Harrietsham, Mrs B. Dodds. Fairbourne Heath REW.

12) Stowting to Smeeh, Hb. J.S. Mill. S. of Sellindge...RAC. 15 Canterbury Miss T. Webber.

13) 63 Stairhouse yard, Lamberhurst, 1939, JRW.

15) 01 Dungeness, KDR.

T. glomeratum L. 15, 16 Clustered Clover. N 11/51
Open sandy and gravelly turf, near the sea and on commons inland; locally common and probably as frequent in Kent as in any county, but very rare over much of Kent.†49

First record, about 1700: near Woolwich, Buddle, and Blackheath, Doody.

1) [47 Woolwich, Buddle MS; 37 Greenwich, Blackstone. [Blackheath, Doody MS (Hb Dill.); JJB c.1890. 37 E. of Deptford, Hb Banks, BM; 47 Belvedere Park.

†49 A marginal note indicates ‘19 localities today’.
Hb Lamb, 1861 MNE.  47 Abbey Wood HE Fox 1866 BM.] [47 ‡ Chislehurst, W.W.] [57 Dartford Heath, Borrer K; AHWD.] Quarry near Crayford Station GMB. 46 Keston Common, C.T.; (1946-55) MNE.

2) [Greenhithe, Cooper, Fl. Met.] 87 Grain near the Fort, 1945-7. (97 Sheppey, Hudson.) 97 Queenborough, E.S.M. 06 Seasalter, E.S.M.


4) 35 Dunes N of Deal, Duthie; (1954!). 35 Sandwich Bay, FJH; 1949 (abundant, 1960!) MNE.

6) [67 Northfleet to Gravesend Hb Dill.] 57 Gravelly turf, Green St[reet] Green, Darenth, H. Trimen 1867, BM; (1944-50! MNE); 578709, 1961, HMP. 67 Shorne behind Windmill, 1945→, abundant; 1954 MNE.

12) 94 Hothfield Heath, GES, FGEK; (1945!). 94 Ashford Warren 1945; both these on Folkestone Sand.


T. suffocatum L. 15, 16 Suffocated Clover. N 7/51350

Open ground and turf on neutral sandy and gravelly soils, especially on the cast; rare but locally plentiful. Very tolerant of trampling.

First record, 1829: Sandgate, etc., C.P.S.K., p[ ].

1) [47 Chislehurst Common; Blackheath, W.W.R.; 47 Plumstead Common, 1880, H.&J.G. BM.]

2) [77 Upnor, P. Jacob in F.G.E.K.] 87 Coast of Isle of Grain, 1945, MNE.


6) 57 Green Street Green, Darenth, 1945-51 MNE; 1959 PCH. 67 Shorne, behind Windmill 1945; 1947 MNE.

14) 92 on the ancient sea cliff, Stone-in-Oxney, 1949, MNE.


16) Sandgate, C.P.S.K.

T. fragiferum L. 15, 16 Strawberry Clover N 23/51

Native. Brackish meadows near the sea and tidal estuaries, in 2), 3), 4) and 15) common; heavy clay pastures and roadsides inland; rare in 12); also on chalk very rarely in 6).

1st record, 1629: Cliffe, Johnson, Iter.


350 Marginal note: 13 modern records.
06 Faversham Creek. 06 Seasalter Marshes, E. Robinson. 06 Shellness. Oare Meadow, HMW. 86 Chetney Marshes. 96 Conyer. Blacketts, Tonge. (no records for 97 or 07.)

3) 16 Swalecliffe. 16 Whitstable, Miss T Webber. Herne Bay, 1910, S.E.C.


5) 15 Swalecliffe. 16 Whitstable, Miss T Webber. Herne Bay, 1910, S.E.C.

6) Roadside verge, A.20, Wrotham By-Pass, 1959 MNE.

7) Nashenden, B Carter.

11) 74 Marden. 65 Trottscliffe Sandpit, B. Carter.

12) 94 abundant in green lane on Weald Clay, Purchase Fm, W of Great Chart, 1946; 1950; 1954, ES MNE. 04 Field S. of Bethersden, ES. 04 Nackholt / Hinshill, field by Pond, ES; 1956! MNE. 93 By B.2070 N. of Birchett Wood, ES. 15 Green Court, Kings School, Canterbury, 1952, Mrs E. Milward. 13 Gibbons Brook, 1958, LJM.

13) 02 Romney Warren. 13 N. of Dymchurch. Hythe, 1905, S.E.C.

14) Open sandy ground, W. side Farningham Wood; 82! Dry ground by ponds, Abbey Wood GAM, RAB. Ruxley Pits. Dartford Heath GMB. Beckenham (Elmers End) H. Davis 1916 MNE. Beckenham Place Park PCH. Keston Commons.

15) 02 Romney Warren. 13 N. of Dymchurch. Hythe, 1905, S.E.C.


6) Allotment, Strood, 1962, Mrs. M. Dolling.


13) Field, Etchinghill, Goudhurst, JS TLS.

T. tomentosum L. Woolly Clover Casual.

“Shoddy” Alien.

4) Sandwich, D.McC., 1960, MNE.

T. aureum L. Large Clover Casual in crop fields V.C.16 BEC 19[ ] p.472.

1) Green St[reet] Green near Farnborough 1937, JEL & HWM.

7) Rainham Park Wood, 1963, O.D.

11) Tonbridge E.C. Gilbert TLS.


T. campestr e Schreber 15, 16 Hop Trefoil. N

(T. procumbens auct.)

Native. Dry pastures, chalk downs, roadsides, dunes, sandy ground. Widespread and generally fairly common, except in the Weald, where it is very rare.

1st record, 1632: Trifolium luteum majus lupulinum – Margate, Johnson. Descriptio, A flower of this species was found in Late Bronze age strata at Minnis Bay.

1) Open sandy ground, W. side Farningham Wood; 82! Dry ground by ponds, Abbey Wood GAM, RAB. Ruxley Pits. Dartford Heath GMB. Beckenham (Elmers End) H. Davis 1916 MNE. Beckenham Place Park PCH. Keston Commons.

2) Grain. All Hallows, 1945 MNE. Oare Creek 62 HMW.

3) Banks, Hernhill, 1955 MNE.

4) Sandwich Bay 50 MNE; Deal Links 54 MNE; Walmer; Kingsdown Beach. Littlebourne, 1957, MNE. Track bank N of R[al]l[wa]y 271692, N. of St Nicholas’ 62.


‡ In manuscript cited as T. aureum Poll. There are two accounts for this species, which are combined here.


13) (unrecorded for Headcorn, Marden, Paddock Wood squares.)


16) Shornecliffe, 1955. Folkestone Leas, 1945 MNE.

T. dubium Sibth. 15, 16 Lesser Trefoil N
Native. Dry roadsides, banks, walltops, pastures, open ground in woods, downs, dunes, shingle, commons, etc.: abundant throughout Kent.

1st record, uncertain.


3) Whitstable.

4) Dunes, Sandwich Bay. Hacklinge. Stodmarsh, REW. Deal Links ‘54 MNE.

5) Darwins Bank, Downe, JEL. 3964 WO Well PCH.


8) Alkham; River, KDR.


T. micranthum Viv. 15, 16 Slender Trefoil N
Native. Short turf mostly on light soils, common on the coast and on sandy or gravelly ground inland, also on lawns; much less common on heavy soils. Unrecorded for Sheppey, Thanet, and for the Weald Clay.


352 In the manuscript, Lesser yellow trefoil.
353 In the manuscript, Least yellow trefoil.
2) Grain, S. beach 45 MNE Faversham Creek, ½ m. above Shipwrights Arms, 1958, H. Wilks. Ham Marshes, Mrs. Verschoyle. (Dartford H. Lamb 1898 MNE.)


4) Sandwich Bay: Deal Links, 1954 MNE.

6) Green Street Green (Darenth) ‘45 ‘46, MNE; 1960, HMP (by school). On Blackheath Beds, behind Shorne Windmill, 1946 MNE. Small... Higham Upshire, on Blackheath Beds, 1955 MNE. Stone House grounds HMP.


8) Swanton Banks by Road ’55 DACL.


14) High Halden ch[urch] y[ard] RAC.


T. pratense L. 15, 16 Red Clover (includes cultivar, var. sativum Schreber) N & H var. sylvestre Syme.

Native, abundant throughout the county in meadows, scrubland, old grassland on chalk, clay, and sand, and roadsides.

1st record, 1632*: “Trifolium pratense purpureum... Margate to Nash”, Johnson, Descriptio. c.1425: calyx and seeds in plaster from house at Larkfield, J.R.B. Arthur in Plant Remains.

var. sativum Schreber.

Common, as a relic of cultivation, in ley grassland, old arable land, and waste ground.

Records for v. sylvestre:


5) Halstead PCH. Chalk W. of Eynsford PCH. Chevening, Pilgrims Way, PCH. Darwin’s Bank, Downe, JEL.


7) A249 below ch[urch], Stockbury.

9) Free Down, abund[ant], ’62. Minster Ch[urch] y[ar]d R.


15) St Marys Bay, 1881, J.F.D.F.

**T. medium** L. 15, 16 Zigzag Clover. N
Native. Roadsides, hedgebanks, rough grassland, and wood borders; mostly on rather heavy loams or clays. Widely distributed and common locally in the Weald, on the Hythe Beds, and on the Pliocene plateau soils of the E. Kent chalk.


2) Stone Marshes, 1931, P.H.C.


4) Ash, RGW.


7) Kings Wood, Challock, frequent. Challock Lees. Rattle Hall, ES.


16) Aldington Frith, 1950 MNE.

[T. ochroleucon Huds. Sulphur Clover

1) “Bank...Greenwich”, Dickson Fl. Met. P.47.

2) Sheppey, Miss de Satze, W.F.S. Mag., 1947.


It is likely that these records are errors, except perhaps Merrett’s. The Sheppey record almost certainly refers to Dorycnium (see below).

The species is common in much of Essex and comes as near to Kent as Kelvedon Hatch and Stapleford Tawney; the latter is only 11 miles from the nearest part of Kent. It is a species of calcareous clay, grassland and roadsides, and might be expected in N. Kent, but the evidence is not quite conclusive.

**T. stellatum** L. Starry Clover Possible former N. Dartford saltmarsh before 1700 (Hb. Du Bois.) Long extinct in Kent.

† **T. incarnatum** L. ssp. incarnatum Crimson Clover H

§ Given in check-list, but no account in manuscript.
Occasional, as a relic of cultivation only.

1) Casual, Hayes, D. McC. W. Wickham, near Nash, H. Davis, 1916 MNE.
2) Tyler Hill, crop relic, RGW.
5) Fields, Hermitage Lane, Barning, 1944.
6) Sandgate, 1854, Hb. J. Groves BM. Kiln Wood, Sandling, L. J. M.
7) These records have little significance: plant not seen truly naturalised.
9) Fields, Hermitage Lane, Barning, 1944.
10) Sandgate, 1854, Hb. J. Groves BM. Kiln Wood, Sandling, L. J. M.
11) Fields, Hermitage Lane, Barning, 1944.
12) Sandgate, 1854, Hb. J. Groves BM. Kiln Wood, Sandling, L. J. M.
(These records have little significance: plant not seen truly naturalised.)

T. striatum L. 15, 16 Knotted Clover
Native, open sandy and gravelly ground, on heaths and near the sea; locally common and widely distributed, except in the Weald.

First record, 1790, Blackheath; Curtis iv, p.51.
3) Old sandpit, Westbere, (behind cement works) L.W.W. Whitstable RGW. Swalecliffe, RGW. Path in woods above Boughton Street, 1958, Mrs. B. St Martin Churchyard, Canterbury, 1939, Mrs J Nisbet. Chislehurst Common WWR (1944!).
6) foot of Dover cliffs, JSM. Petham, E Robinson.
10) Gravel pit, S. Darent, 1955, PCH. Bradbourne, Sevenoaks, Mrs E. Waley.

var. erectum Gaspast
1) 46 Hayes Common, 1945, F.R., J.E.L.
12) 94 Hotheath Field, 1945.

T. scabrum L. 15, 16 Rough Clover
Native. Sand and shingle beaches and dunes, common near the sea; now extinct inland on sandy heaths; from Grain, by Shellness and Seasalter to Kingsdown; Hythe to Dungeness.

First record*, 1763: Sheppey, etc. Martyn Pl. Cant. P.56.

---

355 Given as Soft knotted Trefoil in manuscript.
356 Given as Rough knotted Trefoil in manuscript.
2) Grain S. Beach, 1946-58, MNE. Sheppey, Martyn; H. Davis, 1911, MNE. Upnor, shore, DMcC. Beach, Shellness, 1956. Sheerness, FJH. Beach W. of Sportsman, Seasalter, 1958, H. Wilks MNE. E. of Sportsman (Red Sluice) 1959, MNE. Ram Marshes, Mrs Verschoyle. Oare, REW.


6) [Dartford to Greenhithe, Winch, NBG; Darenth, JC Melvill; Northfleet to Gravesend, Curtis; Gravesend, 1763, Martyn Pl. Cant. p56]

8) [Denton, on introduced shingle, casual, DACL.]


16) Folkestone FJH (Leas, 1945!).

‡ T. hirtum All. 357 Rose Clover Wool alien casual

‡ T. lappaceum L. 358

1) Eltham, Mrs. Wedgewood, BEC Rep., 1921, p.378.

‡ T. spumosum L. 359

Wickham tip, Mrs Small teste JEL.

T. arvense L. 15, 16 Hare’s-foot Clover N Native, open sandy or gravelly ground on heaths, grass-heath, sandpits, dunes, sandy shores, dry pastures, and neglected arable land; locally common near the sea and on the Folkestone and Tertiary Sands.


1) Hayes Common, 1924, JEL; 1938 DMcC (1948!). West Wickham Common, H. Davis, 1915 MNE; 1938, DMcC. Keston Common, 1936 PHC; 1948, E.B. Bangerter; PCH. Dartford Heath, 1919; E.B.B.; GMB Farningham Wood, PCH; 81! Repository grounds, Woolwich, LRAG, 1934 MNE. Ruxley Pits. Chislehurst Common; near St[ation], Crayford; Blendon, GMB.

2) Sandy ground by Conyers Creek, Teynham, 1943. Canal path, Gravesend, 1819, R. Pocock BM.


4) Dunes, Sandwich Bay MNE. Dunes N. of Deal, JBS BM; 1954! MNE. Walmer Beach. Kingsdown Beach.


8) Stelling Minnis, E. Robinson. (Denton on introduced shingle, casual, DACL.)


16) Folkestone Leas.

‡ T. angustifolium L. Narrow Clover Casual “Shoddy alien”.

4) Shoddy field, Ash, DMcC, 1959 MNE. Shoddy field, Sandwich, DMcC, 1960 MNE.

357 In check-list; no manuscript account found.
358 Not in check-list.
359 Not in check-list.
9) Shoddy, Birchington, Mrs B. Dodds, 1960 MNE.
11) Shoddy, Comp, DMcC., 1960 MNE.

T. squamosum L. 15, 16 Sea Clover N
(T. maritimum Huds.)
Dry saltmarshes, sea walls, and grassy banks, on clay or silt soil near the coast and estuaries. Very local, and apparently confined now to the North Kent coast.


4) [Sandwich Saltmarshes, Dillwyn; DMcC 1937; but not reported since.] Pegwell Bay, 1954, J.O. [16] Folkestone, G. Walton, 361 E Erith; Stone; Swanscombe; Shorne; Cliffe; Grain; [Blackheath, A.A. BM; Greenwich P[ar]k, J. Sowerby.] Ruxley pits, TA Angel.

T. subterraneum L. 15, 16 Subterranean Clover362 N 20/51
Native. Sandy or gravelly grass heaths, both in turf and in open ground; widespread but rare and only locally plentiful. Not articulally a coastal species.


2) [77 Upnor, P. Jacob, Cowell, Fl Fav: not since.] Ham Marshes. 06 Favershams, Cowell; (1946, Mrs W Verschoyle). Queenborough, E.S.M. Dry gravelly bank, Joyce G[ree]n, Dafford Marshes, GMB. 87 Grain, N. Beach 1945 MNE. 87 Grain near the Fort, ESM; 1945! abund[ant] MNE. 87 Grain S. Beach 1955 MNE. Marshes N. of Higham Church, J.B. Marshall; 1962, Mrs MH Dolling. 87 Stoke Marshes, W. Dolling 1961 MNE. Oare, REW.


4) 35 Dunes N. of Deal, F.J.H. (1946-1954! MNE). 35 Walmer Beach, L.W.W. 35 near Club House and on dune grassland; Sandwich Bay, 1949→, local. Stodmarsh, Undertrees Fm, LWW; REW. ½ m SW of Stodmarsh LWW.

360 It is unclear which of the entries this gridreference belongs to; it can scarcely have been Cowell’s, although placed below this.

361 There is some appearance of this having been deleted.

362 Given as Subterranean Trefoil in manuscript.
7) 96 Rodmersham Green, FJH.
8) 34 Ringwould, Mrs. Benson.]
9) 57 Grassland at Stone House 559742, Stone, H.M.P. 67 Shorne, behind Windmill, 1945→MNE. 76 (E) Strood, Broomhill allotments, Mrs M.H. Dolling.

Lupinus L.
‡ L. arboresus Sims Tree Lupin. Widely naturalised esp. sandy areas incl. the coast.
1) Naturalised, Crofton Heath, PCH.
6) abundantly naturalised in old clay pits at the Thrift, S. of Stone.

‡ L. x regalis Bergmans (arboresus x polyphyllus). Russell Lupin. Often planted and escapes on waste ground.

‡ L polyphyllus Lindley Garden Lupin Naturalised on waste ground.

Laburnum Fabr.
‡ L. anagyroides Medikus Laburnum. Naturalised widely now.
1) Ruxley Pits.
2) W. Wickham 55 JM Sherwood. 36 Hayes Sta[tion] PCH.
6) 57 chalk pit, Greenhithe, G.C. Druce (BEC, '21, 378); HMP. Mounts Wood PCH. 67 self-sown on bank Gravesnd 61, HAS.
12) 03 by R. Stour Smeeh WM 1959. Canterbury Bombed sites DHK.

Cytisus Desf.
C. nigricans L. Black Broom. Natd. in old gravel pit, Aylesford, 1970

C. scoparius L. 366
15, 16 Broom. N Native. Heaths,scrub, open glades in woods, old sand and gravel pits, etc.; mainly on light soils, but not confined to them; very common, but not recorded for Sheppey or Thanet. The var. prostratus is abundant on the older shingle at Dungeness, and forms a "climax" in the succession there.
1st record, 1629: between Grain and Cliffe, Johnson, Iter.
2) Old Canal, Higham, 1944.

363 Given in check-list, but no account in manuscript.
364 Given in check-list, but no account in manuscript.
365 Given in check-list, but no account in manuscript.
366 Sarothamnus scoparius Koch. in the manuscript.


5) Knockholt, 1947. SW of Timberden Bottom.


9) Ramsgate, RGW.


12) Ashford Warren '44.


**Ceratonia** L.

† *C. siliqua* L. Casual on dumps. [account not yet transcribed]

**Spartium** L.

† *S. junceum* L. Spanish Broom. Naturalised from plantings. [account not yet transcribed]

**Genista** L.

*G. monspessulana* (L.) L. Johnson**367** Montpellier Broom. Naturalised at Dartford.

*G. tinctoria* L. 15, 16 Dyer’s Greenweed N Native. Grassland, scrub and woodborders, principally on heavy clay soils, widespread but not common, but frequent and locally abundant in chalk grassland in the Dover district.

1st record, 1629: Stoke, Johnson, *Iter*.


7) Copse, Rodmersham, F.J.H.

---

**367** In check-list; no account in manuscript.


15) Dungeness, FJH [E. Scott, 1953 MNE, [locally] abundant].

† ssp. elatior Koch. Alien, on roadside at Orpington, 1930, JE Lousley.

G. pilosa L. 15, 16 Hairy Greenweed N, ext.

Native; on a dry heath; almost certainly extinct.

Wrotham Heath, in a pit by the path from the Inn to the Mill, G.E. Sm.; Hb. Borrer. Although a little suitable heathland still exists here, I have failed to refind the plant, as have many others. It still occurs on Ashdown Forest, E. Sussex, though in much less abundance than formerly.

G. anglica L. 15, 16 Petty Whin N

Native. On peaty, usually damp or wet heathland. Rare now, though apparently once common. On the Tertiaries near London; the Folkestone Sand; and the Tunbridge Wells Sand.


6) N. of Otford, PH Cooke – error?

7) Sittingbourne, Grayling. error?


G. hispanica L. 370 Spanish Gorse. Naturalised Darenth Wood, E.P.

Ulex L.

U. europaea L. 15 Gorse, Furze. “Fuez” is old Kent name.

Native, Heaths, scrub, rough grassland, downs, open woodland and hedgebanks, on a wide range of acid soils, but where it occurs on the chalk, usually the surface soil layers are leached or else the chalk is covered with superficial drifts; very common throughout Kent, except in Grain, where it is are, and the Isle of Thanet, where it is unrecorded.

368 Duplicates earlier entry.

369 Needle Whin, in the manuscript.

370 In check-list; no account in manuscript.
1st record, 1777: Beacon Hill, Faversham, E Jacob. Iron age charcoal of this genus has been found at Bigberry Camp, Jessup & Cook, 1936 (Godwin p107).


5) N. of Knockholt. Polhill, Pilgrims Way.


7) Burham Downs, on clay patch. 95 Sharsted Park ES, rare in E of 7.


12) 94 Hothfield Heath. 94/04 Ashford Warren '40. 94 Warren Woods. 04 Willesborough Lees.


15) Dungeness (Boulderwall; Hamilton Farm; NW of Lighthouse; Holmstone). Hythe Beach.

U. gallii Planchon \[15, 6\] Western Gorse.\(^{371}\) N

Native, grass-heath on loam, very rare; it occurs in two places on superficial drifts (?Pliocene) on the E. Kent Chalk plateau, one on drift over Weald clay, and on a railway bank in W. Kent.

1st record, 1918: near Dover, E.S. Marshall, J. Bot., LVI, p.91.

3) Clowes Wood, KFC.

10) a recent arrival, new railway embankment E of Kemsing Station, 1953, D.McC MNE, 1955!


16) Aldington Frith, 052365, abundant, 1950, MNE.

[Reported from Hothfield by FMW, 1875; error for \(U. nanus\).]

U. minor Roth \[15, 16\] Dwarf Gorse.\(^{372}\) N

Native. Dry heathland; local and uncommon, but widely distributed, on the Tertiary soils near London, the Lower Greensand, and on the Hastings Beds.

1st record, 1829: Shornecliffe, G.E. Smith in C.P.S.K.


6) Great Crables Wood, EGP.

(8) "Between Wye and Stelling Minnis", F.J.H.; St Radgunds, F.G.E.K.: do these refer to \(U. gallii\)?)


---

\(^{371}\) Western Furze in manuscript.

\(^{372}\) Dwarf Furze in manuscript.

\(^{373}\) Francis Rose queried this, but the species has since been found at Seal Chart.


13) Rusthall Common F.J.H. (1946!).

Sesbania Adans
‡ S. exaltata (Raf.) Cory 374 Oil-seed casual.

Arachis L.
‡ A. hypogaea L. 375 Casual.

ELAEAGNACEAE

Hippophae L.
H. rhamnoides L. 15 Sea-buckthorn.

Native. Sand dunes, and on rough cliffs of chalk and sand near the sea; locally frequent in E. Kent from Minnis Bay to Lydd-on-sea. In places (Greatestone and Sandwich Bay) it forms scrub on the dunes locally on a small scale, reminiscent of the much more extensive scrub formed by this species on dunes in Lincs, Norfolk, and the Pas de Calais.

The dunes at Camber in E. Sussex appear to be the S.W. limit in Britain as a native, though it is widely naturalised further west. It was widespread in N. Europe in the late glacial, and apparently survived only [on] the coastal dunes (and after the development of the post glacial forests inland in mountains on the continent).


[2] formerly in the Isle of Sheppey (saltmarsh 2 m. from Sheerness, rare, Blackstone, Specimen Botanicum, 1746, p.82; also John Hill, in Hb. BM.)

3) W. Beach, Whitstable, REW, (planted at Seasalter, REW.)


15) Locally abundant on sandy ground (ancient dune-sand) behind sea wall, 1 m. NE of Dymchurch, 1947 MNE. Greatstone dunes, locally dominant, 1947-58. Lydd on sea, one plant, 1946. Dungeness, a bush NE of Old School, in old shingle pit, E.S.; 1961!


Eleagnus L.

HALORAGACEAE

374 Given in check-list, but not in manuscript.
375 Given in check-list, but not in manuscript.
376 Given in check-list, but not in manuscript.
Myriophyllum L.
M. verticillatum L. Whorled Water-milfoil.  15, 16  N.  V. rare now (IH&M - E.P.).
1st record, 1777: Graveney Marsh, E. Jacob, Pl. Fav., p.81
1) [47 E. of Greenwich, Fl. Met.]
2) [57 Dartford Marshes, Hb. Lamb, 1898 MNE.] 57 pits, Stone Marshes, HMP, 1947. 06 Oare, in gravel pit ponds near creek, 1959 MNE. 06 Davington Pond, Mrs B Dodds. 06 Marsh dikes W. of Waystreet Farm, Hernhill, 1953 MNE. 06 Seasalter Marshes, E Robinson.
11) 74 Marden to Staplehurst, FJH. 84 Pond, Leighbridge, 1 ½ m. NW of Headcorn, 813454: 1949-1962, MNE.
6) 67 Flooded chalkpit, Northfleet, 1961, H.A.S.
7) 86 Lake, Berengrave chalk pit, Rainham, P M Roberts.
8) 24 Kearsney Abbey, K.D.R. 1957.
10) 56 Horton Kirby, in gravel pit, 1962, W.A. Sandford; GMB. 56 Eynsford, GMB.
11) 65 Pond, Swanton Valley, Mereworth, 645539, CAS. 44 Hever Castle Moat, CAS. 64 Pond, Ploggs Hall, Whetsted, CAS. 54 Ballast pit, Tonbridge, 574459, M. McFarlane. 44 Hever Park Lake, Mrs Mallinson.
12) 04 Mershams Lake, E.S. & F.R., 1960 MNE. 15 Vauxhall Lakes HMW.

M. alterniflorum DC. Alternate Water-milfoil. 15 [sic] N: now v. rare; Ashurst, Brabourne. H&M - E.P.


M. spicatum L. Spiked Water Milfoil. 15, 16 N, freq.
Native. Ponds and marsh dikes, mostly in alluvial marshes near the sea and estuaries, in both fresh and brackish water; common in the Thames-Medway-Swale estuaries of 2), the Stour estuary marshes of 4), and in 15) Romney Marsh; very rare elsewhere.
1st record, 1777: Oare and Graveney, E. Jacob, Pl. Fav., p.87.
6) 67 Flooded chalkpit, Northfleet, 1961, H.A.S.
7) 86 Lake, Berengrave chalk pit, Rainham, P M Roberts.
8) 24 Kearsney Abbey, K.D.R. 1957.
10) 56 Horton Kirby, in gravel pit, 1962, W.A. Sandford; GMB. 56 Eynsford, GMB.
11) 65 Pond, Swanton Valley, Mereworth, 645539, CAS. 44 Hever Castle Moat, CAS. 64 Pond, Ploggs Hall, Whetsted, CAS. 54 Ballast pit, Tonbridge, 574459, M. McFarlane. 44 Hever Park Lake, Mrs Mallinson.
12) 04 Mershams Lake, E.S. & F.R., 1960 MNE. 15 Vauxhall Lakes HMW.

M. alterniflorum DC. Alternate Water-milfoil. 15 [sic] N: now v. rare; Ashurst, Brabourne. H&M - E.P.

377 Given in check-list, but not in manuscript.
Native. Ponds and peaty fen dikes, in fresh water; apparently very rare, and not recently reported.

1st record, 1899: Fl. Kent

4) Preston Marshes, E.S.M. Ham Fen, E.S.M.
15) Appledore, E.S.M.

[**GUNNERACEAE**]

**Gunnera** L.

*G. tinctoria* (Molina) Mirb. (= *G. chilensis* Lam.)

**G. manicata** Linden ex Andréé

11) By Hever castle Lake, CAS.

[**LYTHRACEAE**]

**Lythrum** L.

*Lythrum salicaria* L. 15, 16  
Purple-loosestrife  
N

Native. Riverbanks, ditches, lake and pond margins, fens, marshes, carr; locally common by the Medway and its tributaries, along the Darent, Cray, Rother, and Stour, and in the Weald generally, and in the marshes and fens of 4), but not common elsewhere and absent from wide areas, including much of Romney Marsh, the chalk districts, Thanet, the N. Kent coastal plain from Gravesend to Hernhill, including the Hoo Peninsula, Grain and Sheppey.


3) Alder swamp, Bigberry Wood, '54.


‡ *L. junceum* Banks & Sol. 379  
False Grass-poly.  
Wool -alien casual, and in gardens.

Native of Mediterranean region (Dunn, Alien Flora).

1) waste ground around a farm, E. of Chelsfield, 492640, no obvious shoddy present, A.G. Spooner, 1961, det. G.A. Matthews at B.M.

9) Minster, 1903, BM teste G.A. Matthews.

---

378 No records given.

379 As given in checklist; in manuscript cited as *L. meonanthum* Link., syn. *L. graeflei*.
L. hyssopifolia L.  Grass-poly 380.  ? N; extinct.}

Native, originally (see below) but possibly most recent records are casual occurrences. Damp ground, ditches, and cultivated land; extremely rare and not seen for 20 years 381; possibly extinct.

1st record: 1746: near Faversham Abbey, Bateman in Blackstone, p.33. Calyx and fruit found in late Bronze Age level, Minnis Bay, Conolly, 1941 (Godwin, p129), “beyond question” H. Godwin.

1) S.W. of Elmers End, 1875, Prebble.
3) S.W. of Elmers End, 1875, Prebble.
5) S.W. of Elmers End, 1875, Prebble.
6) S.W. of Elmers End, 1875, Prebble.
7) S.W. of Elmers End, 1875, Prebble.
8) S.W. of Elmers End, 1875, Prebble.
9) S.W. of Elmers End, 1875, Prebble.
10) S.W. of Elmers End, 1875, Prebble.
11) S.W. of Elmers End, 1875, Prebble.
12) S.W. of Elmers End, 1875, Prebble.
13) S.W. of Elmers End, 1875, Prebble.
14) S.W. of Elmers End, 1875, Prebble.
15) S.W. of Elmers End, 1875, Prebble.
16) S.W. of Elmers End, 1875, Prebble.

L. portula (L.) D.A. Webb 382 Water Purslane

Native. Wet rutted rides in woods on clay, sand and loam; edges of ponds. Local and well distributed in the Weald and the Blean, locally very common in the High Weald.


2) [Margate Brooks.]
3) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
4) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
5) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
6) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
7) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
8) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
9) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
10) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
11) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
12) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
13) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
14) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
15) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.
16) 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jackets field, Challock, ES.

380 As given in checklist; stated as Hyssop-leaved Loosestrife in manuscript.
381 This should probably be taken as implying that the account was written c.1958.
382 Given as Peplis portula L. in manuscript with Peplis as a separate genus.
THYMELACEAE

Daphne L.
D. mezereum L. 15, [16] Mezereon
Native. Woods on chalk and loam over chalk; extremely rare.


[7] Godmersham Park, Bishop Mitchinson.197 Lane, Mountain Street, Chilham, 1951 REW.


13) [Catstail Wood, Hilly Fields, c.1860. Cranbrook, c.1860, Kennard, teste his son A.E. Kennard in litt.] This attractive shrub has a precarious existence everywhere in Britain; wherever it is found, it is likely to be transferred to gardens.

D. laureola L. 15, 16 31/51 Spurge Laurel
Native. Common in beechwoods and scrub on chalk, much rare elsewhere, but locally frequent in woods on Wadhurst Clay about Penshurst. A characteristic member of the chalk beechwood consociation, it becomes rarer in the extreme east where deep moist loams have developed on the chalk, except in beech plantations. Common on the chalk in Surrey and in W. Sussex, rare in E. Sussex; very rare in Essex; very local in Pas de Calais, and nearly confined to the chalk scarp of the Boullonais.

1st record, 1632: Nash to Quex, Johnson, Descriptio, p.20. Formerly held in repute as a tonic for horses, which was said to make their coats glossy, hence perhaps some colonies in odd places, teste ASK.

1) [Chislehurst, JSM. Foots Cray, Hb. Sim.] 57 Joydens Wood, 1948, on chalk inlier. 56 Farningham Wood, [locally] frequent on Thanet Sand, 1949-56; 82! 47 Gattons Plantation, N. Cray, PCH.

3) [Bysing Wood, Cowell, Fl. Faversham.]


383 Winchcombe is what was originally written in the manuscript, although it has the appearance of being altered to Winchdale.

9) 36 Quex Park/Birchington, plentiful. 36 Plantation N. of N. Foreland Golf Course, 1954. It may be planted in Thanet, but was first found nr. Quex in 1632. Manston Court: Cheesmans la Nash /Fl. Than.

10) 55 Roa Crossing, Ivy Hatch Ightham Mote, CAS. Sundridge Recreation Ground. 45 Scarp, Crockham Hill, 1935, DPY. 45 Scarp, Toys Hill, DPY.


12) 03 Sellindge Church, [ar]d. RAC.

13) Vauxhall Lane, Southborough, 1959, P.A. Lane. 54 The Grove, 1 m SW of Penshurst, abundant in coppice on Wadhurst Clay, 1956, MNE. 54 Ashour Wood, Bidborough, 544435, locally frequent. 74 Winchety Hill, by r[o]ad, N. of Goudhurst, 1944 MNE. 54 Marlpit Corner, Bidborough, 538432, CAS. 63 Hedge by Lambourn and Ch[urch].

14) High Halden Rectory, 1958, RAC.

15) 03 Aldington Frith, 048364, ES.

[Genera and species continue through, from THYMELACEAE to:]

**ONOGRACEAE**

*Epilobium* L.

Hybrids occur between most of the species in Kent, they are recorded between 1x2; 3 x8, 2x3.


7) Stream, Painters Forstal, 997591, C. Turner.


9) Wet copse SE of Minster AGS.

10) R[iver] Darent, Otford; Shoreham; Eynsford; W. of S, Darent; St Johns Jerusalem; Darent Church, PCH. N. of Bat & Ball CAS. Westerham Wood, 82.


13) 53 Gill Stone Cross, Ashurst, 518381, CAS. 53 Hilbert Recreation Ground. 54 Royal Ditch, Tunbridge Wells, 1962, CAS. 63 Ditch S. of Ch[urch], Lamberhurst 684365, CAS. Bayham CAS. 63 Wood on SW of Pembridge Heath, PCH.

384 Thus in check-list, but in manuscript given as Great Hairy Willow Herb, Codlins & Cream.
15) Airport Car Park, Lydd DMcC.

2 E. parviflorum Schreber 15, 16 Hoary Willowherb. 385 N
   Native. Wet meadows, stream-and ditch-banks, wet woods, waste ground, not confined to wet places. Very common.
   1st record, 1629: Grain to Cliffe, Johnson, Iter, p.8.
3) Medina Av[enue] Seasalter HMW.
5) Challock Forest, common, E.S. Highstead Quarry, Tunstall, 1958, DMcC MNE.
6) Alder carr W. of Minster, Thanet, 1958 BM.
15) New Romney. [New Romney, J. Ridley, 1908 MNE.

E. parviflorum x roseum = E. x persicinum Reichb.
2) Woolwich Arsenal, A.H.W.D. BM.
12) Between Westenhanger and Smeeath Stations, E.S.M., 1893 BM.

3 E. montanum L. 15, 16 Broad-leaved Willowherb
   Native. Woodland, scrub, cleared woodland, roadsides and banks, waste ground; very common on a wide range of soils throughout Kent.
   1st record, 1777: Faversham, E. Jacob, Plantae Favershamienses, p.64.
5) Wood W. of Shoreham, PCH. Darwin’s Bank Wood, Downe, JEL.
9) Broadstairs, RGW.
10) Westerham Wood 82! 56 R[iver] Darent, above S. Darent, PCH. 55 N of Bat & Ball CAS.
W) Shipbourne Forest (Golden Stable Wood) ’54. Hoad’s Wood, 54.

385 In manuscript given as Small hairy Willowherb.

**E. montanum x parviflorum** = *E. x limosum* Schur.

6) Wingate Wood, 1944, det. J.E.L.


**E. montanum x obscurum** = *E. x aggregatum* Čelak

2) Woolwich Arsenal, A.H.W.D.

8) Penny Pot Woods, Chilham / Woods N of Crundale, 1890, E.S. M. BM.


12) Willsborough Lees, 1893, E.S.M. BM.


4 **E. lanceolatum** Sebast. & Mauri Spear-leaved W illowherb. N 19/52

Native. Open woods, hedgebanks, quarries, particularly on ragstone, gravel, and sand, but also on other soils; widespread now in Kent, locally common in mid-Kent, but still thinly distributed and uncommon as a whole, certainly increasing slowly.

1st record, 1887: Chislehurst to Bickley, A. Bennett, *J. Bot.*, p.27.


2) Woolwich Arsenal, on rubbish heaps, A.H.W.D. in *Fl. Kent*.


4) Kingsdown shingle beach, 1946 MNE.

5) Fox Lane, Keston, GMB, 1954.


12) 15 Canterbury, 1947 RGW; 1949 E. Robinson MNE.

13) 63 Verge of A.21, between Lamberhurst and Pembury, 1940, J.R.W. 54 Wall, Linden Park Road, Tunbridge Wells, 1961, KEB; CAS.

16) 13 Shornecliff, 1946.

**E. lanceolatum x montanum** = *E. x neogradense* Borbás

2) Woolwich Arsenal, A.H.W.D. and ESM, in Fl. K.

**E. lanceolatum x roseum** = *E. x abortivum* Hausskn.

2) Woolwich Arsenal, A.H.W.D. and E.S.M. in Fl. K.


5. **E. tetragonum** L. (E. adnatum Griseb.) 386. 15, 16 Square-stalked Willowherb.

386 Given in manuscript as *E. adnatum* Griseb., *E. tetragonum* auct.
Native. Damp ground, roadsides, ditch banks, damp rides and recently coppiced woods, waste ground: common generally.

1st record, 1864: Foots Cray, etc., Syme, English Botany, Ed.iii, IV, p.16.

1) 1977 Ketton per Bog; 1959, HMP. Foots Cray; Sydenham; Shooters Hill, Syne. Mottingham; Charlton pit; Eltham; Welling; E. Wickham, AHWD. Ruxley pits.


4) Stodmarsh to Grove Ferry, F.J.H. Sandwic, H.C. Watson.

5) Jail Lane, Biggin Hill RAC.


13) S.E. of Cranbrook, ESM.


15) Hythe, FJH. Folkstone; Pedlinge; BDJ.

E. adnatum x parviflorum = E. weissenburgensis F.W. Schultz

3) ? Fordwich, E. Robinson, 1949 MNE.


E. tetragonum subsp. lamyi F.W. Schultz (Nyman) 388

Native. Woodland rides, hedgebanks, and waste ground; rare and apparently nowhere abundant

1st record, 1889: Godmersham, etc., E.S.M., J. Bot, p.145.


8) 05 Woods E. of Godmersham; Crundale; E. of Wye, E.S.M. 04.


11) 54 Waste ground, Tonbridge, J.P.M.B. 66 Ryarsh Wood, W.M. Rogers (1947!) MNE det. GMA. 75 Lane near Boxley Abbey, E.S.M.

387 This record has also, probably more accurately, been assigned to district 13 below.

388 Treated in the manuscript as a species, E. lamyi F.W. Schultz.
13) S4 waste ground, High Brooms, J.P.M.B. 83 Roundhill Park, Sissinghurst, 1949, MNE, det. G.M.A.
14) Tenterden 1897, RRH, Hb Croydon, det. GMA.
16) 13 Undercliff road, E. of Sandgate, on hedgebank, 1947, MNE.

**E. tetragonum subsp. lamyi** 389 x parviflorum = **E. palatinum** F.W.Schultz

8) 05 Penny Pot Woods. Between Chilham and Crundale, 1890, E.S.M. BM.

6. **E. obscurum** Schreber 15, 16 Short-fruited Willowherb. N
Native. Marshy ground, open woods and coppice, waste ground, river banks; common in many parts of Kent. 1st record: possibly 1632; Nash to Quex, Johnson, Descriptio, but uncertain; could be montanum.

1) 46 Hayes, Miss A. Mills. Ruxley pits. Joyce Green; / Chislehurst GMB.
2) 97 Old R[a]l[w]ay SE of Minster, Sheppey, 1958 MNE.
6) 76 Wingate Wood, J.E.L.. F.R. & C.W., 1944. 57 The Thrift, Bean, PCH.
7) 94 Westwell, arable on chalk, 1958, EGP MNE det. F.H.P. 95 Belmont Park, 1958, DMcC.
10) 45 Darenth E. of Westerham GMB.
14) 82 Church Wood, Wittersham, 1964.
16) 13 By Sandling Road, Hythe, ULM.

**E. obscurum x parviflorum** = **E. dacicum** Borbás 15, 16

2) Woolwich Arsenal, A.H.W.D. & E.S.M., Fl. Kent
6) Cliffe, 1892, E.S.M. BM.
11) Medway banks below Tonbridge 1934 AHWD, det. G.M.A. TLS.
12) Willesborough Lees, E.S.M.

**E. obscurum x palustre** = **E. schmidtianum** Rostk. 15

11) Headcorn, E.S.M.
12) Hothfield Common, E.S.M.
15) Ponds, Dungeness, E.S.M.

7. **E. roseum** Schreber 15, 16 Pale Willowherb. N
Native. Stream- and ditch-sides, waste ground, roadsides, gardens; widespread, but certainly rare and very scattered.


2) Woolwich Arsenal AHWD. 06 Bank by Faversham Creek, 1960 MNE.
3) Church Wood, by Rough Common, 55 RGW.
5) 46 Roadside, Downe, 1955.
6) [Cobham, Miss Young, Fl. Kent.]

---

389 Given as **E. lamyi** in manuscript.
12) Willesborough Lees, E.S.M. By the E. Stour, Westenhanger to Smeeh station, plentiful, E.S.M.


Alien, now completely naturalised, and after *E. montanum*, our commonest Kentish *Epilobium*: common all over Kent in damp woods, especially coppices, on stream sides, gardens, and waste land generally. Felling of woodland has helped in the increase of this species. It is often plentiful in coppice 2 years after cutting.


1) 46 Waste ground, Green Street Green, JPMB; 1945! 46 Ravensbourne Estate, Keston, 1955 MNE. Keston Bog, HMP, 1959. Ruxley Place PCH. 56 Farningham Wood, PCH; 82!

2) 77 by canal, Higham. 75 Below Aylesford, E.G. Philip, 1958 MNE. 06 Oare Creek, H.M.W., 1962, det. FR.


5) Chalk pit, between Farnborough and Green St[reet], Green, 1939, JMBP, B.E.C. rep. 1939, 40, p.278.

6) 76 Cobham Woods; 76 Strood, garden weed, Mrs. M.H. Dolling. Wingate Wood 51 FR.

7) 85 Squirrels Wood.


10) 55 sandpit by R[ail]wa[y], Riverhead, CAS. 55 Waste ground, Sevenoaks. On tip N of Bat & Ball, 1938, JPMB. 57 Sutton at Hone Meadows HMP. Brasted Marsh RAC. Darenth Meadows HMP. Sundridge, 55, DPY de[t.] GMA. Westerham Wood 82.


14) Wood near Breeches Pond RAC.

15) 01 by Pool, Denge Beach, JEL & ECW, 1936 Hb JEL. 01 Halfway Bush, Dungeness, 1947, MNE.

16) 13 Wood NW of Sandling Junction, J.P.M.B., 1939. Saltwood LJM. Brockhill LJM.

9. *E. palustre* L. Marsh Willowherb. 15, 16


1st record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p65


2) Holborough Marshes, 1944. Ham Marshes, 026626, C. Tancer. Faversham, Thanet E.

3) Church Wood near Rough Common, 1965, RGW.

---

390 *E. adenocaulon* Hausskn. in manuscript.

391 The BEC Report citation does not refer directly to this record.


14) [Hawkhurst, JC Melvill.]

15) Dungeness Open Pits, FJH (1948!).

10. ‡ E. brunnescens (Cockayne) Raven & Engelhorn 392 16 New Zealand Willowherb. E Alien, recently introduced and becoming naturalised. First reported at Pembury Walks by C.A. Stace.


10) Knole Park, near S. end, 1959 Mrs AG Side; 1959 Dr Melville; 1962, Miss G.M. Prideaux; Miss H. Speer; 1963 Mrs Hewson. Knole Park, near House, 1962, CAS.

Chamerion (Ref.) Raf. 393 (= Chamaenerion Seguier nom. illeg.)

C. angustifolium (L.) Holub. 15, 16 Rosebay Willowherb. N Native. Open or cleared woods, recently-cut coppice, roadsides, waste ground; now extremely common throughout Kent. First record, 1666: Greenwich, Merrett, Pinax p.25.


2) Woolwich Arsenal PCH.


5) Wood W. of Shoreham PCH. Pilots Wood PCH. Chevening Park PCH. Darwin's Bank Wood, Downe. 396611 PCH.


10) Westerham Wood, B. Sennitt; 82! By R[iver], S. Darenth, PCH. N of Bat & Ball CAS.


W) Shipbourne Forest, E side N end '54. Widehurst Wood, 1958 MNE.


---

392 Given in manuscript as Epilobium nerterioides Cunn. (= Epilobium pedunculare auct.)

393 Treated as Chamaenerion in the manuscript, with the species given as Chamaenerion angustifolium (L.) Scop. and English names as Rose-bay Willowherb, "Platelayers Pride", Folkestone..

394 It is unclear what the T symbol represents.
201

\( \text{Ludwigia} \) L.
\( \text{L. palustris} \) (L.) Ell. formerly occurred at Buxted in E. Sussex, but is now confined in Britain to the New Forest.

\text{Oenothera} \text{ L. (All derive from N. America originally, except \textbf{O. biennis})}

\textbf{O. glazioviana} Micheli ex C. Martius\textsuperscript{395} Large-flowered Evening-primrose.

\textit{Alien, naturalised in a few places on waste ground.}

1) 46 Crofton Heath, PCH. 36 Tip, W. Wickham, 1955 J M Sherwood. 36 Hayes near St[ation], PCH. 46 Hayes Churchyard Wall, 1956, Miss A. Mills. 47 Ruxley pits.

3) 06 Rose in Bloom, Seasalter, on bank, HMW.


6) 57 Great chalk pit, Horns Cross, 1962.

7) 76 Strood High Street, on r[ail]y bank, Mrs M.H. Dolling. 94 P[ilgrims] Way, Westwell, 1950s, ES.

8) 05 Denge Wood, in forestry road, 1963, Mrs B.

10) 55 Sandpit by R[ail]y, Riverhead, CAS. 55 Sevenoaks tip CAS.

11) 75 waste land by R[oo]d, Aylesford, CAS. 44 Edenbridge tip, DPY.

\textit{\‡ O. biennis} L. \textbf{15, 16} Common Evening-primrose.

\textit{Alien, frequently naturalised on waste ground and dunes.}

1) Shooters Hill; Lewisham Fl. Met. 1836\textsuperscript{*}. 36 tip, W. Wickham ‘55 J.M. Sherwood. 46 Crofton Heath PCH. Swanley Junction, E.S.M. 46 Bromley R[ail]y, bank, FR. 47 Ruxley pits. 46 Petts Wood GMB.


3) 15 Whitstable Castle, REW. N. of Canterbury in Blean, freq[uent] RGW.\textsuperscript{396}

4) Deal, Duthie. Sandwich Bay 1946 DMcC. 34 Kingsdown Beach, 1946. Ash; Sandwich, REW.

5) Halstead (Brook glade) 1852, A. Atkins, BM. 56 Farningham R[oo]d Sta[tion], old chalk pit PCH.


7) 86 Berengrave pit, Rainham, PM Roberts.


10) 55 Sevenoaks tip DMcC.


12) 04 Willesborough Lees ESM; 1933 T.J. Frazer. 04 Ashford; 03 Kingsnorth, CNP. 15 Canterbury, Common, RGW.

13) Hawkhurst, J.C. Melvill. 53 Rusthall Common KEB.

15) 02 Littlestone. 02 Greatness Dunes.


\textbf{O. cambrica} Rostanski\textsuperscript{397} Small-flowered Evening-primrose.

\textbf{O. stricta} Lede. ex Link \textbf{15, [16]} Fragrant Evening-primrose.

\textit{Alien, completely naturalised on sand dunes at Sandwich Bay.}

\textsuperscript{395} Thus in the checklist; in the manuscript given as \textit{Oenothera erythrosepala} Borbás.

\textsuperscript{396} Manuscript altered from REW.

\textsuperscript{397} Given in check-list, but no entry in manuscript.
Between Richborough and Sandwich by Railway, 1861, *Phyt. N.S.* V, 184. Richborough Castle, by river, J. Reid, 1875. Sandwich Bay, 1932, R. Meinertzhagen BM; 1946, locally frequent on dunes, near hotel and 2m. to N! MNE.

10) Ightham, E.M.H.

15) Littlestone, KEB.

**O. perangusta** Gates

(Hybrids occur between several of the species; but are hard to identify.)

**Clarkia** Pursh


† C. elegans Dougl. ex Lindley Casual.

‡ Fuchia L. Casual.

‡ F. magellanica Lam. Fuchsia.

**Circaea** L.

C. lutetiana L. 15, 16 Enchanter’s-nightshade. N Native. Woodlands on a wide range of soils, but not found on very dry or markedly acid soils; shady hedgebanks; very common in most parts of Kent, but absent from the alluvial Marsh district (15), extremely rare in 2) and 4), and absent from Thanet, Grain and Sheppey.

1st record, 1629, Gravesend to Rochester, Johnson, *Iter*, p.3.


2) Garden weed, Sheerness, '53, Mrs. Bryson.

3) Whitstable Castle g[round],REW. N. end Clowes Wood, 1965.

4) Preston Court, RGW.


9) Copse SE of Minster, AGS.

10) Westerham Wood, B. Sennitt; 82! Broadhoath Wood, 1950, on ragstone, MNE.

11) SE part Oaken Wood, Barning, on basic loam 54. Swanton Valley floor; Ride N. of Swanton Valley cott[ages] on drift 54.

W Shipbourne Forest (E side Plaxtol Rd) ’54. Hoads Wood 54.


**CORNACEAE**

**Cornus** L.

C. sanguinea L. (Thelycrania sanguinea (L.) Fourr., in *List of British Vascular Plants*) 15, 16 Dogwood

---

398 Given in check-list, but no entry in manuscript.

399 Given in check-list, but no entries in manuscript.

400 Given in check-list, but no entry in manuscript.

401 Manuscript amended from RGW.
Native. Scrub, open woods, hedges; abundant throughout the chalk districts, where it is the main seral dominant of the forest wood phase in the succession from grassland to woodland; very common on ragstone and gault, frequent to rather common in the Weald; apparently absent only in Isle of Sheppey and Romney Marsh.


10) R[iver] path below Shoreham PCH. Westerham Wood 82!


C. sericea L. 402

1) Ruxley pits.

‡ C. suecica 403

Alien in S. England.


SANTALACEAE

**Thesium L.**

*Thesium humifusum* DC. 15 Bastard-toadflax. N, but apparently recently extinct.

Native. In short turf in Festuca chalk grassland on very shallow rendzina or skeletal soils, parasitic on grasses; very rare and confined as far as is known to three localities S. of Canterbury. Possibly more widespread on the chalk plateau of E. Kent before enclosure and cultivation of the former extensive sheep walks.

1st record: Bishopsbourne, Rev. E. Ellman; nr. Upper Hardres, Mrs Acheson, *BEC Repr.*

In Surrey and E Sussex, occasional on chalk grassland; not in Essex; rather rare in Pas de Calais, but on both chalk and calcareous dune grasslands there.


---

402 Given as *T[he]lycrania* sericea.

403 Given as ‡ C. suecicum under ‡ Chamaepericlymenium.

VISCACEAE 404

Viscum L.

V. album L.

Native. Parasitic on various trees, especially old limes, apples, hawthorn, elm and maple; rather rare in Kent, with a very scattered distribution, but locally frequent N. of Ashford. See paper by Cove, D.J. (1956), in Starfish, 7, pp. 20-32, on distribution and hosts of this species in Britain (Cove: of 831 infestations in Britain, 345 on apple, 222 on Hawthorn, 133 Elm, 76 Tilia).

1st record, 1777: On orchard trees, etc., Faversham, E. Jacob, Pl. Fav., p. 124.

1) [Foots Cray, Hb. Sim.] [Dartford Heath, S. Priest.]: Swanley Horticultural College, on lime, 1900, G.N. Melland.

2) [Shooting meadow Faversham, on lime, Cowell, Fl. Fav.]: Graveney, Stowell. 06 on apple, Murton Fm, Graveney, R. Th., & REW, 1950.


6) 66 Cobham, on Acer campestre, Miss Young; A.A., BM; and on thorns, Cobham & Bush, Pamplin, N.B.G.; on lime, 1887, teste ASK; B. Carter, 1952. 96 Woodstock, Sittingbourne OD. 94 E. of Suomi, E.S. 94 ¾ m N. of Westwell Ch.[urch], ES.

7) 05 Trees N. of Chilham Church, 1958, E. Philp. 05 Nr Heronry Godmersham Park 1951 REW. 04 Soakham Down, on Crataegus monogyna, 1955, 038495; & on Acer campestre, BJB. 34 Eastwell Park, ES, MNE, on Crataegus 994474, 004477, 020703 [sic, obviously wrong], 025487, 010475, 015470, 015478. 05 Godmersham, 055501, 060505, 066506. [Lees Court Park (on Oak) J. Martin, Gard[ener]s Chron[icle] 1875.] [Selling, in orchards, Stowell.] 04 Challock, 003495, ES. 05 Chilham Park, 060525, ES.


11) W. Ryarsh 1922 on maple ASK. Harrietsham 1923 on apple ASK. 65 Herne Pound, Mereworth, 1. ’62. 75 Chequers, E. Farleigh, 1. 1962. 65 On limes, Wateringbury 684536 nr.Church. 65 On limes, Mereworth Park 669536 & 668537; abundant on limes. 65 In avenue, Fairlawne, Plaxtol, 603533, (Sutton Valence, Mrs. Petley.) 75 E. Malling, 1942. 85 Platts Heath, Mrs. B. Dodds.

12) Brook, on apple, ES. 94 Westwell, E. Scott. Shoddiington. 94 Godmersham Park, on Hawthorn, W. R. Jeffrey. On ilex, Canterbury, Kings School, AHS. 03 The Paddock, Smeth, on apple, LJM. 04 Mersham Hatch Park, 056404; 065402, ES. 04 apple, Brabourne to Brabourne Lees, LJM. 04 Kennington 022452; 027451, ES. 04 Boughton Lees, 023473, ES. 14 Stowting Old Rectory apple and lime LJM 1958. 14 Planted at Stowting Court on apple and Hawthorn, LJM.


14) 72 Tall trees by R[oa]d, Hawkhurst end of Sandhurst, CAS.

CELASTRACEAE

Euonymus L.

404 Loranthaceae in manuscript.
E. europaea L.  15, 16 Spindle 405. N  
Native. Open woods, scrub, and hedges; abundant on chalk, frequent on ragstone, more scattered on sand and clay, but well distributed in the Weald; apparently absent from Grain, Sheppey, and Romney Marsh.  
3) Hemphshall Wood, Whitstable, RGW 1951. Copse by stream, 1 mile S. of South Street, HMW, ’60.  
5) Halstead, AA BM. Wood near Washneys’ Fm, Halstead, PCH. Wood W. of Shoreham PCH. Chalk W. of Eynsford, PCH. Darwins Bank, Downe. 396611, Highams Hill, PCH.  
8) Wye Downs. Reinden Wood ’53, B Nash. Littlebourne, Mrs B.  
10) Roadside, Braasted – Toys Hill, CAS.  
13) Hedge, Sissinghurst. Path to Hurst Wood, Tonbridge Wells, 1960 CA Stace. Hedge Lamberhurst, FR. Copse, Ash Fm, Horsmonden, CAS.  
‡ E. latifolius [(L.) Mill.] 406  
4) Hedge by Sandwich Rd., Littlebourne, 1960, DMcC.  
‡ E. japonicus L. fil. Evergreen Spindle. H (Locally naturalised from gardens.)  
6) Horns Cross shrubbery HMP.  

AQUIFOLIACEAE  
[Ilex L.]  
I. aquifolium L.  15, 16 Holly N  
Native. Woodlands, hedges; very common on sandy and gravelly soils; less abundant on chalk and clay.  
Pollen in (Neolithic?) peat sealing Mesolithic occupation site, Addington, Burchell & Erdtman (1950).  

405 Spindle tree in the manuscript.  
406 Not in check-list.

7) 95 Longbeach Wood ES. Razor Grinders Wood Wichling 1958 MNE.


12) 04 Willesborough Lees. 03 Mersham, C.N.P. 94 Ashford Warren. 94 Hothfield Common.


15) (The placename Wickmary Holm at Dungeness is O.E.; Arich = mere; holm = holly. Holmstone = strong place with Hollies. This place-name was in use in 1460 (Arch. Cant., Vol. 43).) Holmestone, abundant since Childrey’s time. Dungeness. Halfway Bush.

16) Brockhill Woods LJM.

BUXACEAE

Buxus L.
B. sempervirens L. Box N (and planted, or self-sown)
Almost certainly Native on the chalk escarpment at Boxley; the name of the village apparently derives from the plant. The village names in this part of Kent date from the 6th and 7th centuries.
1st record, 1695: ’Buxus’ I find in the notes of my learned friend Mr. John Aubrey that at Boxley, there be woods of them. Ray, in Camden’s “Britannia” p262. The plant thus appears to have been abundant at Boxley at one time, but it is not so now. Elsewhere the Box has been frequently planted, especially on the chalk downs.

7) Boxley Warren, 1884, H. Lamb MNE; 1948! MNE; 1952! MNE, only about three trees left, one very large, 1952-4.
Almost certainly a native relic on the chalk river cliff of the Mole at Boxhill in Surrey; probably of similar status on the steep chalk scarp by the Arun NE of Arundel, Sussex. Not in France N. of the Somme, but on similar chalk or limestone cliffs by the Seine near Rouen, and at Marienbourg in SE Belgium; probably a relic of the Boreal period.
As an escape or planted at:
5) one old bush in chalk scrub, Betsoms Hill, at 800’, ”looks native”, 1956, R.A.C.

16) Brockhill, Saltwood, wood by stream, 1959, LJM.

EUPHORBIAEAE

Mercurialis L.
M. perennis L. Dog’s Mercury
Native. Woodlands on base-rich soils, frequently abundant in the field layer in woodlands on chalk and ragstone, soils on gault, and more locally in flushed areas on other soils. Abundant and widespread throughout Kent, except in Grain, Sheppey, Thanet, and the alluvial marsh districts of 4) (Lower Stour) and 15) Romney Marsh, in which islands and districts it is unrecorded and appears to be absent.
1st record, 1597: Greenhithe, etc., Gerard, Herbal, p.263.


2) Hawes Wood.


1958, PCH. Beechwood, Darwins Bank, Downe, 1962. Mounts Wood PCH. The Thrift, Bean PCH. Darenth Wood PCH; FR.


10) Ragstone escarpment wood, Rooks Hill, 1955. Westerham Wood, on gault in coppice PCH; 82!


Euphorbia L.

E. peplis L. Purple Spurge. Former native, now extinct

Reported twice in 4) one plant, St Georges Links, Sandwich – 1900, Rev. J. Roffey Hb. RJH. Sandwich Bay, one specimen on shingle, Miss H.G. Belton, det. Miss Robinson, ex Lady Davy, B.E.C. 1926, p.131. This very rare Atlantic-Mediterranean species can only be regarded as a casual in Kent.

E. platyphyllos L. Broad-leaved Spurge N or C 15, 16 Broad-leaved Spurge408

Native or colonist. Arable land and waste ground, particularly on heavy clay soils; rare but widespread, at least formerly: most modern records are from the eastern Weald.

1st record, 1777: Faversham, Jacob, Pl. Fav.

1) [Chislehurst, Woods, O.B.G. p.347.] [Southborough to Town Court, 1863, JSM.]

2) Stone, St. J. Marriott, B.E.C. Rep., 1921, p.397. (Thorn, Faversham, in cornfields, E. Jacob.)

---

408 Name as per checklist; in manuscript given as Warted Spurge.
8) (Stowting, G.E. Sm. in F.G.E.K.)

11) [N. of Chiddingstone, J.S. Mill MNE.] [Hop garden, Edenbridge, E.S.S.] [Maidstone, Clover fields, W.W.R.] [Staplehurst, E.S.M.] [Frittenden to Headcorn, JSM. 1863.]
16) [Cheriton, C.P.S.K.] Pas de Calais, very rare.


E. helioscopia L. 15, 16 Sun Spurge. N or C
Native or colonist. Cultivated land, allotments, waste ground; common throughout Kent. Common in Surrey, Sussex, Essex and Pas de Calais.
1) Shooters Hill, ’54, GMB. 47 N. Cray tip, PCH.
2) 06 Field N. of Oare, 1961, C. Turner.
3) Whitstable Castle ’52 REW.
4) Brambling, 1957, P Grattan.
6) 66 Cornfield, Buckland Rd, Luddesdown PCH. 55 Kale field ¼m NE of Kemsing Ch[urch] 1962.
8) 25 cornfields about Fredville DMcC.
10) Sevenoaks tip, 1958, CAS.
12) Sandy verge N. of Potters Corner, E.S., 1956.
13) Cranbrook, Garden Weed and Field edge, 1956, D.S.

E. lathyris L. Caper Spurge N or H
Almost certainly native in Kent, and in Surrey too.
1st record, 1836: abundant near Cobham, Pamplin, N.B.G., p.78.
Dry Woods on base-rich soils; very rare but locally abundant; also as a casual escape.
7) Boxley Warren, E.M.A., Phytol. NS. VI p.188, 1860: in glade in yew wood, abundant 1942-54! MNE.
Casual records at:
2) Faversham, F.G.E.K.
8) Railway cutting, Godmersham, Mrs. J. R.,... 1951. St Margarets at Cliffe, R.J.H.;
12) Wood E. of Mental Hosp[ital], Chartham, a few p[ants], 1955 Mrs B.
16) Sandgate, 1854, J.I. Brent, Hb. F.J.H.

**E. exigua L.** 15, 16 41/51 Dwarf Spurge

Native. Cornfields and waste ground, particularly on chalk; habitats such as open chalk, where it occurs also in natural habitats such as open chalk scree and rabbit warrens, etc; quite widespread on other, mostly light soils, but absent from much of the Weald and from Romney Marsh, except on Lydd Common. Frequent on chalk in Surrey, and Sussex; rarer in Essex; common in N. France. 10th record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.


2) 97 Arable S.W. of Minster, Sheppey, 1958, *MNE*.

3) 16 Stubble N. of Hempshall Wood, Whitstable, REW 1950. 06 Garden Weed, Seaside, HMW.


9) 26 Cornfield W of Plumstone Fm, 1 mile NE of Monkton, 1958. 36 Cornfield, N. Foreland, 1954.


W) Cornfield 1m S. of Chiddingstone, 499442, CAS. 54 Tonbridge Meadows, Miss A. Graseman.

12) 93 By “Scotts Pond” in cornfield on Weald Clay, Stubbs Cross, Shadoxhurst, 1956 *MNE*. 94 Sandy verge N. of Potters Corner, 1956, E.S.

14) Cornfield on loam, by road W. of village, Wittersham, 1956, MNE.

15) 02 Lydd Common, on fixed dunes, 1946 MNE.

16) 13 cornfields above the scars W. of Hythe, 1958, LMJ.

**E. peplus L.** 15, 16 Petty Spurge


2) garden weed, Sheerness, 1956, Mrs Bryson.

3) Whitstable Castle, 52, R.E.W.


6) Paddlesworth PCH. The Thrift, Bean, PCH. Weed of cultivation, Gravesend, ‘60, HAS. Arable weed, Higham, 1956, PCH.

---

409 In addition to the rough map copied here, the manuscript includes lists of 10k squares, grids with hectad map references and other workings towards mapping not included in this transcription, so that a full map is added here.
8) 25 Cornfields about Fredville DMcC. Lydden Spout, 1945 MNE. Ch[al]k arable, E of Knowlton 1958 MNE.
10) Sevenoaks tip, 1958, CAS.
13) Garden Weed, Tunbridge Wells ‘55 KEB.

E. paralias L.
Native. Sand-dunes; extremely rare and local, but locally very abundant at Sandwich Bay; elsewhere only a small colony at Shellness in Sheppey.
4) Sandwich (Bay), Johnson, Descriptio, p.26, 1632; Sandown Castle, Petiver & Sherard; very abundant along the fore dunes from N. of the Guilford Hotel nearly to Shellness, 1945-57! MNE. Together with Eryngium maritimum and A[grimony] junceiforme, this makes a most attractive association along 3 miles of sandy foreshore. Deal dunes, J.E.L., J.Bot., 1925, p.340 (the same stretch of beach). Old records exist for 2) Queenborough, Johnson, Iter; Sheerness, Martyn; 3) Whitstable, Gerard; 4) Reculver, Winch, N.B.G.; but the plant is apparently extinct in these places now. (The Records of this species for 8) The South Foreland and W. of Shakespeare Cliff by Dillwyn in O.B.G. p.180, and for Lydden Spout (“within the path”) by G.E.S. in C.P.S.K., p.59, appear to be errors for E. amygdaloides, which occurs on these cliffs in vast abundance in a very short, fleshy form, mimicking E. paralias)
Rare in Sussex (Camber, Wittering, Thorney, Pilsey), absent in Surrey, very rare in Essex; abundant on the extensive dunes of the Pas de Calais, and genrally from the Belgian coast south-westward on the continent. A Mediterranean species, very drought-tolerant; it rextends into the sandy parts of the N. Sahara in Morocco.

E. x pseudovirgata (Schur) Soö
Naturalised alien. Waste ground, rough pastures, roadsides, railway banks, etc.
1) Bickley; Swanley, 1956, DMcC. [railway] bank, Kidbrook Sta[tion], PC Hall. Nr Woolwich Arsenal, 1932, Mrs M. Mallinson. 56 Roadbank, Farningham Rd Sta[tion] Crossroad PCH.
2) Ham Marshes, S. of Ham Farm,1950, REW.
3) 06 Seasalter, B.J. Brooke, 1958 MNE. Canterbury W. Station, AW Roberts.
6) 57 Mounts Road, Greenhithe, 1945. 57 Stone, 575743, in gravel pit, 1946 MNE;11952, HMP. Waste ground, Northfleet, 1944; 1956 PCH. 57 R[oad] verge, Green Street Green to Lane End, PCH. 57 R[oad]side nr. Cotton Fm, 57-749, Stone, Mrs. A.G. Side.
7) 96 Rough pasture on valley gravel, below Coxett Wood, Ospringe, 1956. 05 Roadside nr. Selling Station, DHK 1946; J.H.P. Sankey 1954 – 1968! MNE.
12) Hothfield Common 1938 F Hyland BM.
16) [13 Building site, Hythe, 1957; gone 1958, LJM]

E. esula [L.]
E. cyparissias [L.]
15 Cypress Spurge N (probably)

410 In the manuscript given as Euphorbia uralensis Fisch. Ex Link (Euphorbia virgata Waldst. & Kit. non Desf.).
Native, almost certainly, in E. Kent, though possibly not so elsewhere in the British Isles. Rough chalk grassland and scrub, very rare, but known from at least five localities, in four of which it still exists.


On Epsom Downs, Surrey, looking native, and less “natural-looking”, in Berkshire, Bucks, and Sussex. Not recorded for the Pas de Calais, but widespread in France generally.

[Recorded as an alien at:

T. Pritchard (personal communication) reports that our wild Kent plant is [manuscript blank]

[RHAMNACEAE]

**Rhamnus L.**

**R. cathartica L.** 15, 16 Buckthorn. N

Native. Open woods, scrub and hedges; frequent to locally common in the chalk districts, though very rare in Thanet; rare elsewhere, always on basic soils.


12) Copse on Gault, SE of Lenham, 1944 MNE.

**Frangula Miller**

**F. alnus Miller** 15, 16 Alder Buckthorn N

Native. Heaths, damp woodlands on acide, usually sandy soils. Locally common in the High Weald, locally frequent on the Tertiaries and Greensand, now rare elsewhere.


[7] near Badging Ospringe, E. Jacob.] 95 Longreach Wood ES.


12) 94 Hoathfield Heath, ESM (1948!). 04 Willesborough Lees, CPSK (1946!). 93 Longrope Wood, PWR. 03 Carr, Sellindge 093396, 565, PCH. 83 Causton Wood, PWR.

13) 83 Chittenden Wood, ESM; abundant 1944 MNE; 1958. 73 Angley Wood. 73 Bedgebury Forest. 54 High Brooms, AR Gemmell. 73 Combwell Wood, 1897 TJS, TLS; 1954. 83 Sissinghurst Park Wood. 63 Kilndown Wood. 83 Roundshill Park Wood, 1950 MNE. 64 Brenchley Wood W. of Matfield, 1961 MNE. 63 Boggy Wood W. of Pembury 614395 CAS.

14) 83 Brogues Wood, Biddenden, 1950 MNE.

16) [13 Folkestone undercliff, G. Walton, Fl. Kent.]

‡ VITACEAE

Vitis L.

‡ V. vinifera L. 411 Grape-vine. Naturalised esp. on river banks, etc. H

‡ Parthenocissus Planchon

‡ P. quinquefolia (L.) Planchon Virginia Creeper Naturalised on old walls, hedges and tips. H

1) Ruxley Pits.

13) On fence, North Farm, Tunbridge Wells, 1960, CAS.

‡ P. inserta (A Kerne) Fritsch 412 False Virginia-Creeper. (As the last). H

15) 13 Garden relic on ruins, Palmarsh, 1958, LJM.

LINACEAE

Linum L.


2) Eastchurch in corn fields, AJ Davis, 1918 MNE.


411 In check-list; no account in MS.

412 Given as P. tricuspidata (Sieb. & Zucc.) Planch. in manuscript.

413 Pale Flax in the check-list.
Faversham 1957; Whitstable 1960; Reculver 1955.

4) 35 waste [round], N. of Sandwich, 1946. Ebbsfleet 341624 near River, Mrs T.B. 36 Richborough, 1946, abundant.


7) Darland Banks, 784661, B.C.


Alkham 1955; Dover; Thanet E.


10) 65 Trosley, Shepherd (hedgebank of lane from Wrotham Heath to Trosley, 1945).

11) 02 bank of A.20, 2 miles E. of Ashford, C.N.P. Ashford

12) Ashford GMB.


14) Appledore area, 1957.

‡ L. usitatissimum L. Flax, Linseed H

A casual, sometimes persisting from cultivation, or appearing where seed has been accidentally dropped.

1) Plumstead, 1880, H & JG BM.


12) Ashford GMB.


14) Appledore area, 1957.

L. catharticum L. Fairy Flax 15, 16 42/51

Native. Chalk grassland and scrub, very common and a characteristic species of these habitats; old quarries and grassland on ragstone, frequent; on open roadsides, quarries, clay pits, occasional in various parts of Kent. 1st record: 1597; Isle of Sheppey, Gerard, Herbal, p.447. Seed, [lower] Bronze age, Minnis Bay: Conolly, 1941 (Godwin. P.100).

1) Holwood Park, DMcC. Keston Common. Ruxley Pits.

[Blackheath U[n]R[ecorded]]; Bexley; Sheppey; [Grain U[n]R[ecorded]].


[...]

Faversham; Whitable; Sandwich; (not Chislet).


[...]

Cobham; Chatham; Stockbury; Teynham; Gravesend; Dartford; Westerham; Sevenoaks; Malling; Cliffe.


Wye; Elham; Alkham; Dover; Chilham; Canterbury; Wingham.; Thanet E.
10) Borough Green Ragstone quarries. Rooks Hill.
13) Stone Cross Ashurst CAS?? Southborough Common. Rare, HNC. R[ai][w]y W. of Tun[bridge] Wells West Sta[tion], 1960, CAS. Roadside, Hawkenbury Cemetery, Tun[bridge] Wells, 1943, HWP BM. (Pembury unrecorded); (unrecorded) Eden[bridge]); Tonbridge; 57; Tin[bridge] Wells- 58-60; Lamberhurst; Cranbrook; Hawhurst S'56; Tenterden 56; Woodchurch 56; (W&E Oxney unrecorded).
14) Cherry G[ar]den Close Woodchurch by Rd, ES.
15) Romney Warren.

Radiola Hill
R. linoides Roth N 15, 16 Allseed 5/51
Native. Damp open loamy soil in woodland rides, often with Centunculus. Almost confined now to the central High Weald of 13) and 14) where it is still locally common: formerly possibly in 16) outside the High Weald, it should occur in the Tonbridge–Penshurst–Crowden and the Hawkhurst–Rolvenden–Tenterden areas. Not infrequent in 12) on the Folkestone Sand and on the Eocene Sand, but only recently seen.

1st record: Johnson, Descriptio, 1632, p.31, “Millegrana minima”.

1) [Chislehurst, Gerard em; Ray Syn. to 1930s, W. Watson. Keston, 1836: Cooper Fl. Met. St Pauls Cray Common W.W.R.]
2) Ore/Luddenham, E. Jacob, 1777: Extinct, if correctly named.]
3) [E. of Canterbury, Johnson, Descriptio, 132.]
12) [Hothfield Common, H. Lamb, 1902 MNE: not seen for many years.] [Willesborough Lees: Brabourne Lees C.P.S.K.]
16) Copse in Sandling Park, E.S.M. Klin Wood in a ride, 1958! MNE.

POLYGALACEAE

Polygala L.
P. vulgaris L. 15, 16 Common Milkwort
Native. Very common and general in chalk grassland, both old and of recent origin, including old ex-arable sites; open places in woodland on chalk; and, more rarely, in grassland on London clay and Gault clay, in old ragstone quarries, and on hedgebanks on Hastings loams.

1st record: 1629: Between Gravesend and Rochester, Johnson, Iter, p3. P. vulgaris is a very variable species in size of plants, size of flowers, and in flower colour. Pink, white, mauve and purple-blue flowered plants are in general all quite common, but in east Kent, (mainly as it happens, in the areas where P. calcarea is absent) the flowers are often bright gentian-blue like those of P. calcarea, and the plants are often very robust. P. calcarea can always be distinguished from it by its more obtuse, narrower
sepalis; the basal rosette leaves which are longer and wider than the stem leaves; by the fact that the stem leaves are sub-obtuse and widest above, not at, the middle, hence obovate; and by its more shrubby habit.


4) Fixed sand dunes at Sandwich Bay MNE.


12) Wye, 1875, J.F.D. Brabourne Downs, 1875, CAM. Charing, 1891, E.S.M.

13) Bedgebury, r[o]aby side by Pinetum GMB. Roadside and hedgesbank near Windmill, Kippings Cross, 1953 (robust plant with narrow sepalis) MNE. Hedgebanks, Bayham abbey entrance and Timberlog Wood, Lamberhurst, J.R.W., 1938: det. by A.J. Wilmott as P. oxyptera, but clearly only a form of vulgaris with sepals narrower than the ripe fruit. It is a large plant with pale lilac-blue flowers. BEC Rep., 1939-40, p.270, 1944! 1946 MNE. Weir field, Lamberhurst, 1943, JRW. E of Ashurst, M. Mallinson.

15) Dungeness, 1886, R. Paulson BM.

16) Abundant W. of Hythe, on ragstone scarp, 1949, 1955 MNE.

P. vulgaris subsp. collina (Rchb.) Borbás

Native. In chalk (and rarely sandy) grassland, especially in exposed place near the coast. A rather unsatisfactory species, at times resembling small white flowered forms of P. vulgaris [subsp. vulgaris]; sometimes appearing more distinct. It is best distinguished from [subsp.] vulgaris when in fruit. [Subsp. collina] has white flowers, rather smaller than typical flowers of P. vulgaris [subsp. vulgaris], and they are

415 Given as Polygala oxyptera Rchb., syn. Polygala dubia Belynck.
416 Reference to species being P. oxyptera, as this taxon was then known.
normally tipped with pink; the sepals are much narrower than the ripe fruit; and the plant has a prostrate habit. There is a very ill marked basal rosette, but the basal leaves are shorter than the stem leaves, and the stem leaves are acute and widest at the middle.


[1] Dartford Heath, F.J.H.; probably a form of *P. serpyllifolia* Hosé.]

3 Oldridges Wood, in turf by Sewage Dump entrance, Miss B. Nash, 1957, conf. DACL.

4 Sandhills at Deal, J.S. Mill, 1863.

6 Wrotham Hill, H. Elgar &H. Lamb, 1899 **MNE.** Magpie Bottom, 1911, A.J. Wilmott **BM.**

7 Downs near Cobham Fm, E of Lenham, 1945, **MNE.** Burham Downs, 1946.

8 Broad Downs, Wye, 1899, C.E.B., **BM.** Near Wye 1888, ESM. Coldharbour Farm, Wye, 1900 CES, Hb. **BM.** Wye, 1934, AHG Alston **BM.** Free Down near Ringswold, 1874, J.F.D. **BM.** Chartham, A.H.E. **BM.** On anthills above the Crown, Yew Downs 1943-46, **MNE.** Julibery Downs, Chilham, FR, DHK, 1945. Downs, Pett Street, Crundale. Downs NW of Stowting 1953 **MNE.** Tolsford Hill '45 **MNE.** Postling Downs, 1945 **MNE.** Chalk pit Brambling, 1945-55 **MNE.** Downs N of Adisham 1955 **MNE.** Cliffs between Folkestone and Dover, HWP 1899 **BM, JEL:** Abbotscliffe 1945 **MNE.**


11) S. of Sutton Valence, 1934, AHG Alston, **BM.**


13) Field near Horsmonden Vicarage, 1897, JS TLS.

P. vulgaris × calcarea

6 Magpie Bottom, near Shoreham, 1947, A.J.W. **BM.**

P. serpyllifolia Hosé 15, 16 Heath Milkwort

Synonyms: - Polygala serpyllacea Weihe

Native. In heathland, grass-heath, and woodlands on acid soils with raw humus; very common in suitable places, but naturally absent from the marsh districts and most of the chalk and clay areas. The subopposite stem leaves form a distinctive character.

1st record 1861: Sandwich, Phyt. N.S. v, p210.


5 Mollards Bank, Biggin Hill 402591, 1960, RA Clarke.


16) Kiln Heath, Sandling Park, 1958 **MNE.**

---

417 This gridreference is some way from Magpie Bottom.
**P. calcarea** F. Schultz 15, 16 Chalk milkwort

Native. In ancient chalk grassland, mostly in short *Festuca ovina* turf, occasionally with *Bromus erectus*. 60 localities known, abundant from the Surrey border eastwards, in suitable places, to Filmer Wood, Doddington, and Westwell chalk pit, as a robust suberect plant, normally with stems 3-5 ins. high, and lapis-lazuli blue flowers, rarely pink or white. It is absent on the northern part of 6), north of Farningham, Meopham and Cuxton, and east of a line from Doddington to Westwell in 7). In the east of 7) and in 8) apparently suitable localities abound for this species, but it seems to be absent from a stretch of chalk country 18 miles long from W. to E., between Westwell and Alkham. About Alkham and Dover *Polygala calcarea* is known in four stretches of downland, and is locally very abundant; but here it is a small, more or less prostrate, plant, with stems 1½ to 3 inches long, and smaller, paler, though still bright blue flowers, though white forms are rather common. The leaves are also smaller and thinner in texture than those of the mid- and west-Kent plant. It seems possible that this east Kent plant has been isolated for a long time, and is in the process of subspecific differentiation. It may have been derived from a population isolated on the coastal cliffs during the phase of maximum forest development.

Pink flowered forms occur at: 7) Burham Downs; 6) Paddlesworth. White flowered forms occur at: 6) Trosley; 7) Burham; and 8) abundantly at Woodville Downs.

Common on the N Downs Surrey in a range of colours; on the South Downs of Sussex as far west as Wolstonbury, white-lilac being the commonest colour. Unknown in Essex. Rather rare in Pas de Calais, where it is normally blue like the Kent plant.


**P. amarella** Crantz 418 (P. amara L. p.p.) 15, 16 Kentish Milkwort

Native. In short, often rather open, but very old, chalk turf. Confined now to Kent in the British Isles; formerly in Surrey. Rare in Kent, but widely distributed on the chalk; nine localities known at present.

STAPHYLEACEAE

**Staphylea L.**

† *S. pinnata* L.
Bladdernut. Naturalised nr. Otford

H

Mentioned in Fl. Wrotham as doubtfully wild, and by Parkinson at Ashford (“Nux vesicaria”), p.1417.

HIPOPOCASTANACEAE

*Aesculus* L.

† *A. hippocastanum* L. Horse-chestnut. Well-naturalised and self-sown.

Planted frequently throughout the County. There seems to be no point in giving a detailed distribution.


2) Love Lane, Minster, 1958, OD.


7) Tonge, DMcC. There is a planted wood or grove of this tree of many acres along the road between Newnham and Doddington.

10) Franks Park, N. of Farningham.

ACERACEAE

*Acer* L.

† *A. platanoides* L. Norway Maple Naturalised from seed in woods, etc.

H

Alien.


5) Cuckoo Wood Down, F.H.B.

7) Wood by Q[ueen D[own]] W[old], W[illeden] – T[onbridge], CAS.

11) many saplings, R afl[ai]w[al]y, Hildenborough – T[onbridge], CAS.

13) Bayhall Road, T[unbridge] Wels, 1960: many seedlings CAS.

*A. campestre* L. 15, 16 Field Maple.

N

419 FR has numbered the various sites through out this account, given here as roman numerals so as not to confuse with the botanical district paragraph numbering, although the manuscript has Arabic numbers for both. No site number was given here, but it looks as though it should have been treated as a separate site.

420 Rosemary FitzGerald attributed the 1964 record to E. Glendenning, the 1981 one to Francis Rose in her partial transcript of this section; this clarification may have been supplied by Francis Rose at the time. Note that under *Paris quadrifolia*, D.R. Glendenning is shown as having botanised in this area; D.R. Glendenning also published on *Polygala* cytology in 1955.
Native. Woodlands, especially abundant on chalk and ragstone, quite common on sand and clay; hedges, common throughout the county, except in Sheppey, Thanet, and Grain, where it is rather rare.

1st record, 1632: Nash t Quex, Johnson, Descriptio, p.21. Crossness, in Bronze Age and Roman occupation levels, Spurrell, 1889; Reid, 1899 (Godwin, p.105).


2) Love Lane, Minster (near Hosp[ital]) 1958, O.D.

3) Strode Park, Herne.


‡ A. pseudoplatanus L. 15, 16 Sycamore. D

Alien, completely naturalised. Woodlands, especially on chalk, ragstone and sand; spreading freely from seed and common in many parts of Kent; also widely planted.

1st record, 1632: Nash to Quex, Johnson, Descriptio, p.21.


5) Halstead, AA, BM. 396611 PCH. Wood W. of Shoreham PCH. Pilots Wood PCH.

8) Wye.
9) Minster, copse to SE.
12) Mersham, CNP. Hothfield Common.
13) Wood by R. Teise, Hoathly, 1955. Bedgebury Forest. 64 R[oadside] 1m SW of New Ch[urch], Pembury, PCH. 64 Pembury Woods PCH.
14) 1½ m. S of Hawkhurst ’55.

‡ A. saccharinum L. Silver Maple. Planted, but self-sown seedling recorded. H
13) N. of Penshurst Park, HJMB.

‡ A. can[a]densis

‡ A. negundo L. Ashleaf Maple Naturalised in one place. H [account not yet transcribed]

[This is as far as the checklist goes. The remaining species accounts are in given in the order in which they appear in Stace, 2nd edition, which was current at the time of the checklist preparation.]

[ANACARDIACEAE]

Rhus typhina [L.]
13) R[ailwa]y between Central and West Stations, T[unbridge] Wells, 1960, several saplings, CAS.

SIMAROUBACEAE

Ailanthus altissima (Mill.) Swingle
6) Green Street Green, Darenth, PCH.

[RUTACEAE]

Oxalidaceae

Oxalis L.
‡ O. corniculata L. 15, 16  21/52
Alien, S. Europe, etc., naturalised in many places. See BEC. 1934, p.823.
1) 47 Hall Place, Bexley, H.M.P. 47 Ruxley Pits, S&S. [Locks Bottom, 1917, P.H.C.] [Beckenham, 1919, A.G. Davis MNE.]
2) 06 Whitstable Road, Faversham, HMW.
4) Wingham, L.W.W.
7) 05 Selling, L.W.W.
8) 24 Kearsney Abbey walls, 1957, KDR.
11) (W) 54 Dry Hill Road, Tonbridge, 589473, CAS. 44 Hever Castle Grounds, 1958, P.C.H. 64 Medway S. of Yalding, GE Shaw.
(E) 75 Lit[t]le Buckland Avenue, Maidstone, 1960, E.G.P. 78 E. of “Chiltern Hundreds”, Maidstone, 1961, E.G.P.
35 Fairbourne Mill, Harrietsham, Mrs. B. Dodds
12) 04 Ashford, G.M.B. Sturry, J.O.

16) 13 Garden Weed, Brockhill, L.J.M.

‡ O. stricta L. 15, 16 6/52
Alien, Europe. Naturalised in several places, but still rare.
1) 47 Hayes Old & New Rectories, 1938, DMcC. 46 Oakley House, Bromley Common, DPY.
8) 25 Little Fredville, DMcC.
11) 54 Cage Green, Tonbridge, 1958, KEB. 84 Weed, Headcorn, Churchyard, 1962, CAS.
12) 15 Sturry, J.O. & DMcC.
13) 53 Tunbridge Wells (Broadwater Lane, KEB; 53 5, Western Road, 1958, CAS). 53 Cambridge gardens allotments, KEB; 53 Hawkenbury Rubbish dump, KEB. 53 Groombridge Hill, on wall, CAS.

‡ O. articulata Savigny (O. floribunda Lehm.) 15, 16 4/52
Alien, naturalised in several places, but rare. This plant has pink flowers and fibrous roots.
1) 51/36 old gravel pit, Hayes, 1912, W.H.G. (OXF; SLBI).
9) 61/36 Minster Churchyard, 1963. 61/36 North Foreland, 1948, DMcC (& var. hirsuta proq.)
11) 75 Sandling Wood road verge, 1960, E.G.P., MNE.
15) 13 Hythe front, L.J.M.
16) 13 Saltwood, L.J.M.

O. acetosella L. 15, 16 Wood Sorrel.
Native: dry woods and shaded banks, on loam, sand, gravel, more rarely on shallow chalk rendzinas; very common in all wooded districts (absent from the Hoo peninsula, 2) Grain, Sheppey, 9) Thanet, 4) the Lower Stour Valley, and 15) Romney Marsh.
5) Halstead, A.A. BM. 396611 Highhams Hill, PCH.
10) Scords Wood Brasted 1954 MNE. Knole Park. Westerham Wood PCH; 82!
12) Bybrook N. of Ashford, ES. E end Hothfield Lake RGW.

Variation is covered in two different sections in the manuscript, due to the rewriting of several of the Oxalis accounts; the sections do not duplicate each other and so are combined here.

Given as O. corymbosa DC (O. martiana Zucc.).
11) Tonbridge, 1941, H. Kewey.
12) Smeth [cross]-roads.
14) Tenterden, 1897, 1902 RR in Hb Croydon NHS. High Halden Ch[urch] Y[ar]d, RAC.

G. rotundifolium L. 15, 16 8/51
Round-leaved Cranesbill
Native, mostly on chalky, sandy or gravelly hedgebanks, rare and scattered,
1st record, 1836: Dartford, Cooper, Fl. Met., p.61
1) [Blackheath, 1855, E.J.], 47 Bexley, 1871, FJH BM; 1950, G.C.D., GMB. Charlton JSM. Kidbrook, Eltham. Plumstead, AHWD. Charlton High Road, 1861 (?Pryor)\textit{vex }Hb. Lamb MNE.
2) 47 Erith Marshes, 1951, JEL, etc.
3) 16 Westbere, R.G. Williams, abundant on hedgebanks, 1956; J.O.
4) [Walter, Miss L. Day.] Sandwich Bay, 1951, P. le Brocq.
10) Twitton, hedgebank 506598, 1955, JEL. [Chevening, Miss Worship.] [57 Lane by Dartford Gravel pit, 1890, A.H.W.D. BM.]
11) [Trosley, Shepherd.] [Lane from Aylesford to Eccles, AHWD & ESM; H. Lamb, 1902 MNE; AHWD, 1894 BM; apparently extinct, F.R.] [Sutton Valence, Mrs Petley: dubious.] 75 Sandpit at Forstal, Aylesford, 1961, E.P.
13) [Goudhurst, Clarke.]
15) [NW of New Romney, FJH.]

G. pratense L. 15, 16 Meadow Cranesbill 21/52 [22/52]
A doubtful native of Kent except perhaps formerly near the Medway at Aylesford. It is widespread in the county on roadsides and waste ground, though rare; but it never seems to occur in the abundance in which it is seen on calcareous clay or limestone in the midlands and mid-west of England.
1st record, 1836: W. of Eltham, Cooper, Fl. Met., p.74.
1) [47 Lee to Eltham, Cooper, 1836.] Hayes (roadside) 1938; 46 Holwood Park 1898, BTL; DMcc: not looking native. 37 E end of Blackheath, 1855, EJ; GMB. 46 Plentiful, meadow by railway NW of Chislehurst Sation, 1944 FR, 1945 MNE; apparently destroyed, 1957. 47 Chislehurst Common GMB. Ruxley Pits. Joydens Wood AGS. [57 Wilmington, near A225, GMB; now gone.]
2) [75 by the Medway, Aylesford, W.W. Reeves: not now visible.]
4) 35 St Georges Links, Sandwich, a colony in a dry hollow of the dunes, 1950, L.W.W.; 1956 MNE! To 1964.
5) 45 on Chalk, path of Betjems Hill, 1958, RA Clarke.

\[424\] This note is placed at the end of the account, but is the publication detail for W.H. Pearsall’s Matfield record above.
7) 05 Chilham Castle, by lake, 1950. 86 Stockbury, Mrs R. Begg, 1962. [75 Roadside N. of Detling, E.M.H.]
8) 14 Roadside NW of Elham, 1950. 23 in A.A. Camp, Lydden Spout, 1950; 1951 MNE; 1955 MNE. 23 Folkestone Waterworks, Miss V. Day; DMCC. River House Orchard, Mrs. B. Dodds. 35 Ham, E. Robinson.
9) [36 Shortenden, in meadows, Dr. Hunter, Fl. Thanet.] Escape on waste ground near Margate, LW Wilson.
10) [45 Chevening, Miss Worship.] 45 Chipstead, 1948, DMCC.
11) [54 Redleaf (Penshurst) C.Cox.] Near Tonbridge, H.S. de Vere Hodge. 54 Sacred Heart Convent, Tunbridge Wells, 1959, P.A. Line. [73 Cranbrook, Crowden.] Brenchley War Memorial, 1953, KEB.

‡ G. sanguineum L.
Garden escape in Kent.
1) Ruxley Pits (and var. lancastriense) Spooner & Stoyel.
5) Meadow between Downe and Cudham, established, 1906, (a mile from the nearest garden where it is grown) WHG.
6) Darenth Wood, Cooper 1836.
8) [Petham, Linford.] Plantation by allotments, Bishops-bourne, 1962, BJB.
11) Platt Brickfield, DMCC.
13) Redleaf, Cox.

G. columbinum L. 15, 16 25/51 Long-stalked Cranesbill
Native. Frequent in scrub, hedgebanks ad open woods on chalk and ragstone, rare in Thanet and Folkestone Sand; absent elsewhere.
1st record, 1670: Swanley, Ray, Cat. Ang. P.266.
3) Perry Woods; Bysing Wood, REW, 1953.
4) Sandwich F. Swain?
10) S5 By wall, Ivy Hatch, 587543, CAS.
11) 75 Holt Wood, Aylesford. 75 Wood S of Ditton. 75 by path over R[aill]w[a]y, E Malling, 1946 MNE. Near River, Allington, A. Graseman. [Penenden Heath, Ex Hb Lamb, 1848 MNE.] [Sittingbourne Rd., Maidstone, ex Hb Lamb, 1850 MNE.] [Offham, H. Lamb, 1882 MNE.]
12) Sellindge → Smeeth, 1875, FJH; hb FJH.
13) Goudhurst, 1899, JS, TLS.

G. dissectum L. 15, 16 Cut-leaved Cranesbill

Probably native on chalk and on the coast, at least; rough fields, banks, roadsides, waste ground, cultivated land, on well-drained soils; common throughout the county.

1st record, 1629: Erith, Johnson, Iter, p.10.
5) 36 W of Biggin Hill 3961, PCH. Darwin's Bank Downe JEL.
10) 56 Pastures N. of Farningham PCH. 55 Field NW of Ightham. 57 Darent Meadows, PCH.
12) 94 Bostfield. 04 Ashford.
13) 63 High Wood, T[unbridge] Wells, PCH. Bidborough Path Southborough HNC.

‡ G. ibericum [Cav.]
10) Bank of r[aill]w[a]y, near Sevenoaks Sta[tion], 1961, CAS.
11) Bourne Fm, near Plaxtol, 609547, 1960, DMcC.

‡ G. platypetalum [Fisch. & C.A. Mey]
St. Marg[are]ts Bay DMcC.

G. pyrenaicum Burm. fil. 15, 16 32/51 Pyrenean Cranesbill

Naturalised alien. Locally frequent: railway banks, roadsides, etc. This plant has spread rapidly in Kent in several parts.

2) 47 Plumstead Sewer bank, PCH. Crossness St J M. Canal bank W. of Higham, FJH. 76 R[iver] by Snodland
Geranium pusillum L.  

Small-flowered Cranesbill

Native. Sandy and gravelly grassland, sandpits and hedgebanks. Widespread, and locally frequent on the Tertiaries, the Folkestone Sand, and near the coast; and confined to superficial in the chalk districts. Very rare in the Weald, except in the towns of Tonbridge and Tunbridge Wells.

1st record, uncertain.

Readily distinguished from G. molle even when not in flower by the dense close pubescence of the stem: in G. molle the stem has lax long hairs, 1mm long or more.


2) Dartford Marshes, PHC, 1931. 57 Ethir, 1948, R.A.B. 06 Ham Marshes REW. Oare Ch[urch]y[ar]d ‘60 REW. 97 E. End, Minster. 96. Teynham sq[uare]; Faversham sq[uare]; W. Sheppey sq[uare];

3) 05. 15. 16. Canterbury sq[uare]; Chilham sq[uare]; Whistable sq[uare].

4) 35 Dunes near road, Sandwich Bay 1954, MNE. 26. Sandwich sq[uare]; Chisle sq[uare];


---

425 Authority cited as Burm. f.

426 This account has been worked on by Francis Rose for the hectad map production in a slightly different manner than others, the text being annotated in pencil with names of 10km squares, not necessarily with any records given. Normally, he would work from the 10km square grid numbers, entered in red ink, sometimes giving marginal lists of 10km square names in blue ink, but without the addition of 'sq'.
6) 76 E of Ranscombe Fm, Cuxton, 1950, G.O.P. 76 Cuxton Station. 57 Stone, 1886, FJH; pits, 1947 HMP. 57 Mounts Rd bank, S. of Greenhithe, 1954 MNE. 77 Higham Upshire, on gravelly bank 1955 MNE. 77 Sandy ground, Upnor, 1949 MNE. 57 Greenstreet Green to Lane End, PCH. 66. 67. Cobham sq[uare]; Gravesend sq[uare]; Higham sq[uare].


8) 15 Chatham Downs chalk pit, 1960, MNE. 24 pit, Haynes Farm, Sibertswold, DACL & B. Nash. 34 Sutton Downs 330479 KDR. Alkham-Temple Ewell sq[uare]; Dover sq[uare].


12) 53 Toad Rock, Rusthall, Tunbridge Wells, 1950, KEB. Absent from Pembury to Woodchurch.

Geranium molle L. 15, 16 Dove’s-foot Cranesbill

Native. Hedgebanks, roadsides, waste ground, dry pastures, cultivated land: very common.

1st record: 1632, S. of Margate, Johnson, Descriptio, p.18("pes columbinus Dod.") or else 1777; Faversham, E. Jacob, Pl. Fav., p.41.


5) Well Wood, W. Wickham 396642 PCH.


7) Newnham. Putt Wood.

8) Shatterling. Fredville.


10) 56 Cornfield by Shoreham Ch[urch] PCH. 56 S. Darent meadows to S, PCH. 57 St Johns Jerusalem, PCH. Sevenoaks tip CAS.


12) St Augustines Abbey ’54, DACL.

13) 63 near Lamberhurst Church, JRW 1938. Bayham CAS. Southborough Common HNC. 73 Roadside in Forest, Bedgebury, 1958, WJ Davies.

15) By Lighthouse, Dungeness, 1938, S.E.C. Lydd Common. Airport, Lydd, DMcC.


G. lucidum L. 15, 16/52 Shining Cranes bill

Native. Hedgebanks on sandy or gravelly soils; and on old walls and on rocks on the ragstone, rare and local. A characteristic, though rarer, species of the ragstone in Mid and West Kent, probably an escape in most localities elsewhere. Locally common on the Bargate Beds in SW Surrey, very rare in Sussex and Essex.
and in Pas de Calais almost confined to the Carb(oniferous) limestone of the Boulonnais.


2) E 86 Hedgebank S.W. of Hawes Wood, Newington, 1957, MNE. 1899, BTL.

3) 16 Westbere, R.G. Williams, 1956. 5 Hedgebank, Canterbury Cemetery, C.A. Roberts. 25 Ellridge Cross roads, on dump of rubbish, 1957-8, B. Nash.

4) 57 [Johns Hole, Dartford, 1811, R. Pocock, BM. Lanes between Dartford and Greenhithe JSM 1863; 1886, FJH, BM. [Stone, Tagg.] 67 Chalk Gravel pit, abundant, 1946, MNE. 76 [Strood, Miss Young.] 66 625658, N. of Elbows Wood,Ridley, Mrs Woods.


2) E 86 Hedgebank S.W. of Hawes Wood, Newington, 1957, MNE. 1899, BTL.

3) 16 Westbere, R.G. Williams, 1956. 5 Hedgebank, Canterbury Cemetery, C.A. Roberts. 25 Ellridge Cross roads, on dump of rubbish, 1957-8, B. Nash.

4) 57 [Johns Hole, Dartford, 1811, R. Pocock, BM. Lanes between Dartford and Greenhithe JSM 1863; 1886, FJH, BM. [Stone, Tagg.] 67 Chalk Gravel pit, abundant, 1946, MNE. 76 [Strood, Miss Young.] 66 625658, N. of Elbows Wood,Ridley, Mrs Woods.


2) E 86 Hedgebank S.W. of Hawes Wood, Newington, 1957, MNE. 1899, BTL.

3) 16 Westbere, R.G. Williams, 1956. 5 Hedgebank, Canterbury Cemetery, C.A. Roberts. 25 Ellridge Cross roads, on dump of rubbish, 1957-8, B. Nash.

4) 57 [Johns Hole, Dartford, 1811, R. Pocock, BM. Lanes between Dartford and Greenhithe JSM 1863; 1886, FJH, BM. [Stone, Tagg.] 67 Chalk Gravel pit, abundant, 1946, MNE. 76 [Strood, Miss Young.] 66 625658, N. of Elbows Wood,Ridley, Mrs Woods.

7) [76 Luton, Miss Young; Sittingbourne, Grayling].

8) [23 Beach between Dover and Folkestone, D.B.G.] 23 Sugar Loaf Hill, Folkestone, L.W.W. 14 West Wood, Stowting, KDR.

9) 26 Monkton, on Railway Ballast, L.W.W.

10) 45 Lane, Froghole, Chipstead, E Armstrong, 1943. 45 on stone...bank on ragstone, Mariners, Crockham Hill, R.C., 1959; RAC; 1960! MNE. 55 Grassy Lane off South Park, Sevenoaks, 1962, K.E.B.

11) 65 on old ragstone walls, Watery Lane W. Malling, 1944-60 MNE. 75 Loose, DMcC. 75 Otham, H. Lamb, 1880 MNE; 1950! MNE. 66 625658, N. of Elbows Wood,Ridley, Mrs Woods.

12) 65 on old ragstone walls, Watery Lane W. Malling, 1944-60 MNE. 75 Loose, DMcC. 75 Otham, H. Lamb, 1880 MNE; 1950! MNE. 66 625658, N. of Elbows Wood,Ridley, Mrs Woods.

13) 53 Groombridge, 1911, EC Gilbert, TLS.

14) Tenterden 1897 RRH.

16) The Record (DBG) from Lympne Castle probably refers to G. rotundifolium which is common there; the same may be true of the Saltwood record (Ibid.).]

G.robertianum L. 15, 16 Herb Robert

Native. Hedgebanks, woodland on well-drained base rich soils, abundant throughout Kent. The ssp maritimum (Bab.) H.G. Baker on shingle beaches, rare but locally common.

1st record, 1632: Margate to Nash, Johnson, Descriptio, p.17.


2) Tonge Carr, J.M. 804759 S of St Mary Hoo. 795741 Sharnel St[reet].


5) R[oa]side, Washneys Fm, Cudham, PCH. 396611 Highams Hill PCH. Polhill, Pilgrims Way PCH. Wall, Chevening Ch[urch] y[ar]d, PCH. Chevening Park, PCH. Pilots Wood, PCH.


9) Durlock, Minster, in copse.


427 Unclear whether these relate to the Beckenham entry or to a deleted entry for Keston Common.


15) Dungeness beach, abundant, WRS, BM, 1925; F.R. 1945-57 (var maritimum) MNE.


**ssp. maritimum** (Babington) H.G. Baker

_Single beaches on the east and south coasts of Kent, locally common._


8) Beach between Dover and Folkestone, A. Bennett in Hb. Geldart, teste Fl. Kent. Folkstone, 1869, J.B. Syme BM.


‡ **G. pheum** L. 15, 16 Dusky Cranesbill

_Garden escape, sometimes naturalised._

1) Farnborough, W. Watson; 1932, PHC; 1959, 445636, in nettle bed, M. Swain.

2) near Crossness Sewage Works, 1927, H.J.B.

3) N of Canterbury, Mitchinson, 1873; FJ H. in Hb.

5) Stourmouth. Dowker.

7) Path to Downs from Otford GB. Rochester St. Brody (in woods); Maidstone Road, Chatham, Miss Young.

8) S. Alkham, cornfield edge, 1957, LJM.


[**Erodium** L’Hér.]

**E. maritimum** (L.) Hér. 428

_Sandy dunes and old walls near the sea. Formerly very rare, and now extinct._

1st record, 1777; last 1802.

4) Sand dunes near Deal, not common, J. [sic] Jacob, 1777. Not reported since.

11) Casual in garden, E. Malling, 1945 MNE.


‡ **E. botrys** (Cav.) Bertol.


2) Motney Hill ’51 DMcC.

11) (Shoddy alien) Offham, 1960, DMcC MNE. Yalding Station (Shoddy alien) 1961, DMcC.

‡ **E. brachycarpum** (Godr.) Thell. 429

11) Shoddy field, Comp, 1960, D.McC, MNE.

---

428 Cited as (L.) Ait. This taxon has since been found no longer to be extinct, and is spreading, as recognised by the final entry.

429 Cited as **E. obtusiplicatum** (Maire Weiller & Wilzek) J.T. Howell.
† E. crinitum Carolin
4) Shoddy field, Sandwich, 1959, D.McC., MNE.
11) Shoddy field, Comp, 1960, D.Mc.C. MNE. Shoddy alien, Yalding Station, 1961, DMcC.

† E. moschatum (L.) Hérb. Cited as (L.) Ait.
Alien, very rare and casual.
1) [Bromley Common; Wickham Park, Irvine.] Probably errors or escapes. Hextable, 1949, JEL, introduced with "shoddy".
2) Motney Hill, '57, DMcC.
4) Ash crossing, Sandwich (Sh[oddy]), 1959, D.McC., MNE.
6) Longfield Tip D.McC. 1956, MNE.
[9] Nash and Street Green in Pastures, Dr. Hunter.] Probably errors or escapes.
11) W. Orchard near Marden, Dr. C. West, 1946. Basted, Shoddy field, 1960, D.McC, MNE. Shoddy alien, Yalding Station, 1961, DMcC. E. Malling, Orchard, 1949, C.W.
[13] Mount Sion and Rusthall Common, etc., an escape from cottagers’ gardens, E. Jenner; Rusthall Common, W.W.R.]
[16] Sandgate near Turnpike: GE Sm[ith] in FlGEK; Dibgate to Ham Street, Hythe, Drew, 1888.]

E. cicutarium L. 15, 16 Hemlock Storksbill
ssp. cicutarium
Native: sand dunes, sandy beaches, banks, open commons, and cultivated land on sand or gravel, or more rarely on chalk; frequent on the coast, the tertiaries, and the Folkestone sand; rare elsewhere and absent from most of the Weald.
1st record, 1632: Nash to Quex, Johnson, Descriptio, p.19.
3) Dengrove Wood. Blean Woods SE of Boughton, Mrs.B.
8) 34 Dover, Miss T. Webber!
12) 94 Ashford Warren, 1944. 94 Hothfield Common, 1945-60. Willesborough Lees. Chapel Fm Lenham.
13) 53 Tunbridge Wells Common, 1944 (pale flowered); 1946 MNE; 1958 CAS; also white f[lowere]d, ‘62, CAS. 53 Rusthall Common (pale flowered) 1944.
15) 02 Romney Warren, 1947. 02 Golf Course NE of Littlestone, 1947 MNE.
16) 03 Ragstone cliffs Alderigate, E. of Aldington, 1958 MNE.
ssp. dunense Andreas (=ssp. neglectum Baker & Salm.) Sand dunes, locally common.

3) gravelly field by Bigbury Wood 1950 MNE.
4) Sandwich Bay, 1946-'55, MNE. Deal, 1880, J.G. Baker, BM.
12) Hothfield Common 1952 MNE.

ssp. arvale Andreas

1) Hayes Common, 1902, E.D. (v. "maculatum").
6) Cobham, 1816 (v. "maculatum").
11) Wrotham Heath 1939, JBM (v. "maculatum").

E. lebelii Jord. 15, 16 Sticky Storksbill Native. Sand dunes, very locally common, and local on the coastal dunes in Sussex, and Pas de Calais.

1st record, 1899: E.S.M. in Flora of Kent, p.79 (as E. cicutarium var. glandulosum Bosch).
4) locally common on the dunes at Sandwich Bay; ESM: Sandwich Bay; 1923 A.H. Carter BM; 1929 TJF: det. Andreas; 1946 MNE -55, FR.

BALSAMACEAE

Impatiens L.

† I. noli-tangere L. 16 Touch-me-not

Alien in Kent, though established for many years (possibly native on the Surrey-Sussex border at Felbridge).
1) ["Mr. Jeremys Wood", Chislehurst, T.F. Young, Fl. Met., 1836.] Bank of the Ravensbourne, Bromley Hill, Scargill; 1901, Dr.D.T. Playfair BM, CGE. Kelsey Park entrance, Beckenham, per Dr. D. Coombe. Ravensbourne Estate, Keston, 1955, in wet wood not far from the stream, MNE.

† I. capensis Meerburgh 15, 16 Orange Balsam, Jewel-weed

I. biflora Walt.; I. fulva Nutt.

Alien, now completely naturalised on the Medway, and to a less extent on banks of the Darent; formerly on the Ravensbourne.
1) On banks of the Ravensbourne; Scargill. Catford Bridge, 1837, WWR. L[owe]r Sydenham, Scargill; Britton; 1897. Southend Village, 1898 H.F.P.; 1905, WHG.
11) Penshurst by R. Medway, T. Greenfield. Wateringbury to Yalding occasional, 1949, MNE. Tonbridge ditch by Castle 1950 KEB. E Farleigh, 1950, 2 plants. Hartlake Br[idge], 1952 MNE. By 1954 this was abundant by the Medway banks on both sides, along most of its course from Ashour Wood, Penshurst, to E. Farleigh (Leigh; above Tonbridge MNE; Tonbridge to E. Peckham; Yalding; Wateringbury; Teston; Tovil 1960 EGP: it was not seen anywhere on this stretch of the river in 1944-45. Medway S. of Penshurst, 533420, ’53, P. Greenfield. Ringlestone by Medway 1954, LRAG MNE. Teise, Yalding, 1962 WAS.
13) Ashurst to Groombridge by stream, 1954, CAS.

† I. parviflora DC. Small Balsam

Alien, naturalised locally.

431 Given as E. glutinosum Dum.


† I. glandulifera Royle 15, 16 Himalayan Balsam Alien, now well naturalised on river banks. 1st record: [sic]


5) Knockholt, escape ‘57 RAC.


10) Bessels Green, E. Armstrong.


16) Bombed sites, Folkestone, 1947, Miss V. Day. (Brockman Rd; Morrison Rd.) VC16; BEC rep., 1933, p.522.

ARALIACEAE

Hedera L.

H. helix L. 15, 16 Ivy

Native. Woodlands, hedges, on walls and trees; old quarries, etc; rare in the alluvial marshes, otherwise abundant throughout Kent. In dense beechwoods on chalk, particularly in plantations, it is often dominant in the bottom layer, being very shade-tolerant; but it normally only flowers when it has succeeded in climbing up a support to a place of better illumination. The flowering shoots have ovate-rhomboid leaves, quite unlike the palmate ones of the prostrate shoots.


2) Grain, PCH. Haws Wood. Tonge carr, J Moor.

5) Wood on chalk W of Eynsford PCH. Wood W. of Farnborough, PCH. Downe Bank Downe. 396611 PCH. Pilgrims Way, Polhill PCH. Pilots Wood PCH.


9) Copse SE of Minster AG Side.

10) Westerham Wood, PCH; 82! Shoreham village PCH. River above S. Darenth PCH. St John's Jerusalem PCH.

11) E. Malling (Well St; Rocks; village) MNE. W. Malling (St Leonards St). Roadside NW of E Barming. Wall SE of Chequers W. Farleigh '54. Platts Heath '54.


[APIACEAE]

Hydrocotyle L.

H. vulgaris L. 15, 16 Marsh Pennywort, White-rot

Native. Valley bogs, fens, borders of ponds on peaty soils, dune-slacks, boggy alderwoods; usually on peat, but tolerant of a fairly wide range of acidity.

1st record, 1632: Marshes W. of Sandwich, Johnson, Descriptio, p.25.

1) 46 Bog on Keston Common, 417642, 1944-57. 46 Holwood Park, by lakes. 47 Round the western pond, Chislehurst Common, 442701, 1957 PCH, HMP. [on a common at Locks Bottom, 1838, AA BM.]

3) boggy ground in grassland N. of Dunkirk, 1945. By pond near Blean Church, 1955, R.G.W.


W) Pond NW of Buckhall, W of Betersden, '54, 915400.


15) In all the fens of the Hoppen pits, Dungeness; and in damp disused shingle workings. Damp hollows of dunes, Greatstone; and Romney Warren, 1947. Wet hollows on shingle beach W. of Hythe.

Sanicula L.

S. europaea L. 15, 16 Wood Sanicle

Native. Old woodlands; abundant in the chalk woodlands, especially in dense beechwoods on slopes, where it is often dominant in the herb layer; frequent on base-rich clays and loams on the Gault, and on the Hastings Beds; plentiful in woodlands on ragstone soils; less common on sands and heavy clays, avoiding base-poor soils; extremely shade-tolerant, in fact shade-demanding.

1st record, 1632: Nash to Qiex, Johnson, Descriptio, p.20.

1) Holwood Park. W. Wickham, 1916, Hb. Davis MNE.


432 Apiaceae was subsumed into Umbelliferae in Stace edition 2, with which the manuscript begins.


12) Cadmans Wood, E. of Brook; Nocket Hill Wood.

13) Ragstone escarpment woods, Scords Wood MNE; Rooks Hill. Below Broadhoath Wood ‘50 MNE.

15) waste ground by sea wall, N. of Littlestone, Mrs J. Rix, det. D.McC, 1957.


Astrantia L.

[‡] A. major L.

Alien in Kent.

11) “Maidstone”, Mrs. Seamark, 1907, MNE.

Eryngium L.

[‡] E. planum [L.] (Blue Eryngo)

6) Hedge Place Road, Stone: several plants naturalised on verge – a garden escape, 1961, HMP, 578742.

15, 16 Sea Holly 7/51

Native. Sandy and shelly beaches, young sand dunes; now rare and very local, but in great quantity still N. of Sandwich Bay, and quite plentiful at Shellness, Sheppey.


1) Casual on waste ground, Chislehurst, Miss Henley, teste W. Watson.


Eryngium campestre L. [15, 16]  
Field Eryngo  
Native. Sand dunes, rough chalk downs; very rare, and apparently recently extinct.  
1) Reported as an alien, waste ground, Chislehurst west, c.1938, Miss G. Heeley.]  

7) Bredhurst Hurst, E. Philp, in open grassland area; 1984! C.100 plants; [locally] abundant 2000, O. Davis; J. Pitt.  
15) Dunes, Romney Warren, near the Targets, with Ammophila, F.J.H.; 1880, J.G. Baker, apparently destroyed by alteration of the ground, 1892.  
16) Brookmans Road and Herdson Road Shornecliffe: waste ground and bombed site, 1946-1947, Miss V.P. Day.  
(Very common on dunes at Sandgatte, W. of Calais, and on the chalk inland from Cap Blanc Nez, so probably native in Kent; it is only surprising that it is so rare with us.)  

Chaerophyllum L.  
C. temulentum L.  
Rough Chervil  
Native. Hedgebanks, wood borders, waste ground, especially on the drier soils; very common generally, but rare locally, as in parts of the Weald.  
1st record, 1777: Faversham, E. Jacob.  
1) 46 Hayes, D.McC.  47 N. Cray Village, 1945.  37 Beckenham Place, 1956, PCH.  57 Dartford Heath, 1954, GMB.  
2) 75 New Hythe.  37 Grain 1958, Mrs AG Side.  
3) 15 Harbledown Village.  
4) 35 Sandwich, E. of Town. Sandwich Bay.  
5) 45 Hogtrough Hill, N. of Brasted. Darwins Bank, Downe, ‘55 JEL. Halstead, 1852, AA BM.  
6) 57 Darenth Rd SE of Dartford.  77 Higham Church Street.  67 Shorne Village.  Ryarsh, Pilgrims Way.  57 Mounts Rd Greenhithe, ‘44 PCH.  S. of Spindrift, Cooling 44.  
7) 76 Bluebell Hill. By roadside.  76 Lane up downs from Burham.  
12) Orlestone.  

Anthriscus Pers.  
A. sylvestris (L.) Hoffm.  
Cow Parsley, Queen Anne’s Lace  
50/51  
Native. Roadside verges, hedgebanks; open woods, especially of Ash or Ulmus procera, on damper loams and clays, often along the river valleys. One of the commonest and most abundant of all Kent plants, as in S. England generally, ornamenting the roadsides everywhere inland in May. Absent from Dungeness area. It is almost certainly native in the woodland habitats of the type named above.  
4) Sandwich Bay.
7) Sandwich Bay. 5) 397612 W. of Highams Hill 1958 PCH. Drive to Northstead, Pratts Bottom, 1956.
12) Sandy Roadside, Lenham Heath '54.
15) Plantation by Church, Old Romney, 1962.
‡ A. ceralfolium (L.) Hoffm. Chervil
Alien, in hedgebanks and on roadsides, very rare.
1) Eltham, W.W.R.
11) Addington, Gray.
13) Fishers Castle, Tunbridge Wells, T. Walker.
14) Roadside, Small Hythe, S. of Tenterden, 1949, P.R. Bell and F.R. MNE.

A. caudalis Bieb. (A. neglecta Boiss. & Reut.) 15, 16 Bur Chervil, Beaked Parsley 27/51
Native. Sandy banks, dunes, sand and shingle beaches, river- and sea-walls; common on the coast and by tidal estuaries, very rare inland.

1st record, 1777: Faversham, E Jacob, Pl. Fav., p.71
1) [Catford Bridge, WWR. NE of Beckenham, E. de C. Woolwich, AHWD. Greenwich, MNE 1839.
2) Plumstead Marshes AHWD (1944!). Erith to Cross Ness on bank, PCH. [Dartford Creek, 1899 TS Goff MNE.] 57 Riverwall, Stone Marshes. 57 Swanscombe Marshes. 67 Northfeel. Riverwall, Denton; Chalk; Higham; 77 W. of Cliffe. 77 banks, Upnor. 87 Grain. 87 All Hallows Beach. 86 NE of Otterden Quay 1960 MNE. Bank, Slayhills Wash, 1957, EGP & GM. 76 by Cuxton Station. 97 E of Sheerness. 07 N. of Leysdown. 06 Sheilness. 06 Banks about Oare, 1946. Fields by Faversham Creek 1946 DHK. Queenborough, E.S.M. 97 Sheerness Canal Dump, '57, O. Davis. (Sheppey Hb Davis 1908.) 06 Seasalter, AHWD; 1948! MNE. (Faversham, E. Jacob.) 86 E. of Newington, sandy bank of A.2, 1946.
3) [Swalecliffe FJH. Whitstable, FJH.]

433 Map given here is assembled from hectad numbers listed along right margin of manuscript page, not put into map format by Francis Rose.-
5) Salt Box, 1933, AFG Kerr BM.
6(E) 67 Chalk Village, 1946 MNE.
8) 34 St Margarets Bay, 1946.
10) 57 Track below Darent Church, PCH. 55 530579 waste g[round]d, Otford Rd, Sevenoaks, 1962, D.McC. (not 45)
11) (65 Bank on Folkestone Sand, Lunsford Lane, E. Malling, 1946 MNE.) 54 R[ail][wa]y Bank, Hildenborough, 563482, CAS.
12) Bank, Ashford Station, 1956, E. (not 75) (not 85)
15) 01 very common at 01 Lighthouse; 01 Hoppen pits; 01 Boulderwall; Dungeness, 1946-54, MNE. 02 Romney Warren. 02 Dymchurch, 1947; 1950 LWW. Lydd, R.G.W. 13 Beach W. of Hythe, 1947. 13 Seabrook.
16) 23 Folkestone Leas 1946.

Scandix
S. pecten-veneris L. 15, 16. Shepherd’s Needle
Colonist. Arable land and waste open ground, especially on sand and chalk: not very common, but well distributed.

1) 56 Old Swanley, in fields, 1948.
2) 76 Railway Bank, Cuxton, 1944, 1946. 96 Sandy banks by A.2, S. of Green Street, Teynham. 77 Minster, Sheppey, A.G. Davis, 1917, MNE.
3) 06 094647, etc., cornfields on L.C., E. of Seasalter Church, 1958, H.M.P. Graveney, farm weed, R. Theobald, 1956.
4) Field at Hacklinge, 1946. Field S. of Sandwich, 1948, MNE.
6) 57 Greenhithe, 1946. 66 605666, Hartley, Mrs Woods. 67 Shingle Well, 1912, C.E.B. BM. 76 Cuxton, 1939, J.B.M. BM.
7) Cornfield, Westwell, E. Scott. Magpie Farm, Bredhurst, 1960 MNE.
10) Cornfield, Dunton Green station, P.C.H.
13) Sandy arable land S.W. of Pembury, 1944, J.R.W. & F.R.

‡ Myrhris odorata (L.) Scop. 16 Alien, very rarely naturalised.
11) By road in Honnors’ Nurseries, Allington. Mote Park, L.R.A.G., 1957 MNE.

(Bunium bulbocastrum L. 292 occurs no nearer in Britain than Herts. And Camb., but it is rather frequent on the chalk grasslands of Pas de Calais up to the coast at Cap Blanc Nez!)

Conopodium

C. majus (Gouan) Loret 15, 16 Pignut, Earthnut
Native. Woodlands, and occasionally in pastures, grass-heaths and scrub, on light sandy or loamy soils in most cases; common in wooded parts of the county, particularly on the Greensand and in the Weald. The tuberous root is about the size and shape of a hazel nut and is very pleasant to eat, raw or cooked.
1st record, 1777: Faversham, E. Jacob, Pl. Fav., p.16.
5) 397612, copse W. of Highams Hill on drift, 1958, PCH. Pilots Wood, PCH.
10) Wilderness Woods, Seal.
12) Roadside, Hothfield.

Pimpinella L. 15, 16
P. saxifraga L.  
Native. Dry pastures on sand and loam, old sand dunes, chalk grassland (of high constancy), dry roadsides and hedgebanks, churchyards and old walls; very common in suitable places throughout Kent.
1st record, 1629: Gravesend to Rochester, Johnson, Iter, p.3.
4) Dunes, Sandwich Bay, MNE; N. of Deal. Sandy field S.W. of Preston Church, 1948 MNE. Track bank to sea, N. of R[ailway] N[orth]. Nicholas at Wade, 62, 271690.
9) N. Foreland Golf Course 1954 MNE.
16) Scars W. of Hythe; below Lymme Castle.

P. major (L) Huds. 15, 16
Greate Burnet-Saxifrage
Native. Woodlands on base-rich loams, and clays, and on chalk, wood borders, roadside verges and hedgebanks; abundant in the chalk districts of mid and east Kent, becoming much less common westward; most abundant throughout the ragstone districts; common on the Gault, frequent on Weald clay and locally on the Hastings Beds on lane sides; scarce in the Blean and in N.W. Kent.
This plant is probably more widespread and abundant in Kent than in any other part of England. This is not due to any particular soil occurrences, apparently, as it occurs on a fairly wide range of soils, appearing to need only moderate base-richness, good drainage, and some shelter. In Surrey it is locally frequent only on the chalk of the east, and it is, strangely, very rare in Sussex, occurring only on the Chalk near Eastbourne, apart

534 The reference should have been to the 120 copper plates of English Moths and Butterflies by Benjamin Wilkes, and the text refers to Seseli pratense (as Meadow Saxifrage) at a meadow near Cookham near Westram [Westerham] in Kent (which may have been at Crockerham Hill; a Cookham Lodge Farm was known in the Westerham area).
from a solitary record at Robertsbridge: it is frequent, nevertheless, in the High Weald of Kent within a mile or two of the border, occurring at Penshurst, Cowden, and Kilndown. Its distribution suggests that local climate factors may be important; it is as common in the woods on the chalk S.E. of Boulogne as it is about Dover.


2) 06 Beach by Sportsman 1958, Mrs Brickenden.
4) Roadside hedgebank by A.257, on Thanet Sand, ¾ mile E. of Ash.
5) Pilgrims Way E. of A.21, SW of Twitton, Oford.


11) Ryarsh Wood, on gault MNE. Border Horse Wood, on gault. E. Malling Heath road. 1m WNW of Leeds MNE. Brickfield on gault N of Platt 620575 1956 DMcC. New Hythe Lane MNE. Allington Wood MNE. N of Teston. Road W of Kent Street N of Mereworth 54. By B2063, Linton; Coxheath; Chart Sutton 54; Sutton Valence 54; E. Sutton 54; S. of Langley 54; Kings Wood, Ulcombe 54; ½ m SW of Lenham at Platts Heath 54; Fairbourne Heath 54, all by verges of plateau top roads.


var. dissecta N.E. Brown. Not as common now as stated in Fl. Kent, but scattered on the chalk of E. Kent. Not uncommon on chalk in the Bas de Boullonais, Pas de Calais, just across the straits of Dover.


var. orientalis

3) Swanton Banks, Mrs. B Welch, 1951.

‡ Aegopodium L. 295
‡A. podagraria L. 15, 16 Bishops’ weed; Goutweed; Ground Elder

Denizen, long and completely naturalised. Roadsides, Hedgebanks, wasteground, borders of woods near houses and gardens; nowhere in completely “natural” habitats.


Sium L.  

*S. latifolium* L.  15, [16] Greater Water-parsnip  

[There are two account versions in the manuscript. The first is in standard format, presumably prepared in the 1950s/60s. The second is a sheet prepared probably in the 1990s in which the older records are assembled and assessed, and post-1945 records are listed with grid references, mostly monads; this may have been in preparation for a 2000 survey, rather than for the Flora.]  

**Version 1:**  

Native. Marsh dikes; rare and very local; at the present day nearly confined to Romney Marsh and its adjacent alluvial levels (district 15), where, however, it is still widespread, frequent, and locally plentiful. There is one outlying locality at Willesborough, but it appears to be extinct in the Thames, Ravensbourne, and Cray Marshes and about Faversham, in which areas there are numerous old records. Forster’s record at Tonbridge is unconfirmed, though possibly correct.  


[1] W. of Deptford, Doody, not actually Kent. Lewisham; Rushy Green Milne & Gordon, 1793. Between Eltham and Lee; by Cray, St Mary Cray; Cooper, Fl. Met.]  


**Version 2:**  

(1) Old records in Hanbury & Marshall, *Flora of Kent*, 1899 – Some of these are probably errors, as the plant was confused by earlier botanists with *Berula erecta*, etc.; others will be genuine but these have become extinct due to changes in environment,  

Between Redriff and Deptford, Doody, 18th century  

Lewisham; Rushy Green; Mile & Gordon, 1793.  

Gravesend to Woolwich  )  

Eltham to Lee  ) Cooper, *Fl. Metropolitana* 1837  

By river Cray, St Mary Cray  )  

Northfleet  )  


Faversham, J. [sic] Jacob 1777; & Cowell, 1839.
Tonbridge, Forster, 1816.
Stour above Canterbury, J.S. Mill, 1863 (he was very reliable).
(2) Records 1945 – 1965 (or earlier) F Rose and his co-workers (most records 1958-62).

Ditches by railway S of S. Willesborough, FR 1950 – not seen since c.1960 (area changed); 017 403 etc., but worth a look! extinct now?
Shirley Moor – abund[ant] 1945-50, 9332, etc.
Reading Street – 9230.
SW of Small Hythe – 894298.
S. of Wittersham Road Station – 8628.
S. of the Stocks, Wittersham, 9126.
Hexden levels near A.28 – 8328.
S of Kenardington – 9831.
S of Warehorne – 9931.

Berula erecta (Huds.) Coville Lesser Water-parsnip
Localised record for district 15: dyke below The Roughs, west of Hythe in 1958 (TR1333?) [L.J. Margetts]

Oenanthe fistulosa L. Tubular Water-dropwort
In relation to district 15: Brackish, calcareous and weakly acid waters, usually stagnant. Localised records:
TQ82: Sandhurst Levels in 1954 [MNE]
TQ92: Snargate (tetrad TQ92Z); and dykes by road north of Oxney in 1954
TQ93: Shirley Moor (TQ938320) [E.S.]; south of Kenardington (tetrads TQ93Q and/or 93V); Royal Military Canal; The Dowels, Appledore in 1959 (tetrad TQ93V) [MNE]
TR01: Dungeness, dyke south of Boulderwall Farm (tetrad TR01U); and Galloways Road (TR040198?)
TR02: Brenzett in 1945 (tetrad TR02D) [MNE]; 2) Ivychurch (tetrad TR02I); Old Romney (tetrad TR02H); and near Romney
TR03: south of Ham Street (tetrad TR03B etc); and Ruckinge (tetrad TR03G)
TR13: Near Selby Farm, south of Lympne in 1958 (TR1033) [MNE].

Oenanthe pimpinelloides L. Corky-fruit Water-dropwort

Oenanthe lachenalii C.C. Gmel. Parsley Water-dropwort
In relation to district 15: Locally common in Marsh. Localised records:
TQ92: southwest of Appleton in 1955 (tetrad TQ92P); and west of Brenzett (TQ9927, possibly TR027)
TQ93: Shirley Moor in 1954 (TQ940320) and in 1955 to south (tetrad TQ93G etc) [MNE]
TR01: Widespread: dykes southwest of Boulderwall Farm, Dungeness (TR0619); and South Brooks, south of Lydd (tetrads TR011 and/or 01J)
TR02: Ivychurch (tetrad TR02I) and much of Romney Marsh area; Snares (TR0129); hollows of Romney Warren (tetrad TR02S), south of Littlestone in old estuary in 1950 (tetrads TR02S and/or 02K); and hollows of Greatstone dunes in 1947 (tetrad TR02W?)
TR03: south of Ham Street (tetrad TR03B etc)
TR13: near Prince of Wales in hollows of shingle beach west of Hythe in 1947 (TR142337) [MNE]; and sandy area behind sea wall ½ miles northeast of Dymchurch in 1947 (tetrad TR13A) [MNE]

Oenanthe crocata L. Hemlock Water-dropwort
In relation to district 15: Probably absent from the Levels, though found at Dungeness (TR01) and east of Reading Street in 1956 (tetrad TQ93F). Abundant in the Weald.

Oenanthe aquatica (L.) Poir

Fine-leaved Water-dropwort

Common in district 15, notably in Brenzett and Snargate area. Localised records:

- TQ82: dyke south of Small Hythe in 1952 (TQ894298) [D. McClintock]; and Hexden Channel (TQ87295)
- TQ93: Shirley Moor (TQ933322) [E.S. – MNE]; The Dowels northeast of Appledore in 1955 (TQ93Q and/or 93V) [MNE]; Royal Military Canal, Kenardington (TQ980315); and Appledore Heath (tetrad TQ93K)
- TR02: Brenzett (tetrad TR02D); Ixchur (tetrad TR02I); dyke northeast of Old Romney in 1959 (TQ92P and/or 92U); and northeast of Ixchurn in 1955 (TQ987295) [MNE]; and Orgars Wick in 1947 (tetrad TR03V)
- TR13: dyke south of Burmarsh in 1947 (TQ93K); ditch near Selby Farm, south of Lympne in 1958 (TQ93Q and/or 93V) [MNE]; and northeast of Burmarsh in 1948 (TQ93K)

Aethusa L.

A. cynapium L. 15, 16

Fool’s Parsley

- Probably native. Waste ground, arable fields, allotments, gardens; common through most of Kent
- 1st record, 1632: Thanet, Johnson, Descriptio, p.14
- 1) Hayes, 1933, AFG Kerr, BM. Shooters Hill Woods, 1954 GMB. N. Cray tip, PCH. Bexley Village PCH.
- 2) Oare, nr Old Mill Pond, 1954 MNE. 87 Roadside, Grain by cult[ivated] field, 1958, Mrs AG Side. Seasalter.
- 5) Halstead A.A. BM. 36 Cornfields on chalk, nr Greyhound Kennels, 1m W. of Leaves Green, 3961, 1958, PC & JF Hall.
- 7) Hempstead, 1938, JBM BM.
- 9) arable on chalk, NE of Monkton, W. of Plumstone Fm, 1958 MNE.
- 10) Cornfield by Shoreham Ch[urch], PCH. Eynsford PCH. R[iver][Meadow S. of S. Darenth, PCH.
- 12) Westwell. Hothfield.
- 13) (Stair House Garden), Lamberhurst, 1938, J.R.W.; 1956, PCH.

Foeniculum Mill.

F. vulgare Mill.

Fennel

Native, near the sea and tidal rivers, where it is very common on waste ground, consolidated beaches, fixed dunes, cliffs, sea walls, dry banks, etc; an escape inland, on roadsides and waste ground near villages and farms.


3) Boughton Street. 16 Whitstable golf course, 57 HMW.
6) Rochester, abundant. Gillingham. Rainham. Bluehill Hill. 05 Cutlers Fm, Chilham ES.
9) Thanet Sand Cliffs, Pegwell Bay, abundant.
12) 15 Canterbury, RGW.
13) 54 Waste g[roun]d by R[ail][wy], Hig Brooms, KEB: CAS. [Albion Rd., Tuinbridge Wells, CAS; destroyed.]
16) Lympne, nr Castle on scarp, 1946, DMcC.

Silium Mill.
S. silaus (L.) Schinz & Thell. Pepper saxifrage
Native. Pastures, damp meadows, roadsides, rough grassland, scrub, railway banks, nearly always on heavy clay soils with poor drainage; locally very common on the Weald Clay of 11) and 12), and on the Gault in 10, 12) and 16); London Clay of 3), the Blean in 6E), the W. part of the Hoo Peninsula, frequent on the London Clay in Sheppey; locally frequent in damp meadows of the upper tidal Medway area; rare elsewhere even on the Wadhurst Clay of 14), and absent in the chalk districts 5)–9) and most of 13) and 14).

46, 47
2) Marshy fields S. of Cliffe Station 1958. 76 Holborough Marshes 1945. NE of Frindsbury 1949 MNE. 86 Bank by Funton Creek, 1962, MNE. 76 Marshes S. of Snodland. 76 New Hythe Marshes, 1946 MNE. Oare Creek 97 East Church. 07 Warden. S. of Minster. 97 Brambledown.

10) 57 Meadows S. of Darent Church. Lane N of Brasted, 1951. 55 Pastures and Railway banks on Gault, R[ail][wy] E. of Kemsing Station. 55 S. of Kemsing Village, towards Seal, 560758, CAS; FR. 45, 55 not in Eynsford sq[uar]e; @Kemsing, Westerham sq[uar]; Malling, Maidstone; Hollingbourne (1955); SE of Lenham, 1953; Stowting; Ashford; Hothf[iel]d; Headcorn; Marden; Pembury; Tonbr[idge]; Edenbr[idge].
437 E) 65 Lunsford meadows. 66 Birling Marshes.

11)E) Woodgate, Ryarsh, ‘46. 75 Bearsted Golf course, on Gault.


435 In pencil.
436 In pencil.
437 Although E and W headings have been given, it is not at all evident that entries have been divided between them.

12) 64 R[oad]side on Gault N.E. of Hinxhill. Rippers Cross 1959. Orlestone. 14 Stowting Meadows, '55. 66, 65, 75, 85, 44, 54, 64, 74, 84, 83, 95, 94, 04, 14, 93, 03 (not 05), (not 15, 63, (not 53), (not 73), 82, 13, (not 23), (not 92, not 02, not 01), not Dungeness, not Romney, not E Oxney-Fairfield, W. Oxney 1956, Sandhurst 58

Bupleurum L.

† B. fruticosum L. Naturalised alien: very rare


9) Ramsgate, A.A. BM

(B. falcatum L. has its sole modern British locality in Essex (scrubby grassland on clay, Norton Heath!). It formerly occurred in Surrey (Reigate). In N France it comes as near as the Somme, where it occurs on very dry chalk downs above Amiens.)

B. tenuissimum L. 15, 16 [Slender Hare’s-ear]439 16/61

Native. Banks, seawalls, dry grassland, and uppermost zones of salt marshes, near the sea and tidal waters. Very common in the Thames and Medway estuaries, rare by the Stour and on the Romney Marsh coast.


4) 26 E. of Reculver, ‘50 REW; Dowker; by seawall, 1960, HMW. 35 River wall of Stour, below Sandwich, FJH; 1957! MNE.

8) 05 Bank at Chartham, E. Robinson.

9) 36 Pegwell Bay, 1838, AA BM; 1935 MS Campbell BM. 26 Minnis Bay, 1960, Mrs B Dodds.

15) [Dymchurch, CPSK; S, of, 1863, JSM. NE of Romney; W. of Hythe, F.J.H.] 01 South Brooks, by saltings, 1947, JH Vavinder. 02 Littlestone promenade, 1950, MNE.

---

438 Pencil entries given in purple.

439 In manuscript given as Narrow-leaved Hare’s Ear.
**B. baldense** Turra occurs on the cliffs of Beachy Head, Sussex.

**B. rotundifolium** L. [15, 16] [Thorow-wax][440]
Extinct. Formerly an abundant colonist in the chalky cornfields from 16th to 18th centuries in the district between Crayford, Wilmington and Swanley on the west, and Higham, Shorne, Cobham, Longfield and Kingsdown on the east, S. to Eynsford; also in Thanet, about Chatham, Ospringe, and near Tunbridge Wells. 16th—18th Centuries. Not recorded since F.J. Hanbury’s record at Swanley in Fl. Kent (1899). Improved agricultural methods and cleaner seed appear to be responsible for its disappearance, as in other counties.


**B. subovatum** Link ex Spreng.[441]
8) 1 plant in neglected, but recently dug over, garden at Westwell 1960 ES.

**Apium L.**

**A. graveolens** L. 15, 16 Wild Celery.
Native. Ditches, and marshes, usually in brackish water, by tidal rivers high up the estuaries; very common locally near the coast, and on Romney Marsh, very rare inland, where it was probably always an escape from cultivation. It does not occur in tidal marshes where the salinity is as high as that of seawater.


2) Plumstead Marshes. Erith Marshes. Below Crayford (Barnes Cray) in ditches ‘44. 57 Stone Marshes. 57 Swanscombe; and 67 Northfleet Marshes. 67 Shornemead. 77 Higham Marshes, in dikes. 87 Grain MNE; 1958, Mrs AG Side. 76 Cuxton. 76 Halling Marshes, Ditch by Medway ‘44. 76 by Medway, New Hythe MNE. 76 S. of Snodland ‘44. 75 Aylesford, by Medway. 76 Rose Cottage Pits Eccles EG Philp, 1960. 06 Faversham Creek (dikes near to), 1961, C. Turner. 96 Minster Marshes, Hb. AG Davis, 1917 MNE. 06 Isle of Harty. 06 N. of Oare Mill Pond ‘59 MNE. 97 Ditches by canal, Sheerness, 1955, O.D.


8) 23 brackish lagoon behind beach, below Abbotscliff.

11) 55 Roadside ditch near Shipbourne, R.G.W. Also reported inland on good authority, formerly in ditches W. of Edenbridge; ½ mile SE of Four Elms, E.S. Salmon; N. of Marden by road, FJH. Headcorn, F.J.H.

15) 02 Lydd. 02 Ivychurch. 02 Old Romney. 02 Dymchurch, MNE. 13 Brackish Sewer 2m W. of Hythe, L.J.M. 1957.

**A. nodiflorum** (L.) Lag. 15, 16 Fools watercress, Marshwort
Native. Streams and ditches, especially where the water is moving and base-rich, very common.


1) Holwood Park. 46 Crofton Heath PCH. 46 High Woods, Crofton PCH. 47 Bexley Mill Pond PCH. 47 [River] Cray, N. Cray, PCH.

2) 57 Dikes, Dartford Marshes, 1962. 97 Brambledown Pond, ‘55. 97 Oakwood, N of Brambledown 1955. 06 Oare Meadow, S. of Creek, 1959 MNE, ‘62. 06 Dikes W. of Seasalter 57 HMW. 16 Ditch, golf links, Whitstable ‘57 HMW.

3) 15 Canterbury Old Park ‘55.

4) 35 Hacklinge Marshes. Ditches behind dunes, Sandwich.

6) 67 [locally] abundant in ponds in chalk pit, Swanscombe, ‘60, HAS.


10) [River] Darent; Otford PCH. N. of Shoreham, PCH. Eynsford, PCH. E. of Darent PCH. St. John’s Jerusalem PCH. N. Darent ch[urch] PCH.


---

440 In manuscript given as Round-leaved Hare’s Ear.

441 In manuscript given as *B. lancifolium*. 
E end of Mote Park ‘SS.  Leeds, 1959 MNE.  Headcorn (Moatenden) 1944.  676493 Ditch E of Hale Street 1957 CAS.


13) Ditch S. of Lamberhurst Ch[urch], 684365 CAS.

var. ochreatum Dr.

12) Hothfield 1891, ESM BM.  Westenhanger, 1893, ESM BM.

A. inundatum (L.) Reichb. F.  15, 16 {Lesser Marshwort}

Native.  Shallow ponds, and ditches, on clay, sand or gravel, usually where competition is slight; rare, much more so than formerly.

1st record, 1777: Nagden Marsh, E. Jacob, Pl. Fav., p.108.

1) Chislehurst Common, W. Pond, AHWD; 1946! MNE.

11) W) 683493, pond on gravel, E. of Hale Street, E. Peckhan, plentiful, 1954, MNE. [formerly common about Tonbridge, W.W.R.; not so now!]


Petroselinum Hill

P. crispum (Mill.) Nyman [ex A.W. Hill]  Parsley, Naturalised Alien

1) Grove Park, Cole.


6) Chalk-pit cliffs, Northfleet, E. de C. (nr. the Church, 1946!).  Mounts Road, Greenhithe, on chalk banks and cliffs, 1946; 1954, PCH; 518746 1957 HMP.

7) Rochester Castle, W.W.R.; JBM, BM; 1949!

8) St Margarets Bay, Fl. Kent.  Cliffs by path above car ferry, Dover, E Cliff, 1960, Mrs B Dodds; 1962, H.M.P.

9) Thanet, Aubrey Moore.  Pegwell Bay cliffs, L.W.W.

11) Gravel pits by Medway, S of Yalding, CAS.  By Medway, Maidstone, 1938, E.D. Morgan TLS.  Ditton S. Quarry 715566 ’57 CAS.

15) Dungeness, on shingle near “Pilot” Inn, 1946.

P. segetum (L.) W.D.J. Koch  15, 16 “Corn Caraway”

Native.  Sea walls, dry banks and roadsides, and arable land, on chalk, clay, ragstone and sand; common on the coast and near tidal rivers, rarer on banks and in cornfields inland.  It occurs in habitats that are dry, exposed and warm in summer, where competition, except from grasses, is slight; often found associated with Bupleurum tenuissimum, which it superficially resembles, and Torilis nodosa.

1st record, 1629; Grain to Cliffe, Johnson, Iter, 8.

1) [Foots Cray; St Mary Cray, 1852, J.B. Syme in Hb FJH.  Charlton, E. Edwards, Phyf. 1 (1842) p.428: 1852, J.B. Syme in Hb. FJH.] [Plumstead Marshes, 1885, J.B. Syme in Hb FJH.]

2) 57 dry bank, Dartford Marshes, 1962.  Banks and river walls near the Thames, at 57 Stone; 67 Swanscombe; 67 Northfleet; 67 Denton; 67 Chalk; 67 Shorne MNE; 77 Higham; 77 Cliffe; 87 Grain; 77 near the Medway at Upnor; 76 Holborough Marshes; 76 Snodland Marshes; Burham MNE; Halling; nr. Cuxton Sta[tion] on R[ight] bank.  Banks and Sea walls by the Swale, 96 Elmley, abundant; 06 Harty MNE abundant; 06 Shellness, abundant; 06 Graveney sea wall; Sheerness.


4) 35 Waste ground N. of Sandwich.  35 Roadside bank, Woodnesborough, 1945.  36 nr Castle, Richborough MNE.  26 Grove Ferry.


7) 76 Rochester Stadium, 1939, JBM BM.
Sison amomum L. 15, 16  Stone Parsley, Hedge Stonewort

Native.  Roadside verges, hedgebanks, railway banks, and rough old pastures and open scrub, mainly on heavy soils; common in many districts, especially on the N. Kent coast and on the Weald Clay, but local and absent over wide areas.

1st record, 1632: Nash to Quex, Johnson, Descriptio, p.21.


3) 16 Tankerton slopes.  16 Tylerhill.  16 N. of Herne.  16 S. of Herne.  26 Reculvers.  15 Fish pool Hill, nr. Dameria 1956 Miss M.E. Milward. ’1

4) 25 Roadside, W of Ash, RGW.  25 Roadside S of Wingham, RGW.

6) 66 Longfield Hill 621679 by Dump, Mrs Woods.

8) Kearsney Abbey, by R[iver] Dour, Mrs D. Rowlands.

9) Ramsgate, 1857, T.M.; 1921, G.A. Bristow BM.

10) Otford.  Darenth, 1913, R.H. Compton, BM.


14) Ch[urch] y[ar]d & Lane by Church, Wittersham 1962.

15) 138340 by R[oyal] M[ilitary] C[anal], Burmarsh Road, W of Hythe, 1958, LJM.

[Cicuta L. 288

C. virosa L.

The Kent records for this are errors: see Fl. Kent, 1899, for discussion of the evidence.

It is still locally common in the Broads district of E. Anglia, but no recent workers have been able to confirm it in Kent or anywhere in S.E. England, except Burton Park Lake, W. Sussex.]

†Ammi L.

A. majus L.  289  casual alien.

1) Fallow field Swanley, 1884, H. & J.G.
4) Ash, DMcC, 1960, MNE. (2 plants nr. Sandwich, 1877, Dowker.)
6) Lucerne Field, Cuxton, Miss C. Stevens, B.E.C. Rep., 1926, 115. The old Greenhithe record (see Fl. Kent) was probably a mistake.
13) Falconbridge (?Falconhurst) Cowden, Mr. Justice Talbot, BEC Rep 1926, p.115.

A. visnaga (L.) Lam. Casual alien

‡ Falcaria Bernh.
‡ F. vulgaris Bernh. 15 Longleaf

A. sylvestris L. 442 15, 16 Wild Angelica 307

Native. Fens, damp meadows, stream- and ditch sides, wet woods, coppice woods on chalk; very common ove the whole of the Weald, also the Gault and Greensand, and in the Medway valley down to Snodland, in the Stour Valley to below Canterbury, in the fens about Wingham and Ham, and locally in coppice woods on chalk and on the clay-with-flints plateau, in E. Kent, between Wye and Dover; absent from most of the N. coastal plains of Kent (not known between Northfleet Brooks and Tonge, E. of Sittingbourne) from the Hundred of Hoo, Grain, Sheppey, Thanet; and very rare in Romney Marsh. It requires, apparently, some shelter, like Oenanthe crocata, which is similarly, absent or very rare in much of the N. Kent coastal plains and marshes.


2) 67 Northfleet Brooks, 1944. 76 West Wood SE of Snodland, '55; 56 New Hythe; 56 W. of Eccles; 56 by the Medway, above and below Aylesford; Forstall. 96 Alder Swamp carr S. of Tonge Pond, 1956. 06 Oare Mill Pong, 1957. 06 Wet Wood W. of Waystreet Farm, Hernhill, 1955. 06 Wet Wood S. of Oare Mill Pond, 1957. 06 Davington Osiers, 1956.

442 The manuscript includes a deleted version of some of the records; additional or alternative readings from this have been carried through into this transcript.


5) Downe, Hb. SLBl, det. C.E.B. (as var. vulgaris Fischer BEEC Rep 1920, p.23.)


15) Dike Shirley Moor 940320, '55.


The occurrence of this species in some quantity in many coppice woods with Deschampsia caespitosa and Orches purpurea in sheltered dry valley sides on chalk in E. Kent 8) is interesting: it is probably connected with the high rainfall and humidity of the valley sides of the E. Kent chalk. A similar climate prevails in the Bas de
Bouillonais, Pas de Calais, where Angelica is similarly frequent on the chaok, with Orchis purpurea, and Deschampsia caespitosa and Pimpinella major.

[†]A. archangelica L. Garden Angelica

2) Woolwich Arsenal, plentiful by a ditch, J.F. Hall. Medway banks above Aylesford, Miss Bacon.

Peucedanum L. P. officinale L. 15 Hogs Fennel, Sulphurwort.

Native. Banks by tidal creeks above normal spring tide level; rough banks by the sea and scrubland on London Clay; very rare but locally abundant at Faversham Creek and about Whitstable. Otherwise only occurs in Britain in similar habitats, W. of Walton-on-the-Naze and N. of Thorpe-le-Soken in N. Essex. In central Europe, it occurs on warm sunny banks on clay (e.g. W. of Tübingen in S.W. Germany, on steep slopes of calcareous Keuper Marl above the River Necker, among vineyards, associated with Bupleurum falcatum, Linosyris vulgaris, Aster amellus, etc! Facts of this kind may indicate that many of our rare plants, confined with us to certain restricted types of habitats, are really represented with us only by certain ecotypes of narrow ecological tolerance.

1st record, 1597; Faversham Creek and Whitstable, Gerard, Herbal, p.86.

2) Faversham Creek, Gerard (locally dominant for over ¼ mile along the east side of the creek, from about ¼ mile N.E. of the church, and along a side stream, 1954) MNE.


Reported by the “Thames in many places” in Ray, Cat. Angl, p.240. This has never been confirmed. Like so many other species, it may have grown by the Lower Thames and been destroyed by embanking, drainage of marshes, building, pollution, etc. (cf. Althaea officinalis, Sonchus palustris, Leucojum aestivum, Schoenoplectus triquester, Sium latifolium, Fritillaria, etc. all formerly by the tidal Thames in Kent and now apparently extinct.

1 mile SE of Faversham 1830, Pamplin, BM. Sea-bank Whitstable, 1922, T.I.F., BM. Hearn, about 6 miles from Whitstable, 1806, Sowerby BM. Herne Bay, 1838, WWN BM. Below Faversham, 1774, Lightfoot in Hb. Banks BM.

309

Pastinaca L.

P. sativa L. 15, 16 Wild Parsnip

Native. Banks, roadsides, waste ground, ragstone and chalk pits, railway banks, consolidated beaches, chalk grassland and scrub. Abundant in the chalk and ragstone districts, and quite frequent throughout most of the Weald and the coastal districts. Not a very strict calcicole, but it is not found in acid and waterlogged soils.


2) 47 Woolwich Arsenal ’44. 47 Ruxley Pits, TH Angel, ’58. 67 Edge of Northfleet Brooks ’44. 87 Grain, 1956, P.C.H.


4) Sandwich Bay.


8) Track NE of St, Margarets, 1962.


15) Dungeness, 1959, AF Mussellwhite.
16) Folkestone Warren.

H. spondylium L. 311
H. mantegazzianum Somm. & Levier

*H. mantegazzianum* Somm. & Levier  
(Giant Hogweed)

Naturalised alien: waste ground, plantations, river banks; occasional.

1) The Tarn, Mottingham 428733, 1956, PCH & JFH; 1957, H.M.P.
2) Vauxhall Lakes, 1958 RGW.


15) Knock Wood, E of Tenterden, Roadside on clay 62.

Tordylium L. 312

[T. maximum L.]  
Great Hartwood

Former Denizen or possible native, now apparently extinct

This plant occurs in Essex on a bank by a marsh dike at Tilbury, only 3½ miles from the Swanscombe locality, and abundantly in 1950's [in] grassy escarpment scrub on London Clay near S. Benfleet in Essex, where it has every appearance of being native. It may well have been native formerly on both the Kent and Essex sides of the Thames estuary, though its rather southern European distribution is against this hypothesis. *Fl. Kent* (1899) overlooks this record. (Loire near Angers, 1972!)

**Laser** Borkh.
**L. trilobum** (L.) Borkh. (*Siler trilobum* (L.) Crantz)

[no entry in manuscript]

**Torilis** Adans.
**T. japonica** (Houtt.) DC. 15, 16 Upright Hedge-Parsley
Native. Hedgebanks, roadsides, borders of woods, scrub; recently coppiced woods; very common throughout Kent.


2) Upnor. N. of Higham JBM. By A249 1m N of Iwade, 1954. Faversham Creek.
4) Sandwich Bay.
5) A.20 N. of Farningham PCH.
   Preston Hill. Halling Downs.
   hanger, NW of Westwell 62.
10) Otford, AA BM. River path below Shoreham PCH. W. of S. Darenth, PCH.
coppice, Barming ’54. Roadsides, Horish Wood.
W) by Pond N.W. of Buckhall, Bethersden. R[oald]side E of Dunks Green. 849437 Track to pond 1m E of
   Headcorn 1962. Frittenden Rd / SW Brook Wood, Headcorn 44.
12) R[oald]side, Lenham Heath ’54. N. of Criol Fm Shadoxhurst 1952 DMcC.
   (Wadhurst Clay).
14) Quarry N. of Brook Street, Woodchurch, 1955 MNE.

**T. arvensis** (Huds.) Link 15, 16 Corn Bur-parsley
Colonist. Cornfields: once rather frequent in Kent, to judge from old records, which cover all our districts
except 10). Now very rare, though still plentiful S. of Nash in 5).

2) Sheppey, Hb. Davis, 1918 MNE.
4) Fields N. of Wingham, R.G. Williams.
   Cornfields on chalk, near Greyhound Training Kennels, c. 1 m W. of Leaves Green, 3961, 1958, plentiful, P.C. &
   J.F. Hall.
6) Near Wrotham, 1774, Hb. Banks BM.
8) 1 plant, Turnip field, Wingham, 1951, R.G.W.
11) Near Maidstone, Rev. Fielding, 1893 MNE.
16) Cornfield, above North Road West, Hythe, Miss J. Gibbons.

**T. nodosa** (L.) Gaertn. 15, 16 Knotted Bur-parsley
Native. Dry banks, especially river- and sea-walls, and waste ground on dunes, shingle beaches, and dry cliffs;
nearly all its localities are close to the sea or tidal water, and it is v[ery] common in such habitats; very rare
inland on dry, sunny banks.

1) Bickley, FRB.
   and waste ground at Swanscombe MNE; Northfleet; Gravesend; Chalk; Shorne; Higham 1938 JBM BM; Cliffe;

3) Herne Bay 1868, H.T. BM.
7) Chestnut Street, Newington (valley gravel) 1957 MNE.
9) Brooksend, Birchington, 1955 MNE.
13) Old Pembury, FRB.
16) Dry Ragstone scars, W. of Hythe; and below Lympne Castle. Dungeness MNE.

Daucus L. 314
D. carota L. ssp. carota

Native. Grassland on chalk and sand and other well drained soils, banks, quarries, cliffs, fixed dunes, waste ground of various kinds; very common throughout Kent, except in some parts of the High Weald, where is occasional only; particularly common on chalk and ragstone.

4) Fixed dunes, Sandwich Bay, very frequent. Pegwell Bay beach. N. of Shuart, St Nicholas, 271692, ‘62.
8) Folkestone Warren MNE. Abbots Cliff MNE. Lydden Spout. Shakespeare’s Cliff. E. Cliff, Dover MNE.

---

443 Several of these locations appear to have yielded specimens of subsp. gummifer in MNE collected by Francis Rose, although not listed under the subsp. gummifer account below.
D. carota L. ssp. gummifer Hook f., D. gingidium auct.
Native. Cliffs by the sea; very rare, but locally in some quantity.
8) Dover, Ray, Syn.; A M Bernard in Hb. A.A. BM; RGW.
...

Calystegia R. Br.
...

C. soldanella (L.) R. Br. 15, 16 Sea Bindweed
Native. Sand dunes and sandy beaches, usually in Ammophiletum; rare, but locally abundant in suitable habitats in 2), 4) and 15), though it has disappeared from districts 3), 8) and 9).
1st record, 1597: Isles of Thanet and Sheppey, Gerard, Herbal, p.690.
2) Beach near London Stone, Isle of Grain, 1949, R.A.B. & F.R. Beach ¾ mile N. of Grain Church, 1958, Mr. & Mrs. Side (1959, frequent locally!). Beach of Scratsgate, Minster, 1947 MNE. Shellness in Sheppey, 1777, E. Jacob; 1946-62 locally abundant in Ammophiletum! MNE. Deadmans Island, W. of Queenborough, on cockleshell beach, O. Davis
3) Swalecliffe Beach, L.W.W., c.1949; now gone.]
4) Patch 4’ x 5’, Reculver Beach, 1964, J Gurr. Dunes, Sandwich Bay, Jacob, 1777; abundant from N. of Deal nearly to Shellness point, 1946-59, among Ammophila! MNE.
[8) Shore below cliffs W. of Dover, Petiver & Sherard; SidneyWebb; extinct. Lydden Spout, CPSK. Folkestone Warren, Miss Young.]
15) New Romney beach C.P.S.K. (Greatstone dunes, locally abundant, 1946-58!) MNE.
...

Cuscuta L.
‡ C. campestris [Yunck]
3) Clover field, Sturry, Mrs J. Oldaker, det. Youncke.

[C. europaea L. [to be transcribed]]

*[C. epilinum Weihe
A rare casual, not [recently] observed for generations.
13) Cranbrook, Crowden (wrong).]

C. epithymum (L.) L. 444 15, 16 Lesser Dodder, Common Dodder 16/51
Native. Parasitic on Calluna and Ulex on heathlands, on various Labiatae and Papilionaceae on chalk grassland, and on a range of plants on shingle beaches; widespread and locally abundant, but not common. Local in Surrey and Sussex, rare in Essex, frequent in Pas de Calais.
1st certain record, 1640; “(Epithymum or 2 Cuscuta)”445 Blackheath, Parkinson, Theatrum, p.11.
2) Sheerness to Minster, F.J.H. (t[rifolii]).
3) Cranbrook, Crowned (?correct).]

C. epithymum (L.) L. 444 15, 16 Lesser Dodder, Common Dodder 16/51
Native. Parasitic on Calluna and Ulex on heathlands, on various Labiatae and Papilionaceae on chalk grassland, and on a range of plants on shingle beaches; widespread and locally abundant, but not common. Local in Surrey and Sussex, rare in Essex, frequent in Pas de Calais.
1st certain record, 1640; “(Epithymum or 2 Cuscuta)”445 Blackheath, Parkinson, Theatrum, p.11.
2) Sheerness to Minster, F.J.H. (trifolii).
3) Cranbrook, Crowned (?correct).]

4) N. of Sandwich, H. Trimen (t[rifolii]).

444 Given as C. epithymum (L.) Murr.
445 This rather odd ‘quotation’ appears to be a reference to the plates in Theatrum, the first of which is labelled “1. Epithymum. The Dodder of Tyme” ans the second, “2. Cuscuta. Dodder”.


9) Margate, H. Trimen (t[ trifoli]).

10) Fawke Common; Riverhead, Miss Worship Bitchet Green, Roper (t[ trifoli]). Westerham, Miss Peers (t[ trifoli]).

11) "nr Tonbridge", Miss Peers. [Penenden Heath, F.G.E.K., on Ulex.] [Allington 1887 MNE.] [3 miles N. of Tonbridge, Miss Peers (t[ trifoli]).] [Maidstone, WWR (t[ trifoli]).] [Barden, Tonbridge, 1842, E. Jenner, Fl. Tunbridge Wells (t[ trifoli]).] [Staplehurst Mrs Petley (t[ trifoli]).] [Ashford, Baker (t[ trifoli]).]


15) Dungeness, Dowker (abundant over several square miles of “fixed” shingle beach, on Teucrium scorodonia, Ulex, Sarothamnus, and other plants, 1945-59!) MNE; 094168, etc.

---

**Menyanthes trifoliata** L. [Bogbean]

Localised records for district 15: Hoppen Pits (TR0718) and also reported (doubtfully) from a pond near Lympne (TR13).

**Nymphoides peltata** Kuntze [Fringed Water-lily]

Royal Military Canal at Appledore (tetrad TQ92P) and to northeast (tetrad TQ93Q) – abundant up to 1970.

... **Myosotis scorpioides** L. [Water Forget-me-not]

In relation to district 15: Mainly off the marsh, with localised records: south from TQ940320 on Shirley Moor (tetrads TQ93F and/or 93K); and Small Hythe in 1956 (TQ888296).

**Myosotis secunda** Al. Murray

Localised records for district 15: by a dyke, Brenzett (TQ92 or TR02); Selby Farm south of Lympne (tetrad TR13B); and Old Romney (tetrad TR02H).

**Cynoglossum** L.


Native, open woods and shady hedgebanks on chalk, ragstone and on Tertiary strata; very rare formerly and now apparently extinct. Also too often erroneously recorded. 446


1) See first record. Farm yards, Keston: half a mile S.E. of Bromley, Milne & Gordon, 1793.

4) Near Sandwich, 1777, E. Jacob.


8) Hedge on the Roman Road (Stone Street) near Stowting, C.P.S.K. I have searched all likely habitats here in vain.

10) One Tree Hill, J.E. Little (Gard. Chron., 1879). The steep ragstone escarpment here, wooded with beech, ash and Wych elm, still appears to be a very suitable habitat for this species, but my searches have so far been in vain.

13) (Reported from the lane between High Rocks and Rusthall Common, Forster, Fl. Tonbr., p.25; W. Borrer regarded this as an error, in Bot. Gaz. 2. p.97.

---

446 This sentence is in pencil and may not be intended for inclusion.
This species has decreased greatly in this country, and is only now known for certain in Oxfordshire (Woodstock and Wychnwood) Suffolk (near Woolpit) and in Surrey, where it seems to be maintaining its numbers well in at least one of its localities near Mickleham. In order to try and obtain some information on its powers of establishment, and on the possible reasons for its decrease at the present time, in Sept. 1958 I sowed seed of this plant for experimental purposes from Mickleham, Surrey, at two points on the sides of the Pilgrim’s Way in 6) between Wrotham and Ryarsh, in open ash-hazel-woodland on chalk (grid references 51/634607 and 51/656613), localities where the plant was certainly absent prior to sowing.

In Sept. 1959 eight first-year leaf-rosettes were detected at the second site. In 1960, no plants flowered, possibly due to the drought of 1959, but eight sterile plants were seen. In 1961, several plants produced inflorescences. Seen [very] [frequent] 1987, R. Fitzgerald. If the plant becomes established here, this could be regarded as evidence suggesting that failure of seed dispersal to new habitats when older ones become unsuitable is a factor of significance in the present rarity of the plant; if on the other hand the plant fails to become established, this could be regarded as evidence for a low reproductive capacity under natural conditions being a significant factor in the plant’s present rarity.

Stachys L.
[S. germanica L. [16]
Possibly native at one time, or else a naturalised alien, in fields and banks on chalk; extremely rare and long extinct. It is still known, very rarely, in open limestone grassland in Oxfordshire, and formerly occurred in calcareous grassland and banks in a number of other counties, including Hants, Bucks, Northants and Lincoln. It has occurred rarely but widely scattered in the past on dry banks on chalk in the Pas de Calais and I have seen it myself at Salliy-le-sec (near Amiens) in Somme, in dry chalk grassland. Thus it is quite likely to have been native in Kent.

6) Field beside Darenth Wood, 1857; since gone, after ploughing up, Syme VII, p.56.
8) Earthing, Lyminge, Rev. R. Price (C.P.S.K., 1829, p.31; the first record).
10) Sevenoaks station, alien, B.D.J.]

S. palustris L. Marsh Woundwort
Localised records for district 15: dykes northwest of Wittersham (TQ82); west of Small Hythe in 1956 (tetrad TQ82Z) [MNE]; Royal Military Canal south of Appledore (tetrad TQ92P); Shirley Moor (at TQ940320 etc); south of canal, Ham Street (tetrad TR03A and/or 03B); south of canal, Bilsington (tetrad TR03L etc); Boulderwall in 1956 (tetrad TR01U); and Potman’s Heath in 1956 (tetrad TQ82U).

S. arvensis [(L.)] L. Field Woundwort 15, 16 28/51
Native, or perhaps colonist. Cultivated fields on a variety of soils, particularly on chalk and sand: widespread, but sparsely distributed and only common locally, particularly in the eastern Weald about Ashford in 12) and 14), and the east Kent chalk of 8), rather rare in W. Kent. Local in Surrey and Sussex, common in Pas de Calais.

1st record, 1632: S. of Margate, Johnson, Descriptio, p.23.
2) 87 Arable, Barn Street Fm, St Mary Hoo, 1958, Mrs. A.G. Side, MNE. Arable fields between Bysing Wood and Oare, 1960, HMW. Faversham, Stowell, Phyt. N.S. 1857.
7) 85 Arable, 1m NE of Hollingbourne, 1947 MNE. 95 Cornfield, Otterden, 1961, C. Turner. 94 NW of Westwell,
ES; E.G. Philp 1958 MNE. 05 Kings Wood E of Challock Lees, ES. 05 Challock Lees, ES. 94 Frittenfield, ES.


11) Snarkhurst Wood, 1954 MNE. 85 Sandy cornfield N of Chegworth, Harrietsham 1958 MNE. 85 cornfield SW of Fairborne Lane, Harrietsham, 1960 Mrs B. Dodds. 95 Arable Great Chart, 1950 MNE.


13) 63 Field by High Woods, Hawkenbury CAS. 64 Field Kippings Cross, 1957 CAS, 643402. 64 Hubbles Farm, 634425, Pembury, Lower Green, 1956, CAS.

14) 93 Kenardington ES. 92 Appledore ES. 93 918342 Cherry Gardens Woodchurch, ES; 1955! MNE. 93 Boldshaves, Woodchurch ES. 82 Arable ½ m. W. of Wittersham 1956 MNE. 82 Arable, Palstre Court, 1½ m W. of Wittersham, 1958 MNE.


---

Scutellaria galericulata L. Skullcap

In relation to district 15: Unrecorded on Marsh but noted at: Shirley Moor in 1955 (TQ940320); and Small Hythe in 1956 (TQ888296).

---

Teucrium botrys L. Cut-leaved Germander

[The MS included reference to: ....[Godmersham] shown to Mrs M.E. Millward [1939]....[E. Robinson 1949]....Rough ex-arable field on chalk downs above Eggerton Manor 61/0185 503 [F.R.]. rare....]448

---

Glechoma hederacea L. Ground Ivy449

Clinopodium ascendens450
Clinopodium calamintha (L.) Stace
[In manuscript given as:C. nepeta L. 15, 16.
Lesser Calamint.
Native. Dry hedgebanks, roadside verges and pastures on base-rich gravelly soils, frequently associated with Rumex pulcher: rare, but scattered along the valley- and river terrace-gravels of the N. Kent coastal plain, from Abbey Wood, Plumstead to Faversham, where it is locally abundant, formerly more widespread, from Charlton to Thanet; an outlying locality exists at Leybourne on the Medway gravels. This interesting and pleasantly-scented plant is a drought-resistant “Southern-Continental” species: it remained fresh right through the great drought of 1959. In Kent it appears to be on the edge of its range, being very common in parts of Essex, Suffolk and Cambridge. In the past it occurred very rarely in Surrey and Sussex, but there are no recent records. It occurs in similar gravelly places at the mouth of the Somme, but not in Pas de Calais.
[Cobham, Ridly.] Green Street Green, in dry turf near the ...., Cooper, Fl. Met.: 1947 (MNE): - 1961, H.W.P.
7) Roadside of A249, between Key Street and Chestnut Street: S.W. of Chestnut Street, 1945-62, MNE, abundant.
[10] Roadside W. of Eynsford, 1863, J.S.M.
....
Lycopus europaeus L. Gypsywort
Localised records for district 15: at inland edge of Marsh east of Oxney, probably rare (tetrads TQ92N?); Shirley Moor in 1955 at TQ940320 and to south (tetrads TQ93F and/or 93K); and southwest of Dymchurch (tetrads TR022).
....
Mentha x verticillata L. Whorled Mint
Localised records for district 15; Ditch southwest of Small Hythe in 1956 (TQ888296).
....
Mentha aquatica L. Water Mint
In relation to district 15: On the Marsh at Dungeness only (TR01). Off the Marsh at: dykes at TQ940320 and to south on Shirley Moor (tetrad TQ93F and/or 93K); and dyke south of canal bridge in 1956 (tetrad TR03G).

**Mentha pulegium** L. Pennyroyal

...its phase of abundance appears to have coincided with a type of rural economy now past, namely the regular use of commons and village greens as pasture by the local commoners.451

**HIPPURIDACEAE**

**Hippuris** L.

**H. vulgaris** L. 15. 16 11/51

Native. Marsh dykes, ponds and streams fed by chalk springs, usually in highly calcareous water; rare and very local though usually forming a pure community where it occurs. Teal, Mallard, and Shoveller feed on the seeds, teste P. Olney.

1st record, Fruit at Roman level, Crossness, Spurrell, 1889; Reid, 1899 (Godwin, p.124).


7) 96 flooded chalk pit NW of Burham, Mrs. M.H. Dolling.

10) 45 Chevening Park Lake, R.A. Clarke.


13) [Goudhurst, Clarke.]

**CALLITRICHACEAE**

**Callitriche** L.

There has been much confusion in this genus in Britain and Europe until recently; work by D.H.D. Schotsman in Holland (Acta. Bot. Neerl. 3 (1954) pp. 313-384) has however made the picture greatly clearer; and Dr. J.P. Savidge of Liverpool University has done much to work out the British distributions. Dr. Schotsman’s key is reprinted in Proc. B.S.B.I. 1, pp340-341 (1955): all Herb[ariu]m spp. cited are det. J.P. Savidge.

**C. truncata** Guss. 15, 16 Short-leaved Water-starwort

Native. In clear, well-oxygenated water, running or stagnant; very rare, but locally abundant. A southern species.

10) In [River] Darent, E. of Westerham, 1837*, G.E. Smith; 1955 RW David LIVU. In River Darent, Chipstead, 1943, JR Wallis; 1933, ECW NMW, BIRM; and many other observers; 1945! F.R. plentiful and since, MNE.

451 Taken from Rosemary FitzGerald’s notes of the species account.

[C. stagnalis Scop. 15, 16] Common Water-starwort
Native. Ponds, streams, ditches, and wet rides in woods; common all over the country, except on the chalk, where it is apparently absent.

1st record, 1632: Woods W. of Canterbury: Johnson, Descriptio, p.34.
2) Pond, East Church, Sheppey, Hb. Davis, 1916 MNE. Faversham; Graveney, REW. Higham Marshes, PCH. Dikes, Nagden, 1951, REW.
4) Lampen stream, Stodmarsh, REW.
6) Pond, Vitters Oak, 1 ½ m. ENE Bethersdenb 1954. Straight Mile, Tonbridge, CAS, det. Savidge.
8) Bogg'y Wood, Willesborough Lees, 1946 MNE, 1955 MNE. Stream SW of Sellinge, S of Water Fm, RAC. Acid Boggy field, Monks Horton, 1953 MNE. Hothisfield, 1891, ESM, BM.
10) Boggy Wood, Willesborough Lees, 1946 MNE, 1955 MNE. Stream SW of Sellinge, S of Water Fm, RAC. Acid Boggy field, Monks Horton, 1953 MNE. Hothisfield, 1891, ESM, BM.
12) Boggy Wood, Willesborough Lees, 1946 MNE, 1955 MNE. Stream SW of Sellinge, S of Water Fm, RAC. Acid Boggy field, Monks Horton, 1953 MNE. Hothisfield, 1891, ESM, BM.
14) Ditches, Willesborough Lees, 1893, E.S.M., NMW.
15) Pond, Palstre Court, Wittersham in Oxney, 1958 MNE.
16) Ditches, Willesborough Lees, 1893, E.S.M., NMW.
17) Ditches, Willesborough Lees, 1893, E.S.M., NMW.
18) Dikes, Willesborough Lees, 1893, E.S.M., NMW.
19) Dike to S. of Aldington Knowle near Sherlock’s Bridge, Romney Marsh, 1958, MNE.
21) Dikes, Willesborough Lees, 1893, E.S.M., NMW.
24) Dikes, Willesborough Lees, 1893, E.S.M., NMW.
26) Pools, Folkestone Warren, 1878, A. Bennett, SLBI, OXF.
**C. hamulata** Kütz. ex W.D.J. Koch / **C. brutia** Petagna 454

Intermediate or Pedunculate Water-starwort

Native. Alluvial Marsh, dikes, rivers, streams, and ponds; tolerates base-poor acid waters; very common. 1st record, 1777: Faversham, E. Jacob, Pl. Fav., p.111.

10) Darent, near Mill, Westerham, 1957, AGS; RAC. Birling Marshes, PCH.
12) Chatham, Watercress Beds, H.M.W. Vauxhall Lakes, HMW.
13) Ditch, and in R[iver] Teise, S. of Lamberhurst Church, 1942, JRW. Angleys Lake, DS.
15) Brenzett. Shirley Moor. Ditch, Burmarsh Rd., Hythe, LJM.
16) Pond below Tolsford Hill, 1959, LJM.

---

Verbascum L.

---

V. lycchnitis L. var. album (Mill.) Dr., 15, 16 15/51 White Mullein

Native. Banks

Scrophularia auriculata L. Water Figwort

In relation to district 15: no records on the Marsh except: by roads west of Newchurch in 1955 (TR038304); and Royal Military Canal, Kenardington in 1959 (tetrad TQ93Q).

Veronica scutellata L. Marsh Speedwell

In relation to district 15, on peat - all records in TR01: Dungeness Fen by Hoppen Pits (TR0718) [G. Dowker]; fen V southeast of Hamilton Farm, 1945-1958 (!) [MNE]; ditch south of Boulderwall Farm in 1961 (tetrad TR01P) [MNE]; and Long Ballast pit north end in 1952 (TR079187) [D. McClintock].

Veronica beccabunga L. Brooklime

In relation to district 15, probably rare, partly due to brackish nature (of the Marsh) and continual cleaning. Only localised record in district: ditch on Sandhurst Levels in 1954 (TQ82) [MNE].

---

Veronica catenata Pennell Pink Water-speedwell

In Kent, generally rarer than *V. anagallis-aquatica*, but the commoner species on the Marsh. Localised records for district 15: ditch northeast of Old Romney in 1959 (tetrad TR02H) [MNE]; ditch south of Small Hythe in 1952 (TQ894298) [D. McClintock]; and probably this also at Aldington and Hythe in 1956 (TR03/TR13).

---

‡ Lathraea clandestina L.

13) Earls Road, Tunbridge Wells, 1947, A. Graseman.

Orobanchaceae L.

**O. ramosa** L.

Alien, parasitic on hemp (*Cannabis sativa*), formerly occurring in hemp fields; hemp is no longer cultivated and the species has not been reported in Kent for over 150 years.

454 The manuscript account is for *C. intermedia* Hoffm., which covered two subspecies, since separated as species, but it is not possible to tell to which of these each record relates.
8) Hougham, O.B.G.

**O. purpurea** Jacq. 15 Blue Broomrape 1/51

Native. Parasitic on *Achillea millefolium*; extremely rare.

8) Bishopsbourne, Anon., *Ann. Mag. Nat. Hist.*, III (1830) p.435. Plentiful on *Achillea*, on neglected allotments, Bishopsbourne village, 1955, B.J.B.; 1955! 1958! MNE. Part of the rough field was ploughed in 1958; afterwards in 1958 and in 1959 the plant was much more abundant in the part that had been ploughed than in the part that was kept! 1960, not seen (field grassed). 1961, one only by hedge. 1962, not visible.

Not certainly recorded for Sussex, not at all for Surrey: one ancient record (near Bethune) for Pas de Calais. It still occurs on the cliffs of the coast of N.E. Norfolk and has records for Hampshire, chalk river scarps S. of Rouen, Seine-Maritime, 1961!

**O. rapum-genistae** Thuill. 15, [16] Great Broomrape. 5/51

Native. Parasitic on *Sarothamnus scoparius*, more recently on *Ulex europaeus*: formerly not uncommon, now very rare in a few bushy places and woodland rides.

1st record, 1597: (On broom) Shooters Hill, Gerard, *Herbal*, 1597


Broom above Boughton street 1958 Mrs B., 3 spikes in flower.


[Path, Lordswood Lane Walderslade to Gibraltar from 1917, S. [Ashman].]

[7] [Covert Wood, on Broom, F.G.E.K. Between Dover and Folkestone, E. de C.] [By Crete Road, Folkestone, on Ulex, Miss Day] West Wood, Stowting, 137424, on broom in ride on Pliocene sand, 1958 Mrs. D. Rowlands, 1960 Miss D.A.C.L.


11) Offham, C.A. Stevens B. Barming Heath, E.M.H. On Broom and Gorse on heathy ridge on Folkestone Sand N. of A.20, 1m W. of Hollingbourne 1951, E. Scott, c.100 spikes, 1951; c.70 spikes, 1952; 1953! 1962! MNE.


On way to High Rocks, Forster, *Fl. Tonb.* (as *O. elatior*). Rare and not recently reported in Surrey, now very rare in Sussex, no recent record for Essex: very rare in Pas de Calais.

**O. caryophyllacea** Sm. 15 Clove-scented Broomrape 3/51

Native. Parasitic on *Galium mollugo* on fixed calcareous sand-dunes, in chalky south-facing hedgebanks, and on chalk cliffs near the sea in East Kent; rare and extremely local, in seven localities from Folkestone to Sandwich Bay; at the last locality it is, however, abundant.

Confined in the British Isles to East Kent; frequent on the fixed coastal dunes of the Pas de Calais (Sandgatte! Ambleteuse!).


4) St George’s Golf Links, Sandwich Bay, FJI; 1946-56 MNE; abundant over a wide range of fixed dunes from 362578 to 358588. [Sandhills, Deal, Duthie.]


O. elatior Sutton 455 15, 1.6. Tall Broomrape 7/51
Native. Parasitic on Centaurea scabiosa on grassy banks, scrub, and old pits on chalk: very rare.
In Surrey and in Sussex, rare on the chalk: rare in Essex but locally common on chalk in the N.W. of the county: very rare in the Pas de Calais.

1st record, uncertain: none of those in Fl. Kent are very satisfactory, and may all refer to O. rapum-genistae or some other species.

(Reported “nr. Woolwich” in Fl. Met.; at Bigberry Wood by Mitchinson; and near High Rocks, by Forster in Fl. Tonb. —probably all really O. rapum-genistae.)

O. hederae Duby 456 15, 16 Ivy Broomrape 4/51
Native. Parasitic on ivy, only recorded on chalk in Kent; extremely rare.
Extremely rare in Surrey (Kew Gardens, Betchworth and Witley), unrecorded in Sussex, Essex and the Pas de Calais.

1st record, 1873: Kent east, Borrer, in Top. Bot.: the locality is not known.
This species has very short rootlets which form no secondary attachments, unlike O. minor (teste A.D. Greenwood in litt.).

6) Wood on the side of the chalk hills, near Shoreham, 1868, J.S. Mill in Hb. Mill. By Mounts Road, Greenhithe, 1948, one spike.


O. artemisiae-campestris Vaucher ex Gaudin
[In manuscript given as O. picris, to which the name has reverted since Stace, edition 2:]

O. picridis f.W. Schultz ex Koch 15 Picris Broomrape. 2/51
Native. Parasitic on compositae, chiefly Picris hieracioides, near the sea, mostly on chalk cliffs; very rare.
Very rare in Surrey (3 records only): unrecorded for Sussex, Essex, or the Pas-de-Calais’


In Kent, I have only seen this plant myself on the ledges of steep chalk cliffs.

O. minor Sm. 15, 16 Lesser Broomrape 29/51
Native. Parasitic upon Papilionaceae, more rarely on other families: scattered through the county and not uncommon on chalky or sandy soils; sometimes abundant in sown clover fields.
Frequent in the adjoining counties and locally so in the Pas de Calais.


455 Although the records in this account begin with botanical district 6 (the Chalk between Darent and Medway), their subsequent layout is somewhat confused by the abandonment of references to districts 7 and 8, leaving one to follow the 10km square grid references, where given.

456 Here, this account is placed in Stace (edition 2) order, before the next species; but in the manuscript it is placed afterwards.
1) [56 Formerly about Charlton, D.G.B.] 56 Rough sandy field W. of Farningham Wood, P.C.H.
2) 06 Old Brickworks near W—house, Faversham, 1954, R.E.W. 06 Murtons Farm, Graveney, 1956, R. Theobald.
3) 06 By Thanet Way on clover (and ? wild carrot?) 200 yds N. of Brenley Corner, 1959, H.M.W.
7) 76 Bluebell Hill, A.G. Davis, 1918 MNE.
10) 55 One plant, Oldbury Lane, lightham, 1945, apparently on Anthriscus sylvestris. MNE. 1 plant, Toys Hill, near Pyrolo site, C. Stace.
13) 54 Bidborough, 1958, on zonal Pelargonium, F.R.B. [Tunbridge Wells, Hb. Lamb, 1870 MNE.]

O. maritima Pugs. 15 Seaside Broomrape 3/51 (?/51)
Native. Parasitic on Eryngium maritimum on sand dunes and on Daucus carota on sea cliffs: very rare, but locally abundant on the coast from Folkestone to Pegwell Bay, also reported at Dungeness. Only detected in Sussex of the neighbouring counties (West Wittering, on Eryngium maritimum, 1938!): mainly southwestern in Britain. Foreign distribution not known: not in Pas de Calais.


The British plant was formerly regarded as identical with O. amethystea Thuill. Pugsley (J. Bot. 1926 p.18) cast doubt on this, but C.E. Salmon reported that Beck had confirmed plants from E. Kent as O. amethystea Thuill., though the corolla was less bent and the bases of the filaments more hairy than in the type (J. Bot. 1927, p.117). Pugsley has since erected the British plant into a separate species, as O. maritima.

... Utricularia minor L.  Leser Bladderwort
In relation to district 15: in dykes west of Hythe ca 1972 (TR03 or TR13) [Miss B. Nash - Kent Field Club]. Near old record from Bull. KFC

Campanula L.

---

457 Plants in Kent thus named are currently treated as a subspecies, formerly a variety, of O. minor and the Sandwich plants are separated from the Folkestone-Dover ones.
C. glomerata L. [15], 16 2/51 Clustered Bellflower

Native. Chalk grassland, in both Festucetum and Brometum erecti; rare; locally common west of the Medway gap from Cuxton to Ryarsh and Luddesdown; formerly in scattered localities thence westwards to Dartford and the Surrey border; absent east of the Medway gap. The distribution of this plant in Kent is very strange; it is widespread and general on the chalk in Surrey and Sussex. Very rare in Essex, and nearly confined to the N.W. of the county on chalk and on boulder clay. Very rare in Pas de Calais. 1st record, -


4) 93 Bank by E. end of By-pass, Hollingbourne, 1960, Mrs B Dodds.

C. rotundifolia L. 15, 16 33/51 Harebell

Native. Dry grasslands, on chalk, and on sandy and gravelly soils, including fixed dunes; common locally on the chalk in 5) – 8) (very rare in 9)), less common but widespread elsewhere; absent from 15), very rare in the High Weald of 13) and 14), absent from the Weald Clay in 11) and 12), local in 1) and on the Folkestone Sands of 11) and 13). It is not found on strongly acid soils. Frequent on chalk and grassland in Surrey and Sussex, rare in the Weald in these counties. Rare in Essex, locally common in Pas de Calais.

1st record, -


3) 05 Sandy grassland ½ m. NW of Dunkirk, 1945. Canterbury golf course (Thanet S[and]) W. of Chequers Wood, Fordwich, 1950 REW.

4) 35 Fixed dunes, St Geore; Links, Sandwich Bay. 5) Down, Norheads, Biggin Hill, 1962. 55 Polhill.

6) 57 Roadside, Green St. Green to Lane End, PCH. 55 Kemsing. Downs W of Wrotham, 1947 MNE. 66 Trottiscliffe. 66 Halling Down. 66 Halling Warren PCH. 56 Shoreham Rifle Range and Downs, PCH. 56 Preston Hill, PCH. 55 Otford Mount, PCH.

7) 95 Belmout Park, 1958, DMcC. 94 Burnt Ho[use], Charing, 967492, ES. N. of Westwell, 993487, ES. 94 “Suomi” Pit, Westwell, 985483, ES.


9) 36 Down, Kingsgate, N. Foreland, 1959.

10) 55 On Folkestone sand by railway S. of Otford. 55 R[ai]lway cutting, Sevenoaks Station, CAS.

11) Ightham. 65 Wrotham Heath. [E. Malling E. Bartlett 1882 MNE.] 85 Bank by E. end of By-pass, Hollingbourne, 1960, Mrs B Dodds.


14) 63 Hogshole Lane; Free Heath; LamberhurstDown; Hook Green (43), 1940 JRW.

15) abs[ent].
16) 03; 13 old golf course, Hythe, 1958, LJM.

....

[Cruciata Mill.]

C. laevipes Opiz 458

Native, grassland and scrub, roadverges and hedgebanks on calcareous and other base-rich soils: abundant on the chalk and ragstone, occasional on soils derived from other strata, as far east as Wye, Monks Horton[;] very rare in or absent from most of NE Kent.

1st record, 1597: Charlton, Gerard, Herbal, p.965.

7) 75 Boarley Warren, 1961. 75 Coombe NW of Detling 1944. 85 Valley W. of Wormshill. 95 Downs ½ m NE of Lenham, 1956 MNE. 96 Base of Ospringe Down, HMW.
9) Horton Kirby PCH. Water Meadows, Darent, PCH.
13) 83 R[ai]l[wa]y bank, Tenterden Sta[tion], 1959, E.S. 83
16) R[ai]l[wa]y track, Saltwood, 1959, LJM.

......

Galium L.

......

G. uliginosum L. 15, 16 Fen Bedstraw

Native. Fens, marshes, and meadows, on peat or alluvium, always on base-rich, usually on calcareous, substrata; rare as a whole, and only locally common; absent from the chalk and from nearly all of the Weald, frequent locally in Surrey, in Sussex, rare in Essex, local in Pas de Calais.


1) 46 Marsh, Ravensbourne Estate, Keston, 1955 MNE.
2) 76 Holborough Marshes, fen-meadow, 1946. 76 S. Snodland Marshes, 1946.
10) 45, 1m W. of Brasted (Meadows by R. Darent) 1945. 56 Meadow N. of Shoreham 1954 MNE. 56 Meadow S. of Lullingstone 1956 MNE. 55 Meadows, St. Johns, Sevenoaks, 1950. 57 St John’s Jerusalem, Sutton, PCH.
11) 65 Meadows SW of Mereworth, 1944; 65 by Leybourne Castle Lakes, 1944; 1960 Mrs B Dodds. 84 E. of Headcorn, 1947, DMCC. In marsh N of R[a]l[wa]y 863438. 84 Ditch SE of Hamden, Smarden 893406, 1949, DMCC.
12) 94 Meadow at Westwell on Gault, 1948. 94 Cuckoldscoomb Fen-meadow, Brook, 1954.

......

Galium palustre L. agg. Common Marsh-bedstraw

458 Given as G. cruciata (L.) Scop.
In relation to district 15: The aggregate recorded at: Brenzett (tetrad TR02D); Snargate (tetrad TQ922); and Shirley Moor (TQ93).

Subsp. palustre at: Dungeness, near Old School (TR01); Hoppen Pits (TR0718); and marsh by Boulderwall, on shingle in 1956 (tetrad TR01U) [MNE]. Overall, not infrequent.

....

VALERIANACEAE

Valerianella Mill.

....

V. eriocarpa Desv.

Alien, at least so in Kent. Waste ground; very rare.

11) 65 Ryarsh Sandpits, 1946 MNE. 64 Gravel pit S. of Medway W. of Brandbridges, 673482, 1956, CAS.
15) 01 Old shingle workings, Dungeness, C.A. Stace.

....

Valeriana L.

V. officinalis L. 15, 16 Valerian

Native. This species consists of two cytological races in Britain (Skalska & Sprague, Linn. Soc.): the tetraploid form (2n=28), which corresponds largely to what has been called V. milkanii Syme, is apparently confined to woodlands and scrub on chalk and limestone in southern England; the octoploid form (2n=56) which corresponds largely to what has been called V. sambucifolia Mik., is confined in S. England to fens, riversides, marshes, and damp alder carrs. According to the authors quoted above, it is not possible to distinguish between the two cytological forms by morphology in every case, so they do not recommend the use of the two separate specific names for the two cytological races; it appears, however very probable that in Kent, for example, the plant of the chalk is nearly always the tetraploid, and the wet habitat plant nearly always the octoploid. In Kent, the plant of scrub and wood borders on chalk is small and slender, with narrow leaflets. The occurrence on chalk is as follows:

8) E. Court Farm, Godmersham, on old flint wall, 1947, MNE. Near Wye, F.J.H. (as V. mikanii Syme).

1st record (for V. mikanii Syme) 1899; Wye, 1875, F.J. Hanbury In Fl. Kent, p.183.
The occurrence of the species in wet habitats in Kent is as follows: it occurs as a large plant with broader, more deeply toothed darker green leaflets than the form on chalk; probably nearly all these locations are for the octoploid plant.

9) 36 Copse SE of Durlock, Minster, 1959, Mrs AG Side.
10) S5 River Bank, Otford, 1853, A.A. BM; 1955, PCH. 57 Ditches by Meadows S. of Darenth, 1944; 1954 MNE. 55 Whitley Forest (Spring Hill) 1959, RA Clarke. Marshes W of Brasted GMB.
11JE 65 Marshy wood by stream S. of Mereworth. 25 by R. Medway, Teston. 66 Birling Marshes.
11W) 54 By R. Eden, Chiddingstone. 64 Paddock Wood; 64 Tudeley, JRW, 1939. Hoads Wood 1958, M.[halmers]-Hunt.
12) 05 By R. Stour, Chilham. [Mersham D. Smith 1907 MNE.]
13) Furnace Road, Cowden. 53 Gill SW of Stone Cross, Ashurst, CAS, 518381. 44 Lock Skinners, Chiddingstone, 1943. 63 Ditch S. of Lamberhurst Ch[urch], 684365, CAS.
Locally common in the adjacent counties and in N. France.

**V. dioica** L. 15, 16 21/51 Marsh Valerian
Native. Marshy meadows, fens, flushes in woodland on base-rich or calcareous soils; locally frequent in the High Weald, [13] & [14], and in the fens of [4], rare elsewhere. Rather rare but locally frequent in the Weald, in Surrey and Sussex, rare in Essex, local in Pas de Calais and largely confined there to the fens and dune slacks near the coast.


2) [66] Marshes S. of Ham Hill, Birling, 1951; now destroyed in this area.] [76 Marshes S. of Snodland, 1946.] Several old records for Faversham area.

3) 15 Marshy Alder carr, Trenley Park, 1949 MNE.


10) 55 Bradbourne Meadows N.E. of Riverhead, Miss Worship; 1944! MNE. 55 Leybourne Marshes, 1944. [Birling Marshes, 1943 MNE, 1951 MNE, now drained.] [75] S. of Barming Church, H. Lamb 1900; H Elgar, 1905 MNE.]


16) Newington Moor; Cheriton CPSK.

---

*Succisa* Haller
**S. pratensis** Moench

Native. Chalk grassland, frequent in less dry places; meadows, grasslands, scrub, open woodlands and woodland paths on clay and Hastings Sands, very common; fens, meadows and valley bogs on peat, locally common.

Common in Surrey and Sussex, frequent in Essex, common in Pas de Calais.


4) Worth Minnis, 1946. Ham Fn, 1946 MNE.


10) St John's Jerusalem, in Meadow, PCH. Westerham Wood, '82.


15) Reported to occur near Dungeness school c.1928 by Head mistress to A.M. Morley & E.C. Joy.

---

**Cirsium Mill.**

*C. eriophorum* (L.) Scop.

Native. Chalk grassland, rare; grassy banks on ragstone, very rare; confined to the chalk escarpment between Postling and Folkestone in 8), and a few places on ragstone in 16). The Kent area of this species is very disjunct and isolated; apart from one locality on chalk at Coulsdon in Surrey of doubtful status, it occurs no nearer than mid Hants and N. Essex, and is mainly midland in its British distribution. It occurs however on calcareous dunes W of Calais and on Carbiferous limestone near Marquise in Pas de Calais.


16) Pedlinge chapel, L.J. Margetts, 1958! Roadbank on ragstone, Copperhurst, Aldington, 1959 MNE. Between Lympne Church and West Hythe, 1823, Mr. Peen, Hb. R.P. BM.

---

*C. palustre* (L.) Scop.

Marsh Thistle

Present in district 15. Only localised record: near Camber in 1956 (tetrad TR01E?);

---

**Silybum** Adans

*S. marianum* (L.) Gaertn.

Fully naturalised alien, or possible native: rough ground on ragstone and chalk, banks and waste ground near the sea and estuaries; local and uncommon, but abundant in several localities where it has the appearance of a native species, particularly west of Hythe to Lympne on the ragstone escarpment, at Upnor and at Higham Marshes.


13) Abundant on Ragstone scarp, W. of Hythe, 1949: W. of Lympne Castle, abundant on ragstone, 1946-55 MNE.

---

**Centaurea** L.
C. cyanus L.  
**Cornflower**

1) [Ruxley pits, 1958 T.H. Angel; escape?  
3) Cornfield by A28, Hersden, 1954, R.G.W.  
4) [W. of Farningham, 1948, C.W. MNE.]  
5) [N.W. of Wrotham, 1 plant, Mrs Tatton Brown.] near Dartford, 1931, P.H.C.  
6) [Ruxley pits, 1958 T.H. Angel; escape?  
9) Sevenoaks dump, 1951, DMcC.  
12) [St Pauls Church Street, Canterbury, Miss M.E.M., 1958.]  
13) Old cornfield, Dodhurst Farm, S.W. of Pembury, 1940, J.R.W.

C. calcitrapa L.  
**Red Star-thistle**

Probably native. Dry grasslands and banks on chalk, near the Thames, Medway and Stour estuaries and in Thanet; rare, but still very locally plentiful, though less frequent than formerly. It occurs in similar habitats near the Sussex coast and in the Somme estuary, and in these areas is probably native; formerly more widespread in the London area.

1st record, [near Cooling, 1629, Johnson]

[Several old records about Deal and Sandwich; JSM 1863 etc.]

6) Rough grassland opposite Plough Inn, Northfleet, R. Pocock BM; 1945! MNE; 613746, 1956, HMP; still there, to 1958! Lucerne field, Stone, 562745, 1956, HMP. Denton, on heaps of chalk N. of Railway, 1945, MNE.


9) Cliftonville, 1947, L.W.W.; 1949! MNE. [Several old records.]

16) Between Sandgate and Hythe, 1850, M.NHS MNE; T. Walker, BM.

...  
Serratula L.  
**S. tinctoria L.**  
Native. Heathy roadside banks and wood-borders, rare; now almost confined to the High Weald of 13) and 14), where it is locally frequent; still existing at single localities on clay soils in 1) and 6a).


14) Lane bank SW of Mopesden, 1950 MNE. Lane near Siseley, 1949. Path bank S.W. of Hawkhurst 753303, 1955, Miss V. Nunns.

459 This appears to be in vc14, East Sussex.
Sonchus palustris L.  15, 16  Marsh Sow-Thistle
Native. Tidal reed swamps along the upper part of the tidal R. Medway, rare and extremely local but locally abundant: also in freshwater reed swamps in a disused gravel pit. Now confined in the British Isles to the tidal Medway and the Norfolk-Suffolk Broadlands (from Minsmere, Blythburgh, and the Waveney Valley) to the Yare, Bure, Ant and Thorne Broadland rivers).


Lactuca saligna L. Least Lettuce
[The MS included reference to: ...E. of ‘Sportsman’, behind bungalows 1952...Greatstone [J.P.M. Brennan, 1954]....on disturbed shingle at N. end of Long Pit, Dungeness [F.R. & D.McC., 1947]....]460

Taraxacum palustre (Lyons) DC.
In relation to district 15, recorded at Dymchurch.

Pulicaria dysenterica (L.) Bernh. Common Fleabane
Localised records for district 15: Dymchurch; road west of Newchurch in 1955 (TR038304); and south of Ox pound (TR035308).

Achillea ptarmica L. Sneezewort
In relation to district 15: Dungeness only (TR01).

Chamaemelum [Mill.]
C. nobile L.  [15], 16  Chamomile

460 Taken from Rosemary FitzGerald’s notes of the species account.
Native. In short turf on commons on acid soil, now very rare; formerly more frequent, but exterminated by enclosures, lack of grazing, and re-seeding of commons in several places. Still locally common in Surrey and in the Weald of Sussex; very rare in Essex.

1st record,

2) [Introduced with turf, Burndept Electronic Co., Erith, 1955, GMB.]
3) Sturry Marshes, Hookham. Stourmouth, Dowker.]
12) Charing Heath, E. Jacob, Pl. Fav.

Anthemis arvensis s.l. 15, [16]
Cornfields, usually on chalk; formerly fairly frequent, now rare.
3) Cornfield border, Blean, W. of Church, R.G. Williams, 1958.
11) Field by A.20, garage, Harrietsham, 1962: Mrs B. Dodds (sp!) MNE. Arable Field on Weald Clay, New Street Farm, G[rea]t Chart, 972407, 1952, DMcC.

Solidago L.
S. virgaurea L.

Native. Dry woods and hedgebanks on various non-calcareous soils; chalk grassland and cliffs near the sea. Very common in most parts of Kent, but absent from the Marsh districts 2), 4), and 15), and never found on calcareous soils inland, though on the chalk sea-cliffs and adjacent downlands, it occurs as a small form; this form may be a result of exposure, or it may be a different ecotype; the matter requires investigation. Common on non-calcareous soils in Surrey and Sussex, and Pas de Clais, rare in Essex.

1st record, 1597; Southfleet, Swanscombe Wood, Gerard, Herbal, p.349.

Aster tripolium L. [account to be transcribed, map]462 given below]
**Senecio L.**

**S. aquaticus** Hill 15, 16 22/52 Marsh Ragwort

Native, wet meadows on alluvium and on peat, locally common, but absent from wide areas. Frequent in the Thames and lower Medway meadows in 2), the lower Stour Marshes in 4), the Darent meadows in 10); sparsely scattered elsewhere in 1), 11), 12), 13 and 15). Locally common in Surrey, Sussex, and Essex and in Pas de Calais.


1) 46 by Brook SE of Bromley 407677, 1956, D.P.Y.
2) 67 Northfleet Brooks, 1944. 77 Wet meadow S. of Cliffe, 1944. 77 Highham Marshes. 66 Meadows at Ham Hill, S. of Snodland; 1888 MNE; 1955 MNE. 76 Holborough Marshes. 77 High Halstow Marshes. 78 Cooling.
3) 25 Peaty marshy meadows, Little Britton, 1m W. of Wingham 1946. 25 S.E. of Wingham, 1947 MNE. 25, ½m N of Wingham Ch[urch], 1956 MNE. 26 Grove Ferry meadows, Miss E. Millward, 1939; 1950, REW. 16 Westbere Marshes, 1958, Mrs. Brickenden. 16 Marsh below Higham Fm, Fordwich, 1950, REW. 35.
5) 85 Meadow by fen, Ramchild, Harretsham, 1962, Mrs B Dodds.
6) 05 Meadows near Chilham Mill, 1955 MNE. 03 Meadows SW of Cheesmans Green, Kingsnorth, 025384, ES, 1954. 13 Gibbins Brook, 1957, L.J.M.
7) 44 By Furnace Pond, Cowden, 1947.
8) 82 Sandhurst Levels, 1954 MNE.

**Petasites hybridus**

**Bidens cernua** L. Nodding Bur-marigold

*In relation to district 15: only localised record off Marsh: dyke east of Friezingham, near Windmill Channel, Rolvenden, 1950 onward (tetrad TQ83Q).*

**Bidens tripartita** L. Trifid Bur-marigold

*In relation to district 15: Dungeness only (TR01).*

**Eupatorium cannabinum** L. Hemp-agrimony

*In relation to district 15, no records on Marsh, though noted by the Hexden Channel, Newenden in 1956 (tetrauds TQ82J or 82P?).*

---

463 Part of a series of maps from Francis Rose’s folder marked Kent Flora Maps; the distribution dots may be incomplete.
Hieracium L.

All records quoted (except for those of *H. perpropinquum*, *H. umbellatum* marked *, and those of *H. pilosella*) are based on specimens determined by Mr. P.D. Sell and Dr C. West, to whom I am greatly indebted for help in preparing this account.

Sect. Vulgata Fries

† *H. scotosciicum* Hyland. (H. praecox sensu Pugsl.)

1) Library Grounds, Bromley, C.W., 1956.
11) Maidstone Cemetery, H. Lamb, June 1900 (det. C.W.) MNE.

*H. exotericum* agg.

Locally common in scrub, wood borders and rail and roadsides banks, especially on the chalk.

*The records for the segregate microspecies have not been distinguished further.

4) Beach, S. of Deal, Mrs. B. Dodds, 1960.

† *H. vulgatum* Fries

There is a specimen in Hb. Cantab collected by W. Peete in 1845 on an old wall at Woolwich Common. It was almost certainly a casual.

*H. lepidulum* (Stenstr.) Omang

Local on roadside banks; possibly introduced in some localities.


*H. pollichiae* Schulz.-Bip. (H. roffeyanum Pugsl.) occurs just across the border in Surrey, SW of Edenbridge, E. of Dormansland.

11) Kings Wood SE of Langley, Mrs. B. Dodds, det. C.W.

*H. maculatum* Sm.

Probably always introduced.


† *H. diaphanoides* Lindeb. (H. megapodium sensu Pugsl. pro parte)

---

*The account of this genus has undergone extensive revision, with many deletions. Exceptionally, for presentation of this transcript, I have not attempted to convert nomenclature and sequencing into that of Stace (1997) New Flora of the British Isles (2nd edition), which itself in any event does not give all *Hieracium* species names, and which separates the Mouse-ear Hawkweeds into the genus *Pilosella*.***
In seeded grassland at **13**) Ashurst Park, near Langton Green, H.W.P.; C.W., 1952; and in **8**) Roadside bank on Lenham Beds, West Wood, Stowting, F.R.B., 1953; F.R. & C.W., 1956, In both of which it [was] probably introduced.

‡ **H. diaphanum** Fries
1) Grassy banks, Sundridge Park, C.W., 1957, probably introduced.

**H. tunbridgense** Pugsl.

- Sandy banks by lanes and wood borders, widely distributed; banks on chalk, rare.

**H. strumosum** (W.R. Linton) A. Ley (H. lachenalii auct.)
15, 16
1) Joydens Wood, J.S. Henslow in 1827 CGE.
5) Wilmington, Kent, C.A. Stevens, 1837.

Section **Tridentata** Fries

**H. cambricogothicum** Pugsl.

**H. cantianum** F.J. Hanbury

- Sandy banks and clearings in woods. In Kent common in the High Weald but rare elsewhere. Confined to Kent, Surrey and Sussex.

**H. trichocaulon** (Dahlst.)Johansson

(H. rigidum sensu Hanbury & Marshall pro parte; H. tridentatum sensu Pugsl. pro parte)

- Sandy banks by lanes and wood borders and sandy heaths. Locally frequent in the High Weald but local elsewhere. This species, which is widespread in southern England, is elsewhere only known from Sweden. This

465 Here, H. cheriense Jord. Ex Boreau with its various records has been deleted.
suggests that either our plant is a different species (which is not apparent from material examined) or that it was introduced to the country many years ago.


H. eboracense Pugsl.
Sandy banks by lanes and wood-borders; rare. Endemic.


16) Near Saltwood, E.S. Marshall, 1894, CGE.

Section Umbellata Fries
H. umbellatum L. 15, 16
Shaded and open sandy banks, heaths, sandy woodland, wall tops, railway banks, etc. Common in suitable places in 1), 3), 10), 11), 12), 13) and 14).


Section Sabauda Fries
H. perpropinquum (Zahn) Druce 15, 16
(H. boreale sensu Hanbury & Marshall pro parte)
Sandy banks, wood borders, heaths, railway banks; very common in suitable places throughout Kent, but not found in the marsh districts or on chalk or clay. Common in England and Wales, rare in Scotland and E. Ireland; widespread in Continental Europe.


Subgenus Pilosella S.F. Gray
Sect. Pilosella Fries
H. pilosella L. 15, 16 Mouse-ear Hawkweed
Native. Very common throughout the county on dry banks, heaths, cliffs, chalk grassland, grassland on sand and gravel, fixed-dunes and shingle beaches. Common in all adjacent counties and in North France.

1st record, [sic]

1) Bromley Kent, C.W., 1957.
8) Dover East Cliff 1955, FR. St Margarets Bay cliffs, 1955, FR.
Var. concinnatum F.J. Hanbury
In similar localities to the type.


H. peleterianum [(Mérat) F.W. Schultz & Sch. Bip.] 466
There is a specimen of this species collected by J.C. Melvill at Undercliff, Folkestone in 1891 in Herb. Harrow Schoool. Another in Herb. [CGE] collected by F.K. Tennant at Folkestone in 1890 seems to be a hybrid between this species and H. pilosella L. Attempts to refind the species have failed.

Sect. Collinia Naeg. & Peter
H. brunneocroceum Pugsl. (H. aurantium auct.)
Naturalized at
4) near Ebbs fleet, J.E. Woodhead, 1938.
Native of C. Europe.

H. lanatum Vill.
Naturalized at
12) old walls, St. Augustine’s Abbey, Canterbury, F.R. & C.W., 1956.

Liliidae (Monocotyledons)

ACORACEAE
ARACEAE
LEMNACEAE

ALISMATACEAE

Sagittaria L. 467

Sagittaria sagittifolia L. 15,16
Arrowhead
Native. Slow flowing rivers and marsh ditches: rare generally and decreasing, but still locally common in the Beult and Teise systems in 11) (apparently almost extinct in and by the Medway itself) and in 15). Very rare in 4), 2), 10) and 13). Rather rare in Surrey, local in Sussex and Essex and Pas de Calais.

2) [Stone Marshes, A.C. Tagg, H.M.P. c.1949; not now.] [Crayford, 1863, Hb. Lamb MNE.] 57 Ditch on Dartford Marshes, 1961, Mrs AG Side. [Ditch, Scrapsgate Rd, Minster, formerly: now built on, Mrs Bryson.] 76 Ditch N. of New Hythe, 1946. 76 Snodland Marshes, 1946, in ditch by railway. 51/76 Medway, 51/57 Dartford

466 Cited as plain Mérat in the manuscript.
467 Placed after Alisma in the manuscript.

10) 45 Westerham, Darenth pond, Squerries Park, D.P.Y.


13) 63 Ditch S. of Lamberhurst Church, 1936, JRW: 1956! MNE. 63 Byham Abey Lake, 1957, CAS. 61/63 Lamberhurst


Baldellia Parl.

[Apparently placed before Alisma in the manuscript and missing, together with the beginning of Alisma.]

B. ranunculoides (L.) Parl. Lesser Water-plantain

In relation to district 15, recorded at Hoppen Pits (TR0718).

Alisma plantago-aquatica L. Water-plantain

[The beginning of this account up to records for botanical district 4 is missing. There are no records for districts 5, 6 and 7.]

8) Pond on c[lay-] w[ith-] f[lints] above Gutteridge Fm, Denton, 1956, DACL


12) Brabourne Lees RAC. Ashford JG. Gravel pit Lake E of Chilham, 084539, ES


14) Beals Fm, Woodchurch, H.W. Adams

15) Dymchurch, JG. Shirley Moor, Dike SW side, ‘65.
16) Folkestone Warren, KDR.

**Alisma lanceolatum** With. 15, 16 14/52  Narrow-leaved Water-plantain

Native. Ponds and ditches; widespread but uncommon in districts 1), 2), 4), 11), 12), 14) and 15). It occurs in the alluvial areas and on the clay lands of the weald. Rare in Surrey, Sussex and Essex, unrecorded for Pas de Calais. 17 locations.

1) 46 Bickley, old Golf Course, 1956, C.A. Swain.
2) 77 Dikes, St Mary Hoo Marshes, 1958 MNE. 06 —.
3) 74 N. Bank of R. Beult, E. of Stile Bridge, Linton, 1945 MNE. 74 Teise, W. of Marden, 1956 MNE. 64 Pond E. of Rly, Hale St, 683493, E. Peckham, 1954-56 MNE.
4) Fordwich Marshes, ’49, E. Robinson. 26 Grove Ferry, C.T.
11) 74 N. Bank of R. Beult, E. of Stile Bridge, Linton, 1945 MNE. 74 Teise, W. of Marden, 1956 MNE. 64 Pond E. of Rly, Hale St, 683493, E. Peckham, 1954-56 MNE.
14) 82 Pond, Palstre Court, Wittersham, 1958 MNE. 92 —.

[Damasonium Mill.]

**D. alisma** Mill [15] Star-fruit

Former native, now extinct: recorded long ago in two ponds, one in Sheppey, one at Folkestone. Still exists, very rarely, in Surrey (three localities); in Sussex (one locality); extinct in Essex. Formerly recorded for Nord. Still in Herts. This species is dying out in Britain like *Pulicaria vulgaris* apparently because the ponds in which both formerly grew are disappearing or becoming overgrown. Formerly ponds on commons and village greens were kept open by the grazing of cattle, horses and geese.

2) Field pond at East church, Sheppey; *Pl. Fav., 1777.*

[4] The records for Thanet (see Fl. K.) are almost certainly erroneous.

13) Tuckers Pond, Angley Wood, Dr Ranger, teste A.W. Hudson, c.1890.]

16) Pool below cliffs between Folkestone and Sandgate, FGEK: now lost, CPSK.]

BUTOMACEAE

**Butomus L.**

**B. umbellatus** L. 15,16  Flowering-rush 24/51

Native. Rivers, marsh dikes and ponds; uncommon, but still locally frequent in the marsh districts 2), 4) and 15), and in the Medway and its tributaries in 11); rare in 12). Now uncommon and very local in Surrey, local in Sussex, Essex and Pas de Calais.


10) [Darent, Dunton Green, 1933, A. Beadell.] [Darent, Hawley: Darenth, AC Tagg.] [Pit by Central Park, Dartford, before 1949, H.M.P.]


13) 63 Pond nr Bayham Abbey, 648365, CAS. 51/63 Bayham.


HYDROCHARITACEAE

Hydrocharis L.

H. morsus-ranae L. 15, 16 Frogbit 23/51

Native. Marsh ditches and ponds: locally frequent to locally abundant in 4), 11), and 15); rare in, and absent from most of 2); very rare elsewhere. A plant of alkaline fresh waters. Now rare and very local in Surrey, local in Sussex and Essex and Pas de Calais.

2) rare. 57 Abund[ant] in ditches, Dartford Marshes, at 541761 and 543772, 1962. 539767 HMP. 06 Dikes nr Sportsman, Seasalter, P.R.B. Oare Marshes, C.T. N of Hernhill, 1957. 57, [NOT 67], [NOT 77], [NOT 76], 06


12)


Stratiotes L.

S. aloides L. Water-soldier

1) Keston, up[pe]r pond, introduced, 1924, ASK. 4) [Old records for Minster, Sarre and St Nicholas area, probably errors for Hydrocharis; see Fl.K.]

15) [Pond west of road between New Romney and Dymchurch, 1875, FJH: not recorded since.]

Egeria Planch.

E. densa Planch. 468

Elodea Michx.

468 Egeria densa has a heading in the manuscript, but the only entry (for Hatch Park) has been deleted. There is no evidence that this is, or has been, a Kent plant.
**E. canadensis** Michx.

Alien, fully naturalised. Ponds, streams and ditches: very common in 2), 4) 10), 11), 12) and 15), rare in 1), 3), 13), 14) and 16, where suitable habitats are scarce, absent in 5) – 9).

1) Pond, 375661, W of W. Wickham, PCH. Pond, Blackheath, GMB. Cray, Old Bexley, nr A2, GMB. Ruxley pits, SAS. 37, 46

2) 47 Ditches, Erith Marshes, PCH. Pit N of Shorne, 693734, PCH. 57 Ditches, Dartford Marshes, 1962. 76 Ditches, Snodland Marshes, 1943. Gravel pits, Oare Creek, 1959 MNE. Seasalter Marshes, PRB. 76, 47

3) Pond, 375661, W of W. Wickham, PCH. Pond, Blackheath, GMB. Ruxley pits, SAS. 37, 46


8) Swimming pool, St. Margaret’s Bay, B. Dodds.

10) N of Otford, D. Lang. Darent, Shoreham; Lullingstone; Eynsford, PCH. Hawley, AC Tagg. Westerham, AGS.


12) R. Stour, SW of Hothfield, 1943. Beaver, Ashford, + flowers, 1950, E.S. New Lake E of Chilham, 084539, ES.


16) Brockhill Lake, Saltwood, LJM.

† **Lagarosiphon** Harv.

† **L. major** (Ridl.) Moss

5) Pond, Downe village, FHB.

11) In flower, gravel pits S. of Yalding Sta[ion], 1961, CAS. Gravel pits, Aylesford, EGP.


**Vallisneria spiralis**


**APONOGETONACEAE**

Aponogeton L.f.

A. distachyos L.f.

1) Keston Upper Pond. Mrs M. Bostock, BEC Rep. 1924, p.200; 1952! 1954, PCH.

13) Pond nr Bayham Abbey, 648365, CAS. And in Teise.

**JUNCAGINACEAE**

**Triglochin** L.

**T. palustris** L.

21/52

Native. Calcareous spring-fens and fen-meadows; brackish meadows and ditches; widespread but uncommon: 30 localities. Locally frequent in 4), occasional in 2), 12) and 16), rare elsewhere, in 1), 10), 11) and 15). Usually in short vegetation of *Parvocaricetum* type. Now very rare in Surrey, Sussex, and Essex;
local and sub-maritime in Pas de Calais.

1) 47 Meadows S. of N. Cray, 1955 MNE. Bexley /47.

2) 47 Crossness, Erith Marshes, PCH. 96. 76 Marshes E of Halling, 1944. 76 Marshes S. of Snodland, 1895 H.L., 1943 abundant MNE. 76 Holborough Marshes, 1947, abundant. 06 Seasalter Marshes, 1958, H.M. Wilks MNE. 06 Calcareous spring, meadow below Mill Pond, Oare, 1959 MNE. 07 Warden, flush on cliffs.


5) 46 Holwood Park Lakes. 46 Keston Common Ponds. 47 Chislehurst Common Pond, PCH. 46, 47

6) 57 Ditch, Dartford Marshes, 543772, 1962. 86. 77 Cooling Marshes, 1944. 07 Pond, Warden point. Lundenham Marshes, H.M.W. 57, 67, 77, 86, 96, 06, 07

7) Pond, Kites Fm, Swalecliffe, REW. Pond, Denstreoude, HMW.

---

P. natans L. 15, 16 Sea Arrow-grass 18/51

Native. Tidal salt-marshes, mainly in the general salt-marsh association: more rarely by brackish dikes: very common and locally abundant in 2) and 4) in these habitats, rare in b3) and 15), absent elsewhere.

---

POTAMOGETONACEAE

Potamogeton L.

P. natans L. [15, 16] 38/51

Native. Rivers, ponds, and ditches, in fresh weakly acid to alkaline waters: widespread and locally common, particularly in 2), 4), 11), 12) and 15); unrecorded for 3)72, 5), 7), 8), 9) and 16). Frequent in the adjacent counties and in N. France.

1) 46 Holwood Park Lakes. 46 Keston Common Ponds. 47 Chislehurst Common Pond, PCH. 46, 47

2) 57 Ditch, Dartford Marshes, 543772, 1962. 86. 77 Cooling Marshes, 1944. 07 Pond, Warden point. Lundenham Marshes, H.M.W. 57, 67, 77, 86, 96, 06, 07

3) Pond, Kites Fm, Swalecliffe, REW. Pond, Denstreoude, HMW.

---

470 Follows Zostera in manuscript.

471 These details supplied; not in original.

472 However, records are given for district 3.

6) 67 Chalkpit S. of Northfleet, 1945, J.E.L.

7) Chalk pit, Rainham, OD.

10) 45 Westerham. 55 pond, Knole Park, PCH. 55 Dunton Green, AG Davis, 1919 MNE.

11) 65 Clare Park Lake, E. Malling. 66 pond W of Ryash Wood. Chilston Park Pond. 54 Leigh. 64 Ditch at Beltring. 84 R. Beult, N of Buckmans Green, 889419, 1962. 84 R. Sherway, Sherway Br[dige], Smarden, 867447, 1962 MNE. 84 Pond SE of Golden Square, Smarden, 887411, 1962. 74 R. Beult, Cross at Hand, Staplehurst, 1963. 45, 55, 66, 75, 85, 54, 64, 74, 84

12) 94 R. Stour, SW of Hothfield, 1943: E.G.P. MNE. R. Stour, Godmersham Br[dige], E of Ch[urch], 1955, FR & E.S. 04 Dikes E of R[ai][lwa]y, S. of Willesborough, 1950. 94, 04, 05, 15


14) 83 Breeches Pond, 1947.


P. polygonifolius Pour. 15, 16 9/51

Native. In acid, often peaty and ferrugineous water, in pools and rivulets in bogs, and in ponds on acid soils; locally plentiful in 12) and 13); rare in 1) and 10); unrecorded elsewhere. Locally common in the heath districts of Surrey and Sussex, very rare in Essex and in Pas de Calais.

1) 46 Keston Bog, 1944-62. 46

10) 55 In Pond, Ightham Common, 1944-62, MNE.

11) [nr. Hadlow, 1878, FWE Shrivell TLS]


P. coloratus Hornem. 15 3/51


(The record for 12) Hothfield in Fl.K. is surely an error.)

P. lucens L. 15, 16 11/51

Native. Dikes, canals, lakes, and rivers, in still or slow moving neutral or calcareous water: frequent in the alluvial marsh dikes of 4) and 15), and i the Stour in 12): formerly in 1), 2), 11) and 14), but apparently now extinct there.

1) Ravensbourne, Lewisham, Milne & Gordon.]

2) Greenwich Marshes; Deptford Creek, Mile & Gordon.]


11) [Old records only for Tonbridge and Maidstone.] SW of Bishopsden, 1955, ES.

---

This symbol marks several entries, but the intention is not clear.
P. lucens x perfoliatus (= P. x salicifolius Wolfg.) (P. decipiens Nolte ex Koch)


P. alpinus Balb.

Native. Slow flowing rivers, ditches and ponds; extremely rare and only recently observed in 11) in the Beult and its tributary the Sherway.

[4] Ditches, Sholden, FGEK.


P. perfoliatus L.

Native. Rivers and canals: very rare, and much decreased since Fl.K. 24 localities given there: only 9 modern ones.


2) Marshes ditches nr the Thames, E. de C.


[8] 34 In the Dour FGEK.


11) [75 In R. Medway, Teston, 1944 MNE.] [15 In Medway, Maidstone, 1895, H. Lamb MNE.] [Tonbridge, Fl. Ton.] 75 E. Farleigh: 65 Yalding FJH.] /75

[12] In Stour, 15 Canterbury/ E. of Chartham, F.M.W.; 04 Wye, FJH.


P. friesii Rupr.

Native. Calcareous fen-dikes; very rare but locally abundant.


P. pusillus L.

Native. Slow flowing rivers, ditches and ponds; extremely rare and only recently observed in 11) in the Beult and its tributary the Sherway.

[4] Ditches, Sholden, FGEK.
Native. Still or slow moving fresh water in streams, ditches, etc.: rare, and recorded only from the marsh districts 2), 4) and 15), and from the Medway valley 11) and Stour valley 12).


P. pusillus x P. trichoides = [P. x grovesii][475]

11) Marden (as P. berchtoldii) E.S.M., BEC Rep., 1920, p.50.

P. obtusifolius Mert. & Koch 15, 16 4/51

Native. Ponds and ditches: now very rare, in a few ponds in the Weald.


2) Luddenham Marshes, 1961, H.M. Wilks, det. DMcC.

4) [Ham, H.C. Watson. Stourmouth, Dowker.]


12) [Stour nr Wye, F.J.H.]

13) Pond N. of Scarletts, Cowden, 1949, ECW.

The wide blunt leaves, close branching habit, and very fine lateral nerves distinguish this species when sterile.

P. berchtoldii Fieb. 15, 16 13/51

Native. Freshwater dikes, streams and lakes, in base-rich water: rare in 2) and 13); widespread and locally frequent in 4), 11) and 12).

First record, 1881: see Dandy & Taylor’s paper in J. Bot., 72 (1940) p.56.

1) Danson Park, GMB. Ruxley pits, S&G.

2) 57 Dartford Marshes, 1962 MNE (det. JED 1963).


12) 05 R. Stour near Church, Godmersham, FR & ES, 1955 MNE. 94 R. Stour, Hothfield, 1959, G. Morgan MNE.

13) 63 Ditch S. of Church, Lamberhurst, 1956 MNE.

In this species there is a strong lateral nerve on each side of midrib at some distance from it.

P. trichoides Cham. & Schlecht. 15 4/51

Native. Freshwater ditches and lakes: very rare and confined to 4) and 15).


[474] This account has been amended more than usual, with a number of records from district 4 queried and then deleted (so not included here).

[475] Name supplied here, not in manuscript. In the BEC Report cited, it was P. x franconicus, a re-determination by C.G. Druce.
**P. acutifolius** Link  
15, [16]  
[4/51]: 2/51  
Native. Alluvial dikes in calcareous water; very rare, and only seen recently in 4) and 15).

1) 37 Marsh ditches, Deptford, Hb. Buddle.  


**P. crispus** L.  
15, 16  
[38/52]  
Native. Freshwater streams, ditches and ponds: widespread and locally frequent in 2), 4), 10), 11), 12), and 15); unrecorded for 3), 5)-9). Frequent in the adjacent counties and in N. France.


1) 47 Cray, nr A.2, Old Bexley, GMB. 46 Keston Ponds, 1949, DPY, Hb. DPY.


11) 54 Tonbridge Marshes. The Moat, Ightham Mote, 1955, Mrs. M. Mellinson. 75 R. Medway, Maidstone, 1957, E.G.P., MNE. 85 Fairlawn Mill pond, Mrs. B. Dodds. 84 Pond W. of Leighford, Headcorn, 813454, 1962. 84 R. Sherway, Sherway Bridge, Smarden, 861447, 1962 MNE. 74, 44. 75, 84, 74, 44

12) 94 Stour SW of Hothfield, 1943. 05 R. Stour, Godersham, 1955 MNE. 05 R. Stour, Godmersham, 1955 MNE. 05 R. Stour, Shalmsford Bridge, Chatham, 1960 MNE. 04 R. Stour, Olantigh Park, 1m S. of Godmersham, FR & R. Melville, MNE.


14) Breeches Pond, RAC. 83 Pond E of St Michael’s RAC.


16) 23 Gault pond, Folkestone Warren, 1965, BN.

**P. crispus x friesii = P. x lintonii** Fryer

10) Stream in village, Riverhead BM. R. Darent, by rly. between Dunton Green and Riverhead, 1946, JPMB, in Hb. JPMB BM.

**P. pectinatus** L.  
15, 16  
[24/51]  
Native. Streams, ponds, canals and ditches, in fresh and brackish waters: very common in the districts 2), 4) and 15), less so in the Stour in 12), rare in 1), 3), and 11).

1) 46 Keston Ponds, C. West.

Marshes. 06 Harty. 06 Dike, 046648, W of Sportsman, Seasalter, HMW. 86 Dikes, S. Chetney Marshes, 1962. 76 Burham, dikes W. of Church. 76 Cuxton.


6) Chalkpit, Northfleet, HAS.

11) 75 Maidstone, in R, Len, E.G. Philp, 1958 MNE.


287

Groenlandia Gay

G. densa (L.) Fourr. (Potamogeton densus L.) 15, 16 16/51

Native. Freshwater dikes, streams and ponds; rare and unrecorded from most of S. Kent but locally frequent in the dikes of 2), 4), in the Darent in 10) and in the Stour in 12); rare in 8), 11), 13) and 15).

1) Cray, Old Bexley, GMB (nr A2).


8) 24 R. Dour, Kearsney, KDR.

10) Chipstead 45, 56

11) Tonbridge. 65 Clare Park, E. Malling.

12) R. Stour, Chilham, 1945, DHK. 04, 95, 05, 15

13) Tunbridge Wells, W.W.R. TLS.

15) Lydd, Lady D. c.1902. No recent records.

RUPPIACEAE

Rupphia L.

R. spiralis L. ex Dumort.


Wilks & FR, MNE. W. of “Sportsman”, HMW. /87 Grain, /06 Harty/Seasalter/Sheerness

3) E. of Whitstable (=Swalecliffe) FJH, Fl. K.

4) /35 – 1954 – Richborough?

R. maritima L.


5) Dikes below Faversham, FJH, Fl. K.: DHK, 1945. ½ mS W of Sportsman, W. of Seasalter, HM. Wilks MNE.

ZANNICHELLIACEAE

Zannichellia L.

Z. palustris L. 15, 16, 32/51

Native. Ditches, streams, and ponds, in still and running fresh or brackish water, not in acid water: frequent to locally common in 2), 4), and 15), in the Darent and Stour in 10) and 12) and in the northern part of 11); rare elsewhere, and absent from 5)–9) and 13) and 14). Rare in Surrey, local in Sussex, Essex, and Pas de Calais, but commoner in the coastal marshes.


3) 16 Swalecliffe, 1944.


5) Flooded chalkpit, Northfleet, HAS.


15) Hythe, J.E.L. 02 Lydd. 92 Appledore. 13 Dike nr Selby Fm S of Lympe, 1958 MNE. 92 Dike, Fairfield, 1952, MNE.

16) 23

ZOSTERACEAE

Zostera L.

Z. marina L. 15

Native. In estuaries on mud near low-water mark: very rare, and not confirmed by specimens. Zosteretum submerged:emerged ratio 0.628 – 282/732 hrs per month.

2) Mudflats near LWMOT [Low Water Mark of Ordinary Tides], NW of Seasalter; reported, local fishermen, to REW and Prof. GE Kewell, 1950. From the description and the habitat this was probably Z. marina L. Older records for this species cannot be accepted in the absence of specimens (see Fl. K.).

476 Follows Aponogeton in manuscript.
**Z. angustifolia** (Hornem.) Reichb. 15, 16 2/51
Native. Mud flats below the general salt-marsh level, but far above low-water mark of ordinary tides (often over low water reefs!); very rare, but locally abundant in at least three places. Rare in Essex, very rare in W. Sussex. Not reported from Pas de Calais; nor are the other two species.


4) "Salt-water ponds at Reculver", Hb. J.S. Mill, probably refer to this species: I have not seen the specimen.

“A Mallard shot off Milford hope Island in Sept. 1958 had 170 seeds of this species in its food tract, in perfect preservation: it had probably fed just prior to being shot”: P. Olney *in litt.*, 1962.

---

**Z. noltii** Hornem. 15 1/51
Native. Mud-flats, with *Z. angustifolia*: very rare but plentiful in at least two places.

2) Mud-flats close to beach, W. of Sportsman, Seasalter, 1960, H.M. Wilks.; 1960! MNE "may well be this, but sterile", T.G.T. Mud-flats close to beach, castle coot, Graveney, 1960, H.M. Wilks.

---

**ARACEAE**

*Acorus* L.

**A. calamus** L. 15, t16 Sweet Sedge 1/51 (3/51)
Alien, probably introduced into Britain, but appearing quite native in dikes about Plucks Gutter.


13) Spa Golf Course, T[unbridge] Wells, KEB.

**Calla** L.

**C. palustris** L.
Alien. Naturalised in a swamp at:

13) Kenward Green, 633409, Pembury, 1956: flowering 1962, CAS, det. BM.

**Arum** L.

**A. maculatum** L. 15, 16 /51 Wild arum, Lords and Ladies, Cuckoo-pint 2n=56
Native. Woodland on all except highly acid soils, hedgebanks; abundant throughout Kent except in the marsh districts 2), 4) and 15) where it is, locally, very rare or absent; it is also rare in the acid sandy plateau woods of 13), but even here occurs on hedgebanks where the soil is somewhat base-enriched. Common throughout the adjoining counties and N. France.


---

Follows *Orchidaceae* in manuscript.
3) 06 Hernhill village 55. 16 Canterbury golf course 55. 16 Old Park, Canterbury 55. 26 Shelving Wood (Woo[wich] Beds) '62.

4) Wenderton Wood, Wingham, BN.

5) Darwins Bank, Downe. Halstead PCH. Rushmore Hill PCH. Hedge 396611 PCH. Pilots Wood PCH.


_A. italicum_ Mill. subsp. _neglectum_ Towns.

Native: deep, well-drained banks on calcareous rocks: very rare and as a native only known in one locality in Kent so far. There are a number of old records from S.E. Kent quoted in Fl. K.: C.T. Prime and I have visited most of these, and C.T.P. has looked at the available herbarium material: he has concluded that all records prior to the one quoted below are errors (see Melvill’s account of his reputed discovery of this at Folkstone in J. Bot. 1888, p.348, and N.R.A. Brigg’s comment in Ibid. p.378).

It is locally common in sheltered localities on the chalk in W. Sussex, and westward from these; not recorded in any other adjacent county nor in France NE of Normandy.


A. dracunculus

16) Old r[ail]w[ay] bank, Shorncliffe, for 3 years to 1950, teste V.F.P.Day.

LEMNACEAE

Spirodela Schleid.

S. polyrhiza (L.) Schleid.478 15, 16 23/51 Greater Duckweed

Native. Ponds, and slow-moving rivers and ditches: very widespread and locally common in fresh base-rich waters. Surprisingly rare in 2); common in 4) and 15), and in the Medway-Beult system in 11) and in the Stour. [old records for Plumstead, Northfleet and Harty Ferry, FI.K.]

2) 06 Dikes NW of Waystreet Fm, Hernhill, 055616, 1955 MNE 06


10) 45 Westerham, R[iver] Darent AGS.


12) 94 Stour below Ashford, '49, E.S. 04 R[iver] Stour, Olantigh Br[idge], Wye, L.W.W. 94, 04

13) 53 Tunbridge Wells, '55.

15) 01 Dungeness. 02 Brenzett. 93 R[oyal] M[ilitary} Canal, Kenardington, 1959 MNE. 83 Dike, Windmill Channel, E of Freezingham, Rolvenden, 1959 MNE. 82 Dikes SW of Small Hythe, 1956. 16, 15, 26, 36

Lemna L.

L. gibba L. 15, 16 25/51 Fat Duckweed

Native. Streams, ponds, and ditches in fresh and weakly brackish waters: common in the marsh districts 2), 4) and 15), in 12), 13) and in the Medway-Beult system in 11); rare elsewhere.

2) 77 Highham Marshes, 1944-1956; flowering here, D.P.Y. 1947. 67 Northfleet Marshes, stream 615746 PCH. 76 N. of Burham Fl. K. 87 Dike, All Hallows, AGS. 06 By Waystreet Fm, Hernhill. 96 Dikes, Blacketts Tonge. 67, 77, 87, 96, 06


10) unrecorded.]

11) 65. 54 Ditch near Medway, Tonbridge, GE Shaw. 64 Pond, Plogs Hall, Whetsted, 657458, CAS, 1957. 84 R. Beult, 832440, S. of Ch[urch], Headcorn, ‘62. 74 E of Staplehurst, 1950. 74 R. Beult, Cross in Hand, Staplehurst 1955 MNE. 94 Pluckley. 54, 64, 74, 84, 65

12) Ditches S. of Willesborough, E.S. N. of Willesborough. Near Ashford Sewage Works, 1949, E.S. Stour, Milton Bridge, MEM. 94, 04

13) 64 pond, Kippings Cross, 644401, 1957, CAS.

15) 92 Appledore. 02 Brenzett! RGW. 02 New Romney. 02 Brackish Marsh (old eastuary) SW of Littlestone 1950 MNE. 83 Windmill Channel, E of Rolvenden Layne, 1959. 93 Shirley Moor. 03. 83, 82, 93, 92, 03, 02, 01

L. minuta

Now common.

L. minor L. 15, 16 50/51 Common Duckweed

Native. Fresh and weakly brackish waters, in streams, ponds and ditches; abundant in such habitats wherever they occur; hence very rare in the chalk districts.


478 In the manuscript, given as Lemna polyrhiza L.
L. trisulca L. 15, 16 42/51  Ivy-leaved Duckweed
Native. Ponds and ditches, in fresh base-rich and in brackish waters; very abundant in the coastal marsh districts and estuaries of 2), 4) and 15), far less common than L. polyrhiza inland in 11) and 12); very rare in 13).

L. arrhiza (L.) Horkel ex Wimm. 15, 16 7/51  Least Duckweed
Native. Ponds and ditches: rare, but locally abundant in a few places in 4), 11) and 15): unknown elsewhere.

* 1935: BEC, 1935, p.44.

JUNCACEAE 479

Juncus L.

J. squarrosus L. 15, 16 Heath Rush 5/52
Native: dry- and wet- heaths: very rare, but still plentiful at Hotfield Common. Still very common on the heaths of Surrey and Sussex, very rare in Essex: very rare in Pas de Calais (3 localities only now).

Juncus tenuis Willd. 15, 16 11/52
Naturalised alien, becoming widespread in damp paths in woods on acid soils, but still rare.

West Kent, St J. Marriott, BEC Rep., 1925, p899.

J. compressus Jacq. 15 6/51
Native. Moist calcareous meadows, associated with chalk springs: rare, but locally plentiful in 4) and 12) and in one place in 11). Local in meadows by the Thames in Surrey; very rare in Sussex; unrecorded for Essex; frequent in the Pas de Calais. This is an inland freshwater species, in contrast to the next, and its globular fruits much exceed the perianth in length.

J. gerardii Loisel. 15, 16 24/51
Native. Brackish ditches and meadows: upper parts of tidal saltings: fresh meadows in former estuarine areas: common and general on these habitats in 2), 4) and 15). Inland at Swalecliffe in 3), in 12) at Sevington, E.S. In 15) it occurs well inland at Fairfield, Sandhurst Levels, Brenzett and Shirley Moors, probably as a relic of anciet brackish conditions. Probably now extinct by the tidal Thames in Surrey, but plentiful locally in its typical habitats in Sussex, Essex, and Pas de Calais.

In the manuscript, this section follows Liliaceae.

479

3) 16 Swalecliffe, REW.


J. bufonius L. 15, 16 Toad Rush 51/51

Native. Bare, damp ground, such as pond banks, paths, track ruts, often in woods and on heaths on acid soils, but also in fens and marshy meadows: very common, except in the chalk districts, 5) – 9), where it is rare: common in the adjoining counties and in N France


2) Higham Marshes. Holborough Marshes. Grain, 886774, AGS. Oare Meadow, H.M.W. Gravel pits E of Bysing Wood, HMW.


5) Pond, Downe village, 1960, FHB.


8) Pond, Gate Fm, Rhodes Minnis, 1955, DACL. Napchester Wood, in clearing, 1957, BN.

10) Darenth Meadows PCH, FR. Bradbourne pits, FSEF. Road verge 1½ m N of Westerham RAC. Ightham Common. Seal Chart, SW part 1954 MNE.


16) Folkestone golf course, VFSPD.

J. inflexus L. 15,16 51/52 Hard Rush

Native. Meadows, alluvial grasslands, pastures and marshes on moist or heavy base-rich soils or on alluvial peat: very common and often abundant, except in the chalk districts 5) – 9). Particularly abundant in the marsh districts 2), 4), and 15), and on the Weald and Gault Clays in 10), 110, and 12); its local abundance in grasslands indicates poor drainage. Abundant throughout S.E. England and N. France.


2) 857669, L[owe]r Halstow by str[eam], '62. Grain, PCH.

3) Luddenden Marshes, 61, HM Wilks.


8) 24 Woolwich Wood, KDR. 34 Pond, E. Langdon, 1959, BN.

10) Knole Park, PCH. Above S. Darent, PCH. St Johns Jerusalem, PCH. Darent Meadows, PCH. Lullingstone PCH. Bradbourne pits FSEF.

11) Addington Place, DMcC. Claypit, Trottiscliffe SW, HAS. Platt Brickfields, DMcC. Fairbourne Mill, Harrietsham BD. 683493, E of Hale St, 57, CAS. Rdside Leighbridge, Headcorn, 813454, '62. Green Lane E of
J. effusus L.  
15, 16  
50/51  
Soft Rush  
Native. Very Common and abundant in damp grasslands, marshes, and open places in woods on a wide range of soils from weakly acid to calcareous and brackish types: rare only on the chalk in 5) – 9). Abundant throughout S.E. England and N. France.


3) R[oad]side Pond SE of Blean, CAS.

4) Wendonton, meadows BN. Westbere Marshes, MEM. N. of Sandwick Bay.

5) Andrews Wood, PCH. 396611, PCH.

6) Swanscombe Wood, 1945. On clay with flints, Preston Hill, PCH.

7) Park Hill, Hougham, on clay with flints, DPY, ‘55. Reinden Wood BN. Unrecorded in 34 from Dover to Kingsdown.

10) Westerham Wood PCH. Meadow nr. Darent W of Brasted GMB. Knole Park PCH. Bradbourne pits FSEF.


J. effusus x inflexus = J. diffusus Hoppe

11) Leybourne, 1962, Mrs. R. Begg.


J. conglomeratus L.  
15, 16  
44/51  
Compact Rush  
Native. Damp grassland, marshes, rides and clearings in woods: not quite as abundant as J. effusus; though very well distributed; it is rare in 2) and the NE part of 4), rather more common on acid soils. Most easily distinguished from compact-headed forms of effusus by the stem, which has fewer and stronger ridges and feels fluted when rolled between finger and thumb (effusus feels smooth). Common throughout S.E. England and N. France.


2) (not rec[orde]d for 87, 97, 07, 96)

3) Marsh, Old Park, E of Canterbury 1947 MNE.


5) Andrews Wood S. of Badgers Mount PCH.

8) Eastling Woods, BN. Reinden Wood, 1959, BN.


12) Hothfield Heath, 1947 MNE. Field SW of Sellindge Church RAC.

J. maritimus Lam.  

**Native.** Upper parts of tidal salt marshes: common in 2) from below Gravesend to Sealsalter and up the Medway to Cuxton; in 4) in the Stour estuary below Sandwuch; and in 15) rare, and only at Littlestone and SW of Lydd.


4) N. of Sandwich by Stour, from Downs Farm to river mouth. Saline dune slacks S. of Shellness, Sandwich Bay MNE. 35, 36

15) S of Lydd, H. Lamb 1897 MNE. Old Rother estuary S of Littlestone. S. of Dymchurch, RGW. South Brooks. 01 02

J. acutus L.  

**Native.** Dune slacks, both saline and fresh, and sandy salt-marshes: very rare, but locally abundant from Deal to the estuary of the R. Stour. Not known elsewhere in S.E. England, or in N. France E. of the Cotentin. It occurs very rarely in Norfolk., and is abundant in the dune slacks of N. Devon and Wales. It is an essentially Mediterranean species in Europe.


J. subnodulosus Schrank  

**Native.** Calcareous fens and fen meadows, usually on peat: rare generally, but locally common in 4) and 16); scattered elsewhere in 2), 11), 12), and 15). Very rare in Surrey, Sussex and Essex; locally common in fens in Pas de Calais.

2) Footscray Meadows, R. Burton. 57 Ditch, Barnes Cray, below Crayford, 1944 MNE. 76 Holborough Marshes, Snodland, abundant, 1944, MNE. 76 Snodland S. Marshes, one clump, 1943-44 MNE. 06 Gravel pits NE of Oare, 1959, MNE. [67 Northfleet Brooks, 1862, Maidstone NHS, MNE.]


35 behind dunes, N. of Sandwich Bay. 26 Stodmarsh! 1964, PWW. 16 Westbere M[arshes]. 15 Fordwich M[arshes].

11) 65 Leybourne Castle Lakes, 1958 MNE. 75 Mote Park Lake, Brian Woodham[s], 1964.


15) 01 Old shingle workings NE of Bird observatory, Dungeness, 1953-62 MNE.


J. acutiflorus Ehr. ex Hoffm.  

**Native.** Valley bogs and swamps on heaths or in woodland, on moderately acid peat: rare on the Eocene gravels and sands in 1) and 3), local on the Folkestone Sand heaths of 10), 11), 12), and 16); only common on the Hastings Sands of 13); very rare in 14); and Dungeness in 15). Usually associated with some degree of flushing with base-deficient water. Very common in the acid sandy areas of Surrey and Sussex on Bagsand, Greensand and Wealden Sands; very rare in Essex and Pas de Calais where suitable habitats are few.
1) 46 Keston Bog, PCH, 1945 MNE. 56 wet place[s], Farningham Wood, GMB. 47 Chislehurst Common. Ruxley Pits, S&S.

2) Marsh on landslip on cliffs, E of Minster, 1954, on Bagshot Sands and London Clay.


10) 55 Ightham Common. 55 Oldbury Hill. 45 Marsh 1m. E. of Westerham 1955 MNE. Westerham Wood 82.

J. acutiflorus x articulatus = J. x surreyanus Druce

J. articulatus L. 15/16 43/51 [Jointed Rush]

Native. Marshy meadows, swamps and fens on neutral to calcareous peat or alluvial soil: rather frequent in most parts of Kent except the dry chalk districts.


2) 57 Barnes Cray, below Crayford, 1944, MNE. 77 Meadow ¾ m. S. of Cliffe Station, 1944. 76 Holborough Marshes, 1944 MNE. 76 Snodland S. Marshes. 96 Luddenham Marshes, 1961, H.M.W. Sheppey, A.G. Davis 1918 MNE. 06 Meadow N. of Oare Mill Pond, 1959 MNE. 07 Warden cliffs, in ravine. 76, 96, 06, 77, 87, 07

3) Gipsy Corner, Clowes Wood, 1953, REW. Church Wood NW of Rough Common REW.


10) 45. 55 Bradbourne Pits FSEF. 45, 55

11) Addington Place, DMcC. 65 Leybourne Lakes. 65 Mereworth. 85 1m. S. of Harrietsham 1958 EGP MNE. 84 Pond 811454 W of Leighbridge Headcorn ’62. 84 Pond E of Hale St. CAS 683493. 66 Ryarsh Wood. 75 Boxley, 1958, EGP, MNE. Pluckley Brickworks ES. 65, 75, 85, 66

12) 04 Cuckoldscoomb Fen, Brook, 1946-54 MNE. 14 Stotving fen-meadows, 1954 MNE. 94. 95. 94, 04, 05, 95, 05, 15


15) 01 Dungeness. 82. 92. 02 Romney. 02, 01

16) 13 The Lince, Etchinghill 1958 MNE. 23 Gault, Folkestone Warren, in flushes, BN. 44, 54, 64, 74, 84, 53, 63, 73, 83, 93, 82, 92, 03, 13, 23

J. bulbosus L. 15, 16 21/52 Bulbous Rush

5) Pond, Downe Village, 1960, F.H.B.
10) 55 Latham Common, 1944. Westerham Wood 82.
12) 94 Hothfield Common, 1943-62 MNE. 04 Willesborough Lees. 13 Gibbons Brook, 1945-54 MNE. 03 Stonehill Bog, Selldigne.

55 Ightham Common, 1944. 72 Sandhurst.
15) 01 Ballast pit, Dungeness.

J. kochii
1) Keston Common.
12) Birchett Wood, 992358, 1952, DMcC.

Luzula DC.

L. pilosa (L.) Willd. 15, 16 44/51 Hairy Woodrush
Native. Dry woods and shaded hedgebanks, more abundant on lighter soils: very common in all wooded areas of Kent, but absent from the marshland areas and from Sheppey in 2), and wholly from 4) and 15): rare on the Weald Clay in 11) from Tonbridge to Smarden. Common in the adjacent counties and in N. France.

2) Hawes Wood
4) Copse, Wenderton Mabor, Wingham, BM.
5) Well Wood, 3964, PCH. Darwins Bank Wood, Downe...

Formerly treated as a separate species, but presumably would not have been maintained as such if Francis Rose had continued his revision of taxa covered by the Flora.


L. forsteri (Sm.) DC 15, 16 34/52 Narrow-leaved Woodrush

Native. Dry woodlands, particularly of beech and oak, especially on banks, mainly on chalk, sand or gravel; rather common to locally very common over most well-wooded parts of the county, but rare in 12), unrecorded in the marsh districts of 2), 4), and 15), and absent from the heavy clay soils: common over much of Surrey and Sussex: the Weald and the North Downs seem to be the headquarters of this species in Britain. Very rare in Essex, unknown in Pas de Calais, or NE of Normandy in France.


2) Hawes Wood, Newington (Thanet Sand) 1957 MNE.


9) Unknown.


12) Rare. 03?


51/53 T[unbridge] W[ells], 63h, 73c, 44, 54, 64
16) Bargrove Wood / Asholt Wood VFPD.

Luzula forsteri x pilosa = L. x borreri Bromf. ex Bab.

Native. This hybrid can usually be detected where the parents occur together — and nearly always where L. forsteri occurs, L. pilosa is nearby or intermixed.

3) Thornden Wood 1945.
5) Beech Woods, Pratts Bottom, Chelsfield, 1956 MNE.
6) Darent Wood, ESM.
10) Bitchet Common. Lane SW of Ightham 1949 MNE.

L. sylvatica (Huds.) Gaudin 15, 16 25/52 [Great Wood-rush]

Native. Dry woodlands, mostly of sessile oak or beech associations, on sandy or gravelly soils, but usually in sheltered humid situations: widespread in wooded areas, but rather local with absences over certain parts: frequent generally on the Eocene of 1), 3) and 6E), occasional and local on drifts over the chalk in 5), 6), 7) and 8). Common to abundant on the Lower Greensand of 10) and 11), scattered on the Hastings Sands of 13) and 14). Frequent in the High Weald and Greensand areas of Surrey and Sussex, rare and very local in Essex, very local in Pas de Calais and confined to the Wealden of the Boulonnais.

1) 57 Joydens Wood, 1946 MNE. 56 Farningham Wood! PCH.


10) 45 Crockham Hill. 45. Ide Hill. 45 Goathurst Common S&S, RAC. 55 Everlands, 508518, RAC. 55 Bayleys Hill.
12) unrecorded.
13) Stonewall Park, Chiddingstone. 54 South Park, Penshurst. 53 Hungershall Rocks 1947; ‘60 MNE. 63 Winbridge Lamberhurst 1944 MNE. Fishers Castle Rocks. 73 Old Park Wood. 63 Kildown Wood. By drive, Tunbridge Wells 595400 CAS.
14) 93 Finchbourne Wood. 93 Gill S. of Pigeon Hoo, Tenterden, 1962. 82 Gill N. of Wittesham. 92 Gill Wood, Owley, Wittersham 1954 MNE.
301

[16] Aldington Common, FGEK.

† L. luzuloides (Lam.) Dandy & Wilmott [White Wood-rush]

Alien; status uncertain.

11) Maidstone, 1890 H. Lamb MNE.

L. campestris (L.) DC. 15, 16 50/51 [Field Wood-rush]

Native. Dry grassland, dunes and open places on heaths and in woods: very common throughout most of Kent but unrecorded recently for Thanet 9). Common in all adjacent counties and N. France.


2) Dartford Heath 516728, 1961, HMR.

3) 123660 track Chelsfield HMW.

4) Sandwich Bay.

5) Leaves Green. Rushmore Hill, PCH. Pilots Wood, PCH.


10) Knole Park.


13) Stone Cross, Ashurst, 518381, CAS, 1960. Scotney, PCH. Southborough HNC.

14) [Tenterden, J. Ridley 1908 MNE.] Woodchurch, ES.

15) Romney Warren, fixed dune by R[oa]d, ’62. NE of Littlestone ES.

L. multiflora (Retz.) Lejeune 15, 16 36/51 Heath Wood rush

Native. Dry open woods and heaths, usually on acid sandy or peaty soils: also in fens: widespread and locally common in such habitats. Common in Surrey and Sussex, more local in Essex and Pas de Calais. The two varieties of this species, var. congesta (DC.) Lej. and var. multiflora, have been recognised as species (see J. Buchaan, 1960, Proc. Linn. Soc. 171, pp126-128), but I have followed Dandy in regarding them as varieties. Their distribution, as far as it is known, is given below that of the aggregate.


4) 35 Hacklinge Fe, 1946. Ham Fen.

6) 66 Darenth Wood.


8) 14 West Wood, Stowting, MNE, 1956. Atchester Wood, B.N.


15) Fen SE of Hamilton Fm, Denge Beach, 1954 MNE.
**var. multiflora** *(L. multiflora) (Tetz) Lejeune s.s.***

Buchanan (see above) found 2n=36 consistently in material which she regarded as this taxon from Glen Lyon, Perthshire.

1) Abbey Wood, H.L., 1862 MNE. West Wickham Woods AG Davis 1916 MNE. Chislehurst Common, 1945 MNE.
2) Hunstead Wood, Chartham Hatch, 1956 MNE. Church Wood, SE part, RGW.
3) Ham Ponds, 1957, B.N.
5) Abbey Wood, H.L., 1862 MN.
6) E. West Wickham Woods AG Davis 1916 MNE. Chislehurst Common, 1945 MNE.
9) Abbey Wood, H.L., 1862 MN.
11) Simpkins copse, Maidstone, 1850, MNE. Penenden Heath, 1944 MNE. Wrotham Heath, 1950 MNE.
13) Bog W. of Mooren, Penshurst, 1944 MNE. Angley Wood, 1955 MNE.
15) Hoppen Pits, Denge Beach, 1954 MNE.

**var. congesta** *(DC.) Lejeune *(L. congesta) (Thuill.) Lej.)*

Plants of this taxon cultivated from Glen Lyon, Perthshire were found to have consistently 2n=48 by Buchanan (see above), and she considers that on cytological grounds, as well as from biometrical morphological studies, this variety should be regarded as a good species. She measured morphological characteristics from over 1000 plants of the *campestris – multiflora* complex.

1) Keston Common, 1945, 1946 MNE. Holwood Park, 1954 MNE.
2) Thornden Wood, 1945 MNE.
6) Sandway Bog, Lenham, 1965, B. Dodds. 85
9) 01 Hoppen Pits, Denge Beach, 1945-62 MNE. 01 Shingle pit, Marsh E. of school, Dungeness, 1962. 01

**Cyperaceae 481**

**Eriophorum L.**

**E. angustifolium** Honck. 15, 16 9/52 Common Cotton Grass

Native. Fens, valley bogs and wet heaths in acid (pH3-5) to calcareous (pH7.5) waters: also in artificial ponds and ditches: rare and scattered (only eleven localities), but plentiful at Hothfield, Gibbons Brook, Dungeness and Keston. Probably once common on the [lowe]r Greensand bogs. Still locally common and abundant in W. Surrey and in Sussex (High weald, and Greensand heaths in the west): rare in Essex and Pas de Calais where suitable habitats are few.

1) 46 Keston Bog 1916, AGD MNE; 1944-62! MNE.
4) Sandway Bog, Lenham, 1965, B. Dodds. 85
7) 01 Hoppen Pits, Denge Beach, 1945-62 MNE. 01 Shingle pit, Marsh E. of school, Dungeness, 1962. 01

[**E. latifolium** Hoppe] 15 Calcareaous marshes and open fens: now extinct.

---

481 In the manuscript this follows Typha.
12) Boggy meadow, Herringe, G.E. Smith, F.G.E.K. Harringe, E. Kent, G.E. Smith, Ex Herb. Mrs Robinson Dec. 1847 BM (specimen correct, teste P.C.H.). [Willesborough Lees, W.R. Jeffrey, doubtfully correct, the habitat is not very likely. Not in any adjoining county. The Surrey record at Cernes, Lingfield is an error for angustifolium; it occurs, however, rarely, in Hants and Norfolk and Pas de Calais.]

[E. vaginatum L. (15 error), [16] Extinct native: formerly in 13) Bog at Fishers Castle Tunbridge Wells W.W.R. in Fl. T.W; extinct by 1884, W.W.R.. Tunbridge Wells (W.W.R., TLS), probably from Fishers Castle, the bog is now merely a marshy field. The Thanet records are undoubtedly errors (see Fl.K.). still locally frequent on wet heaths in w. Sussex and W. Surrey. Not recorded from Essex or Pas de Calais.]

Trichophorum Pers.

T. cespitosum (L.) Hartm. ssp. germanicum (Palla) Hegi [15], 16 1/51


[12] Willesborough Lees, CPSK; extinct

13) about Tunbridge Wells, Forster Fl. Tonbr.: extinct now on the Kent side; but it probably occurred formerly. (The records at 2) Frindsbury, FGEK; 3) Hernhill, Stowell; 4) Thanet, Dr. Hunter; and Sandwich E.S.M. are certainly errors for another species. The Sandwich record of Marshall probably relates to Eleocharis quinqueflora: these two have been confused in the past by excellent botanists.)

Eleocharis R. Br.482

E. palustris (L.) Roem. & Schult. 15, 16 /51 [Common Spike-rush]

subsp. palustris

Native. Ponds, ditches and swamps, usually on inorganic mud or silt, in weakly acid to calcareous water. Very common in all suitable habitats throughout the county, but unrecorded from the chalk districts 5) – 9). Common in Surrey, Sussex, Essex, and Pas de Calais.

1) 37 Beckenham Place, pond, PCH. V 47 SW pond, Chislehurst Common, 1945 MNE. Ravensbourne, Bromley, AG Davis, 1919 MNE. Ruxley pits! S&S.

2) 47 Erith Marshes, PCH. 87 Dike, All Hallows, AGS. 96 Conyer, KDR. 95 Luddenham Marshes. 67 Northfleet. 57 Swanscombe. 67 Chalk. 77 Higham. 77 Cliffe. 76 Upnor. 76 Cuxton. 76 Halling. 76 Holborough Marshes. 76 S. of Snodland. 75 Aylesford. 06 Faversham Creek, Miss V. Day, 1957 MNE and ES.


10) Pond, Wilderness Park, Seal.

11) Leybourne. R. Len, Bearsted, EGP, 1958 MNE. Yalding, H. Lamb 1897 MNE. 54 Tonbridge. 64 Pond S of Hale Street CAS. 84 Pond ¼ m SE of Marden, 62, 879417.

12) 94 Hothisfield, H. Lamb, 1903 MNE. 14 Stowting Marsh, 1954 MNE. 94 WestWell pond by W[ater] W[orks], ES. 93 Scotts Pond 986395 ES. 03 S. of Water Fm, Sellindge (W. of) 082387, RAC.

13) 44 Hever, marsh S. of Church, 1953 MNE. 54 Moorhen, Penshurst. 53 Brighton Lake, Tunbridge Wells Common, 1960,CAS. 83 R[oa]dside pond E of Cranbrook DS. 63 Court Lodge pond, Lamberhurst, 1941, JRW. 53 Dunorlan Lake (unbridge) W[ells], CAS.

14) 73 Pond S. of Cranbrook (Hartley).

482 In the manuscript, Eleocharis follows Eleogiton. Also the species are ordered differently from Stace edn.2 as adopted here.
subsp. microcarpa Walters\footnote{This is currently treated as a synonym of subsp. palustris.}

Native. Brackish to calcareous meadows, often with \textit{E. uniglumis}: apparently rare, but readily overlooked among \textit{E. uniglumis} which it resembles superficially; it can be distinguished by the two sterile basal glumes to the spikelet: \textit{uniglumis} has only one.


\textbf{4)} Stodmarsh, 1955 \textit{MNE} det. SMW.

\textbf{10)} Meadow N. of Shoreham, 1955 \textit{MNE}, det. SMW.

\textbf{11)} Birling Marshes, 1944, \textit{MNE}, det. SMW.

\textbf{E. multicaulis} (Sm.) Sm.

Native. Pools of valley bogs and swamps, always in fairly acid waters (pH 4.5-5.5); very rare. In only three localities for certain now. Locally common in bogs in west Surrey, and in the High Weald and Greensand heath areas of Sussex: extinct on Essex: very rare (2 localities now) in Pas de Calais.  

\textbf{1)} 46 Keston Common, Fl.K., 1963!

\textbf{2)} (vc15) 94 Hothfield Common, Fl.K., in three valley bogs, 1944–63! abundant \textit{MNE}.

\textbf{483} This is currently treated as a synonym of subsp. \textit{palustris}.

\textbf{E. quinqueflora} (F.X. Hartmann) Schwarz

Open base-rich fens and mires among short vegetation; formerly very rare, and apparently now extinct: no record since Fl. K.

\textbf{4)} Ham Ponds, Dillwyn, Fl. Brit; FGEK. Marsh 1 mile N. of Sandwich E.S.M. (as \textit{S. caespitosus}, but almost certainly this.)

\textbf{15)} Dungeness, 1875, F.J.H.; Fl.K.  

\textbf{E. uniglumis} (Link.) Schult.

Native. Somewhat brackish alluvial meadows in estuaries, and calcareous fen-meadows inland in short vegetation: rare but locally abundant in the Thames-Medway estuary in 2), more frequent in the Stour fen areas in 4): very rare elsewhere inland in 1), 6), 10), and 12): and formerly at least in 15). Very rare in Sussex, not recorded in Essex; rare in East Anglia and Pas de Calais in similar locations.

\textbf{1)} Marsh in Meadow N. of Foots Cray, 1955, GMB and FR, \textit{MNE}.  


06 Ditches near “Sportsman”, Seasalter, PRB and SMW, 1946 \textit{MNE}, \textit{BM}.


61/25 Wingham, 61/35 Sandwich, 61/06 Fav[ersham], 61/16 Whit[stable], 61/26 Chislet, 61/36 Thanet E..
10) 56 Water-Meadow N. of Shoreham, 1954 MNE.
12) 94 Meadow S. of Brabourne Church, 1954 MNE.

Bolboschoenus (Asch.) Palla. 484

B. maritimus 15, 16 27/51  [Sea Club-rush]

Native. Brackish or saline marshes and fleets, dikes (usually brackish or saline) of alluvial flats, upper tidal river banks; abundant and fully distributed in these habitats in 2), 4) and 15); rare on the coast of 3) and 8); very rare in inland ponds, as in 11) (Harrietsham). Very rare in inland ponds in Surrey: common in the Sussex and Essex coastal marshes and in the estuaries of Pas de Calais.

2) 47 Plumstead Marshes, 1944. 57 Dartford Marshes 1930 PHC; 1962. 57 Stone Marshes 1938 PHC: 1945. 57 Swanscombe Marshes 1933 PHC; 1946. 67 Northfleet. 67 Denton. 67 Chalk. 67 Shorne. 77 Higham '44. 77 Cliffe HL 1898 MNE; 1950. 77 Cooling. 76 Wouldham. 76 above Burham Ch[urch]. 76 Halling. 76 Holborough Marshes. 76 S. of Snodland 1894 HL MNE; 1943. 76 Aylesford. 77 High Halstow. 87 St Mary Hoo. 87 All Hallows. 87 Grain. 87 L[owe]r Stoke 1959 MNE. 77 S. of Hoo. 77 Upnor, meadow SW of. 06 Harty Marshes. 96 Elmley. 96 Kings Ferry. 06 Leysdown. 06 Shellness, ditches. 97 Minster Marshes. 86 Brackish fleets, Chetney Marshes, 1962. 96 Conyer Creek. 06 Oare Creek and Meadow. 06 Ditches by Faversham Creek. 06 Graveney. 06 Seasalter. 96 S. of East Church, 1918 AGD MNE. 06 Near Harty Church. Luddenham Marshes, HMW. 47, 57, 67, 75, 76, 86, 96, 06, 77, 87, 97, 07

3) 16 Swalecliffe. Ditch 102660, W. Of Whitstable, HMW. R[oa]dside pond SE of Blean, '56 CAS. 16
4) 35 N. of Sandwich. 36 Pegwell Bay. 35 Slacks of Dunes N. of Deal. 36 Marshy slacks of dunes N. of Sandwich Bay. 36 Minster Marahes, 1963. 26 Brackish dikes N. of Shuart, St Nicholas, 271693 to 270686, '62. 46, Grove. PWW. 26 Marshside, Chislet, 225661, '62. W. of Minnis Bay, HMW. 26, 36, 15, 35
8) 23 Lagoon behind beach below Abbots Cliff.
11) 85 Pond, Harrietsham, 1958, EG Philp MNE.
12) 04
15) 93 Shirley Moor, 1942, JHL MNE. S of Wittersham. New Romney, Ch[urch] Lane, RAC. Dymchurch. South Brooks. Wicks. 82, 92, 93, 03, 13, 01, 02

Scirpus L.

S. sylvaticus L. 15, 16 31/51  [Wood Club-rush]

Native. Springs, swamps and flushes in woods, usually of alder: common in the High Weald in 13) and the western part of 14), and frequent in alder carrs on the greensand spring lines in q19), 11), 12) and 16; a few localities on the tertiaries in 1) and 3), and rare near the tidal Medway in 2); in one place in 4). Common in Surrey and Sussex, principally on the Weald; uncommon in Essex, very local in Pas de Calais.

2) 66 Birling Marshes. 76 S. of Snodland. 76 W. of Burham. 76
3) 06 Copse W of Waystreet Fm, Hernhill, 1955 MNE. 05 S. part of Fishponds Wood, Charlton, Miss B. Nash, 1958 MNE at 097581 near R[oa]d. 16 Convicts and Longtye Woods by str[eam] S. of South Street REW, 1960 HMW. 15 Stream at Tyler Hill, RGW. Calcott Bridge, Sturry, 1955, RGW. 06, 16, 05, 15
4)
10) 45 Near Source of Darent, W. of Westerham, GMB, 1954. 45 1 mile E. of Westerham, 1955 MNE. 56, 45, 55
12) 94 Hothish Mill alder carr BN. 04 Cadmans Wood 1946. Smeeth. 04 Hinshill, Oastley, 053423 ES. 94 N. of Yonsea mill 991455. 14 Chalk springs, Stowting, 1944. 93 N. of Ham Street 997343 by B.2070. 05 Cudham, 1945. 04 Bybrook, 015441, ES. 94, 04, 14, 93, 03
13) 63 Pond near Ellis Wood, Lamberhurst 1937, JRW. 63 Pond near Bayham Chapel, 1940 JRW; CAS. Bayham CAS. 73 Alder Carr W. of Folly Hill, Colliers Green, 1962. 73 Angley Wood. 83. 44 W. of Chiddingstone. 53

484 Given as Scirpus L. in the manuscript., which genus accordingly begins with B. maritimus named as Scirpus maritimus L.
Schoenoplectus (Rchb.) Palla 485
[S. triqueter (L.) Palla] 15, [16] [Triangular Club-rush]

Former native, now extinct, on the Medway above and below Aylesford on the tidal mud-banks. Probably now extinct too on the tidal Thames in Surrey and Middlesex: there are no recent reports of it either from the Arun in W. Sussex.

2) Medway, Aylesford, 1924, Ex Herb T.J. Foggitt BM; R[ight] bank of Medway, above Bridge, Aylesford 1934, JPMB; 1939, J.E.L.; not refound, 1942-62! Apparently destroyed by dredging of the river channel, or possibly by pollution: its hybrid with tabernaemontani, however, still survives (see below).

4) Mouth of R. Stour, Sandwich Bay, 1932 – “very few plants – no leaves, stem triangular”; ex Herb. Col. R. Meinertzhagen BM teste PCH. 486

S. lacustris (L.) Palla 487 15, 16 17/51 [Common Club-rush]

Native. Margins of rivers and lakes in base-rich water; very local; almost confined to the freshwater Medway and Stour and their main tributaries but frequent along these rivers in 11) and 12); rare elsewhere in a few isolated localities in lakes, ponds and ditches in 1), 4) 10), 13) and 14) 488; in tidal waters and in alluvial coastal flats it is replaced by S. tabernaemontani.

*Bronze Age: Crossness, fruit, Spurrell 1889, Reid 1899.
1) Pond, Hawkhurst Lane Chislehurst, G.M.B. 1958.
4) Hacklinge marshes, 1961, Miss B. Nash.
S. tabernaemontani (C.C. Gmel.) Palla 489 21/51 [Grey Club-rush]

Native. Tidal river banks, dikes and fleets, usually brackish, of alluvial coastal or estuarine flats: local; well distributed and fairly common in 2), 4) and 15); also in freshwater lakes on Denge Beach in 15), and very rarely, in inland ponds. Frequent locally in inland freshwater ponds in Surrey.
2) 57 Crayford Ness, 1951, JEL, etc. 67 Northfleet. 57 Dartford Marshes, behind River Wall ‘62. 76 Snodland Marshes 1944 MNE. 75 By Medway, R[ight] B[ank] Aylesford. 75 Right bank, New Hythe, 1950 MNE. 76. 77 Cliffe. 87 Grain, 805790 All Halls, AGS. Conyer, KDR. Dike near Oare Creek, 1957 MNE. Pits E of Oare Creek. Luddenham Marshes HMW. Ham Marshes REW. Ditches by Faversham Creek ES. 96 Elmley. 06 Hartly. Below Rainham OD. 86, 96, 06, 67, 75, 76, 77

485 Treated as Scirpus in the manuscript; hence S. triqueter given as S. triqueter L.)
486 While this statement may be taken as it stands, Meinertzhagen’s reputation of fraudulent claims for ornithological finds suggests that any claim for these species in this location should be treated as requiring confirmation.
487 Treated as Scirpus in the manuscript; hence S. lacustris given as S. lacustris L.
488 There is a marginal note in the manuscript: ‘single localities occur in the Darent near Sevenoaks, in 10), 13) – Cranbrook?, 14) – Breaches Pond, and in 4), in 1).
489 Treated as Scirpus in the manuscript; hence S. tabernaemontani given as S. I tabernaemontani C.C. Gmel.
S. tabernaemontani x triqueter = S. x kuekenthalianus (Junge) D.H. Kent

Native. This hybrid still persists on the tidal Medway although one of its parents, S. triqueter, seems to have gone. It also occurs still on the Arun in W. Sussex and on the Tamar on the Devon-Cornwall border, but appears to be extinct in Surrey and Middlesex on the Thames.

Isolepis R. Br.

I. setacea (L.) R. Br. 15, 16 21/51 [Bristle Club-rush]

Native. In bare, most places, such as pond borders, track ruts, ditch-sides, and meadows, often on peaty or sandy soils, both acid and calcareous: widespread, but only locally common [in 1), 12), 13); rare in 2), 3), 4) 10), 11) and 15), unrecorded from 5) – 9), 14), 16). Rather common in Sussex in the Weald, locally so in Surrey, rare in Essex; and in Pas de Calais.


2) 76 Snodland S. Marshes, 1946. 76

3) 15 Church Wood, Blean, LW & RGW, 1950, v[ery] a[bundant] 1965, on field to E, RGW. 15


5) 6 Wet chalk pit, SW of Cliffe, 1963. 77

10) 55 Bradbourne Gravel Pits, FSEF, 1957. 55


15) 02 Romney Warren, ab[und]ant.


(E. fluitans (L) Link 15, 16 7/51 [Floating Club-rush]

Native. Ponds, lakes, streamlets and flushes, in peaty acid water; rare. In 1), 11), 12) and 13 sparsely: 8 localities. Commoner but still local in similar places in Surrey and Sussex, rare in Essex (Epping), very rare in Pas de Calais (Helfaut! St Josse!).


490 Treated as Scirpus in the manuscript; hence hybrid given as S. tabernaemontani x triqueter = S. x kuekenthalianus (Junge).

491 Presumably Derrick, although the handwriting is clear.

492 Given in manuscript as S. cernua Vahl., even though Isolepis has otherwise been used instead of Scirpus. Francis Rose missed the presence of this species in the Hacklinge area (found in 2003), despite his study of the Eadt Kent fens and subsequent visits.
15) Marsh Dike, Appledore, 93Q.393

Blysmus Panz. [ex Schult.]

B. compressus (L.) Panz. ex Link 4 or 5/51 [Flat-sedge]
Native. Calcareous fens and wet meadows, in short vegetation; very rare, but abundant in its habitats. A species of Parvocaricetum associations in flushed calcareous mires and marshes. It was probably once more widespread in the E. Kent fen areas and in flushed turf communities by chalk and ragstone springs. Probably extinct in Surrey; very rare in Essex. Very rare in Sussex, but in at least two localities by chalk springs (Aldworth and Kingstone-next-Lewes). Rare in Pas de Calais in similar places.

4) Fen-meadows, Hacklinge, DBG: abundant, JPMB: 1946, FR and DMcC, MNE. 35
12) 04 Calcareous flush meadows by chalk stream, Cuckoldscoomb, Brook, FGRK: 1946-54 MNE, not found 1986. 14 Fen-meadows, Stowting, FGEK; F.J.H. (Fl. K.): not refound here, though habitat was still quite suitable in 1954 04 (14)
16) Darnley Vale, Coolinge Folkestone, in flush fen meadow fed from calcareous Lower Greensand, 1955, MNE. “Salt Marshes, Kent” ex Herb. (G.) Francis, BM. “Bogs, Kent”, Herb. Roem. (er) BM. (Several records quoted for this in Fl. K. are probably errors for Carex divisa or C. disticha: Thames below Woolwich; Brents, Faversham; Luddenham; Seasalter.)

Cyperus L.

C. longus L. 15 1 or 2 / 51 Galingale
Native. Calcareous marshes near the S.E. coast, extremely rare, and possibly extinct in one of its two localities, though persisting in the other. A species of S.W. distribution in Britain and Europe, not otherwise known nearer than S. Hants and the Isle of Wight.

8) 35 Roadside Bank (by the course of a former stream from chalk springs), near station, Walmer, Miss B. Nash: 1958! MNE. 1958! 1962 C.A. Lister. Probably a survival of a very different former habitat here. 35
16) 13 Whitenbrooks Wood, Seabrook, near Hythe 197352494 (peaty calcareous carr on Sandgate Beds) G.E. Smith, C.P.S.K.: BM. Ed. Forster BM, also Hb. J. Storey: the habitat is unchanged, except that it is overgrown, and a large cyperaceous species, which could be C. longus, still exists here, but never produces inflorescences. 13

As an alien, it occurs at:
14) Pond by Hawkhurst Old Ch[urch], 1956, P.C.H.

(C. fuscus L. occurs by a muddy pond at Shalford, Surrey, and at Staines, Middlesex, and has old records for pas de Calais, Nord, and Somme.)

H. declinatus Moench

(Schoenus L. occurs by a muddy pond at Shalford, Surrey, and at Staines, Middlesex, and has old records for pas de Calais, Nord, and Somme.)

S. nigricans L. (15) [Black Bog-rush]
Reported at
4) “Boggy Places”, Fl. Thanet 1847, p.60; and

493 A marginal note lists as follows: Keston 51/46; Tonbridge [urch] 1955, 51/54; Woodch[urch] square 1956, 51/93; S[even]oaks 51/55; Cranbrook 51/73; Lamberhurst 51/63; Pembridge 51/64.
494 Likely to be in error for TR17935.
"Near Folkestone [...], plenty", W. Pamplin in Irvine’s *London Flora*, 1838, P88: but there is no other evidence: some other sedge may have been found, though Pamplin is unlikely to have been mistaken. It may have occurred on the Warren at Folkestone and have been destroyed by coast erosion. It occurs in flushed valley bogs S of Bagshot, Surrey, but not in Sussex or Essex: it is, however, abundant in dune slacks and sublittoral fens in Pas de Calais.

**Rhynchospora** Vahl

[R. alba (L.) Vahl 16 [White Beak-sedge]

Former native, now extinct; in *sphagnetum* of a valley bog. Still plentiful in Ashdown Forest, E. Sussex, and on the bogs of W. Surrey; and in one locality still (St. Josse!) in Pas de Calais. 13) (near Tonbridge, Ray, *Synopsis*, ed. 3, p.427: in Sussex?) Bog near Mr. Slopers, towards Tonbridge, Forster, *Fl. Tonbrigensis*, p.6. This record appears certainly to have referred to a site in Kent.

(R. fusca (L.) Ait. f. occurs plentifully in bogs at Thursley, Surrey, but not in any other adjoining county in Kent. It also occurred in wet-heath at one place (St. Josse!) in Pas de Calais until c.1980.)

**Cladium** Browne

C. mariscus (L.) Pohl 15 Saw Sedge 2/52

Native. In two base-rich fens: very rare, but locally dominant. Unrecorded as a native from Surrey, Sussex, or Essex; but plentiful in the fens behind the coastline of Pas de Calais and Somme.

4) 35 Ham Ponds, DBG, 1802; CPSK; 1946-62! MNE, 1991! Locally dominant in patches, over about three acres of rough fen. Its remains occur at a considerable depth. In the peat of this ancient fen. This colony is the last relic of a species formerly widespread in the fens between Deal and Sandwich.

15) O1 Fen in natural shingle pit, S.E. of Hamilton Fm., Dungeness, F. Swain, 1951; 1952-62! One patch about 20metres across, MNE, c.50m across 1997!

**Carex** L.495

C. paniculata L. 15, 16 27/51

[Greater Tussock Sedge]

Native. Fens and Fen carr, Valley Alder carrs, Pond borders, in alkaline to weakly acid waters; widespread; locally common in the High Weald in 13), the Greensand of 10)-12) and 16), and the fen areas of 4); rare on the Tertiaries of 3).

1) Ruxley pits, S&S. E side R[iver], N. Cray, GMB.

51/47 Bexley


61/25 W[ing]ham; 61/35 S[and]wich; 61/16 Fordwich; 61/26 Preston


51/45 W[esterham]; 51/55 S[even]oaks

11) 65 Marshy Wood SW of Mereworth. By Medway, S. of Station, Leigh, 1942, JRW. 85 Goddington, Harrietsham, BD.

51/65 W[est] M[alling]; 51/75 M[aidstone]; 51/85 H[artlands]


51/94; 61/04; 61/15 Hythe

13) 44 Scarletts Pond, Cowden. 54 Roundabout Wood, Tun[bridge] Wells, 1943, JRW; CAS. 64 Cinderhill Wood, in alder carr, 1953. 73 Bedgbury Park. 73 Bedgbury Pinetum. 73 Louise Lake, Bedegbury. 73 Frizley Bog, Cranbrook. 73 Swamp, Tuckers Pond, Anglesey Wood, 1945-61. 73 Klinowood, Wood, 1946. 64 Corks Pond,

495 The species of Carex are listed here in the sequence of Stace edn. 2, rather than that of the manuscript.
Brenchley, WHP. 73 Horsmonden Mill Pond, 1939, JRW. 63 Scotney Castle, 1939, JRW; 1956 PCH and KEB. 53 Tunbridge Wells. 51/44 Edenbridge; 51/54 Tonbridge; 61/64 Brenchley; 51/53 Tunbridge Wells, 56; 51/63 Amberhurst; 51/73 Cranbrook


[4] Ham Ponds, FJH on Fl. K.; 1906, H.W. Pugsley BM; but appears extinct through lowering of the water table.] [Boggy places, Brook, G.E. Smith in FGEK; probably correct but there is no later record.]

15) Hoppen Pits, Denge Beach, FJH on Fl. K.; A.M.G. Natal and ECW, 1934 BM; 1946-62! MNE →1973! abundant in parvocariceta of the fen zones of all four pits. Marsh E. of Old School, Dungeness, 1962. Marsh E of Boulderwall, Dungeness, 1961. Not seen since 1963 – water levels have fallen. (recorded at 2) meadows at Upnor, FGEK; by Oare Creek, Cowell, Fl. Fav.; Dykes near the sea wall, Ham Marshes, Stowell, Fl.K.: these are almost certainly errors for C. divisa or C. otrubae: C. diandra is most unlikely to occur on the inorganic alluvial silts at these places.)


[4] Ham Ponds, FJH on Fl. K.; 1906, H.W. Pugsley BM; but appears extinct through lowering of the water table.] [Boggy places, Brook, G.E. Smith in FGEK; probably correct but there is no later record.]

15) Hoppen Pits, Denge Beach, FJH on Fl. K.; A.M.G. Natal and ECW, 1934 BM; 1946-62! MNE →1973! abundant in parvocariceta of the fen zones of all four pits. Marsh E. of Old School, Dungeness, 1962. Marsh E of Boulderwall, Dungeness, 1961. Not seen since 1963 – water levels have fallen. (recorded at 2) meadows at Upnor, FGEK; by Oare Creek, Cowell, Fl. Fav.; Dykes near the sea wall, Ham Marshes, Stowell, Fl.K.: these are almost certainly errors for C. divisa or C. otrubae: C. diandra is most unlikely to occur on the inorganic alluvial silts at these places.)


[4] Ham Ponds, FJH on Fl. K.; 1906, H.W. Pugsley BM; but appears extinct through lowering of the water table.] [Boggy places, Brook, G.E. Smith in FGEK; probably correct but there is no later record.]

15) Hoppen Pits, Denge Beach, FJH on Fl. K.; A.M.G. Natal and ECW, 1934 BM; 1946-62! MNE →1973! abundant in parvocariceta of the fen zones of all four pits. Marsh E. of Old School, Dungeness, 1962. Marsh E of Boulderwall, Dungeness, 1961. Not seen since 1963 – water levels have fallen. (recorded at 2) meadows at Upnor, FGEK; by Oare Creek, Cowell, Fl. Fav.; Dykes near the sea wall, Ham Marshes, Stowell, Fl.K.: these are almost certainly errors for C. divisa or C. otrubae: C. diandra is most unlikely to occur on the inorganic alluvial silts at these places.)

In addition to a copy of the manuscript Flora account which bears cumulative revisions to 1985, there exist two very similar manuscript notes by Francis Rose headed CAREX VULPINA L. Kent records held by FR. These do not appear to be specifically intended for the Flora, but give information for records more or less corresponding to the Flora account, albeit sometimes with additional details. Those additions have been included above in the Flora account, but are given in green font, so as to distinguish. The notes are prefaced by introductory comments, of which one reads: ‘The British headquarters of this species is clearly the Weald of Kent, on Weald Clay: habitats are river- and stream-sides, wet meadows, ditches and swampy woods’.
C. otrubae Podp.  15, 16  45/51  [False Fox Sedge]

Native. Pond borders, swamps, ditch and stream sides, on neutral to brackish, usually inorganic substrata: very common in 1)-4), 10)-16) (Blean, the river valleys and the coastal plains); absent from the chalk country 5)-9), except from springs on the cliffs in 8); very rare in Sheppey. Common throughout SE England and N. France.

Not in Warden, Alkham, Dover, Farningham, T[unbridge W[e]lls], Hawkhurst S.

1) 47 N. side of Eltham Common, 1934, LRAG. Ruxley pits, S&SS  46, 47
2) 47 Woolwich Arsenal PCH. 47 Plumstead Marshes. 47 Erith Marshes, PCH. 57 Barnes Cray, Crayford. 67 Northfleet Brooks. 67 Shorne. 77 Highmarsh, 1944 MNE. Cliffe Marshes. 77 Cooling Marshes. 76 Halling. 76 Holborough. 76 Snodland Marshes. 76 N. of New Hythe. 87 Grain. 77 Meadow W of Upnor 1944-60 MNE. 75 Above Aylesford, EGP, 1958 MNE. Conyer KDR. Lundenham Marshes, HMW. (Sheppey, 1x917, A.G.D., MNE.) 97 Minster, DHK.
75 Chart Sutton pond. 54 R. Eden, Chiddingstone. R. Eden, Penshurst. 64 E of Tonbridge. 54 Pond E of Chiddingstone. 84 Ditch, Leighbridge, Headcorn, 813454, '62. 84 Ditch E of Headcorn, 849437, '62. 84 Beult bank, N. of Buckmans Green, 889419,'62. 86. 83438 N of Marley Fm, Smarden, DMcC. Pluckley Brickswork. 64 Beltring. Teston. 64 Pond E of Hale Street, 1952 MNE. 74 Ponds 1m N of Marden 1932. 74 Pond S of Woolpack, Yalding, 1962. 94 Pond, Birch Wood, Bethersden, 915405, '62.
44, 54, 64, 74, 84, 94
(NOT 72), 82
14) 83 E of St Michaels, Tenterden, 1958, R. Clarke.
15) 93 Shirley Moor. 02 Canal St Mary's Bay, LJM. 02 Brenzett. 02 Romney Warren. 13 W. of Hythe. 01 Dungeness open pits. 03 Below Coppehurst, Aldington.
92, 02, 93, 01, 03
C. otrubae x remota = C. pseudoaxillaris K. Richt. (C. axillaris Gooden. Non L.; C. kneucheriana Zahn)


C. vulpinoidea Michx.

1) Green St[reet] Green (Farnborough) 1937, J.E.L. in Hb.

C. spicata Huds.

15, 16 /51 Spiked Sedge

Native. Hedgebanks, pond- and ditch banks, wood borders, scrub, old sandpits: very common on a wide range of soils in all districts except [sic.]. Common in Surrey and Sussex, rarer in Essex: common in Pas de Calais.

1) Keston, PCH. Hawkwood, Chislehurst, Swain. Sparrow fields, FM Swain.
2) N. of New Hythe, 1943 MNE. Below Aylesford, 1958 EGP MNE. ¾ m S. of Cliffe Station.
7) Putt Wood, Ospringe, 1957 MNE. Belmont Park, 1958, DMcC MNE.
8) Reindens Wood, B.N.
10) Sandpit E. of Riverhead by R[ail]way CAS. Lullingstone, Swain.

C. muricata L. (C. pairaei F.W. Schultz) 15, 16 /51 [Common Prickly Sedge]

Native. Dry grassland, hedgebanks and roadsides on sandy soils: frequent and widely distributed in these habitats. (On the Eocene in 1), 3) and 6E), and on the Folkestone Sand in 10)-12) and 16): very rare in 13) and 15). Common in similar habitats in Surrey, rare or under recorded in Sussex and Essex; not distinguished from spicata in Pas de Calais.

1) Elmstead Lane, Bickley, 1945 MNE. Eden P[ark], AG Davis, MNE. Ruxley pits, S&S. Farningham Wood 82!
3) Trenley Park Wood. Canterbury Golf Course. Alcroft Grange Rd, Tyler Hill 1949 MNE. Hernhill, bank near Waystreet Fm. on Thanet Sand 1955 MNE.

6E) Lane End to Green Street Green, 1946 MNE. Greenhithe GMB.
10) Bessels Green, 1949. Oldbury Lane, Ightham 1945 MNE. Eynsford, GMB. ¾ m S. of Brasted 1955 MNE.

12) Postern Lane, Tonbridge, JPMB; 1944!
14) Lydd Common, 1954 MNE.
16) Folkestone Leas. Sandling Junction, 1961, MNE.

*C. divulsa* Stokes 15, 16 38/51 Grey Sedge

Native. Hedgebanks, woodborders and pastureland on dry soils, mostly on sand, but also on chalk-derived loams; widespread, and locally frequent in the chalk districts 5)-8), and on the lower Green Sand in 10), 11), 12) and 16); more scattered in 3), 4), 13) and 14) and on the Weald clay of 11) and 12). Frequent throughout SE England and N. France.

1) Hayes Common, 1931: W. Abbey Wood Station. 05 Chilham; 15 Canterbury; 96 Bysing Wood

2) Dartford Marshes 1931, PHC. Faversham KDR.

3) C. polyphylla (Kneuck.) W. Koch 15, 16 38/51 Leers’ Sedge

Native. Hedgebanks and wood-borders on base-rich soils, mainly on chalk: widespread but uncommon: 5)-8), 10), 11). I am not fully convinced that this species can always be distinguished from *C. divulsa*. Frequent in Surrey, very rare or unreported in Sussex and Essex: not yet detected in Pas de Calais.

5) 46 Hedge, Biggin Hill, 1949 MNE.

6) 56 Farningham, 1954, J. & P.V.H. Lane above Wrotham

12/51

7) 86 Heath (Thanet S[and]), Dannaway, Newington, 1957 MNE. 95 Belmont Park, DMcC, 1958 MNE. 86 Hedge by Magpie Farm, Bredhurst, 1960 MNE. 95; 76 Chatham; 85 Snarkhurst

8) 34 Waldershare (Eastling Wood) 1959 MNE. 54 Chiddingstone Causeway. 84 On clay, S. of Coldbridge Wood, Lenham, 1958, Miss E. Millward MNE.

9) 15 Canterbury; 96 Bysing Wood


11) 34 Roadside (F[plkestone] Sand), Bybrook, Kennington, 1952. 13 Bank by Newington Moor 1954 MNE.


14) Benenden, DKR.

16) 23 Sandy bank E of Sandgate. 13 Bank by Newington Moor 1954 MNE. 51/92 Appledore; 13; 23

*subsp. leersii* (Kneuck.) W. Koch901 15, 16 12/51

Native. Hedgebanks and wood-borders on base-rich soils, mainly on chalk: widespread but uncommon: 5)-8), 10), 11). I am not fully convinced that this species can always be distinguished from *C. divulsa*. Frequent in Surrey, very rare or unreported in Sussex and Essex: not yet detected in Pas de Calais.

5) 46 Hedge, Biggin Hill, 1949 MNE.


7) 96 Tunstall, 1958, DMcC MNE.


10) 55 One Tree Hill, 1952 MNE. 45 SE of Sundridge, 1955 MNE. 45 1m E of Westerham 1955 MNE.

901 In the manuscript treated as *C. polyphylla* Kar. & Kir. (*C. leersii*).
C. arenaria L. 15, 16 11/51 [Sand Sedge]

Native: open sandy habitats: local: abundant on fixed coastal dunes, locally abundant on roadside verges and banks inland on the Folkestone Sand from Wrotham Heath to Leeds in 11). Very local on the coasts of Sussex and Essex, very [sic] inland on open sandy heaths in W. Sussex and W. Surrey; abundant along the coast of Pas de Calais.

1) Ruxley pits, 1962, A.G. Spooner. 06 Shepway, Sheppey, 1946. 07 Beach N. of Leysdown. 07, 06
2) 06 Beach W. of Seasalter, DHK, 1945. 87 Grain. 87
3) Shipyard, Whitstable, on beach shingle, HMW. 35
4) 35 Abundant on the fixed dunes, from Deal Links; by Sandwich Bay; to 36 Sheerness at the mouth of the Thames. Old dunes E of Downs Fm 62. 36 Pegwell Bay beach.
5) Wrotham Heath (on sandy verges of A.20 and in adjacent grass heath) 1944-60. 75 Roadbank near Bearsted Station. 85 Verges of A.20, 1 m. W of Hollingbourne, 1944-. 85 By A.20, on banks, Warren Wood, Lees, 1944-62.
7) 23 Folkestone Lees.

C. disticha Huds. 15, 16 19/52 [Brown Sedge]

Native. Base-rich or calcareous fens and fen-meadows, nearly always on peat; locally common in 11), 12), 15) and 16); probably now absent elsewhere. Very local in Sussex, rare in Surrey and Essex; locally common in Pas de Calais.

1) Abbey Wood Sta[tion], GBB, '58.
8) 51/92 (Appledore - E Oxney); 61/01 Dengeness; 61/13 Hythe; 61/23 Folkestone

C. divisa Huds. 15, 16 21/52 [Divided Sedge]

Native. Pastures and dike banks on the alluvial coastal and estuarial flats on soils derived from former saltmarshes: abundant in such habitats, very rare elsewhere. Locally common in the coastal marshes of Sussex, Essex and Pas de Calais: very rare on dry grasslands near the Thames in N. Surrey.

1) West Greenwich, J.T. Syme, 1852 BM.]
C. remota L. 15, 16 /51 Remote Sedge
Native. Damp woodland, Alder carrs, ditch and steam banks, most often in shade: very common in the Weald in [sic]

C. ovalis Gooden. 15, 16 /52 Oval Sedge

C. remota L. 15, 16 /51 Remote Sedge
Native. Damp woodland, Alder carrs, ditch and steam banks, most often in shade: very common in the Weald in [sic]

4) Ditch E of Elbridge [sic] LWW. Elbridge JG.
10) Westernham Wood, 1947 (821). Darenth copse, 1944--.
14) Breeches Pond.
16) Coombe Wood Etchinghill BW.

C. ovalis Gooden. 15, 16 /52 Oval Sedge

4) Stodmarsh, 1950, LWW. Hacklinge.
10) Meadow 1m. E of Westerham, 1955 MNE. Knote Park, PCH. Meadow W. of Otford Road, N of Sevenoaks, 1950-MNE.

16) Damp slope SW of Newington BN.

I. C. crawfordii Fernald
1) Pit, Green Street Green (Farnborough) 1937, J.E. Little in Hb.

C. echinata Murr. 15, 16 3/51 Star Sedge
Native: moderately acid valley bogs, swamps, and carrs; among short-sedge vegetation; rare generally, but locally frequent in 13), and on the Greensand of 12). Locally frequent in Surrey and Sussex, very rare in Essex Calais.
1) 46 Keston Bog, 414648, AGD, 1915 MNE: 1945 MNE! 1962, HMP. 46 St Pauls Cray Common, WCRW.
3) 15 Bigbery Wood, in Alder Carr, 1954 MNE. 05 Bog, Hunstead Wood, Chartham Hatch, 1956 MNE.
4) 35 Ham Fen, 1956 MNE. Ditch W. of Sandwich DHK.
11) 85 Boggy meadow W. of Sandway, Lenham, 1954 MNE; 1965, B. Dodds. 85
14) 83 near Penhill, 1947.
15) 01 Fen SE of Hamilton Fm, Dungeness, 1946, JHL; 1953! MNE. 01

C. elongata L. 15, 16 3/51 Elongated Sedge
Native. Swamps, sallow-carrs, river and ditch banks, in Kent always on the Weald clay: very rare. Very rare, in a few places by rivers in Surrey and Sussex; extinct in Essex: unrecorded in Pas de Calais but fairly frequent in the east of Nord (forêt de Wassigny!).
12) "Scotts Pond", Stubbs Cross, Kingsnorth, E.S.; 1952 MNE.

C. curta Gooden. 15, 16 2/51 White Sedge
Native. Moderately acid swamps: extremely rare. In Surrey rare and nearly confined to the west: in Sussex in a few localities in the Weald and on the western Greensand; unrecorded for Essex and Pas de Calais.

C. hirta L. 15, 16 43/51 Hairy Sedge
Native. Fens, meadows, pastures, sand dunes, roside banks; on soils of a wide range of texture and water content, but commonest on peat, sand and alluvial soils: absent on typical chalk downland, and in very acid or saline habitats, or in heavy soils, but otherwise fairly common and widespread through the county. Common in Surrey, Sussex and N. France.
2) 47 Woolwich Arsenal, PCH. 47 Northfleet. 57 Below Crayford. 97 Sheppey. 97 Upnor Marahes. 87 Gain. Newington, F.C. 76 Holborough Marshes. (NOT 07), 97, 77, 76, 86, (NOT 96), 06 '55
3) 16 Thornden Wood. 05 Dunkirk. Church Wood, REW.

6) 57 Greenhithe. 57, 67

7) 95


9) Pegwell Bay.

10) Darenth water Meadows, PCH. 55 KNoe Park. 55 Sadpit by R[a]o[w]y E of Riverhead, CAS. 56 Meadow N. of Shoreham. 55 Dunton Green, 18919, AGD, MNE. Brasted, marsh near Ch[urch], RAC. Bradbourne Meads FSEF. Westerham Water 1947. 45, 55, 56

11) Addington Place DMcC. 66 Birling Marshes 1943 MNE. 65 Leybourne. 75 New Road, E. Malling. 65 Roydon Hall. 65 Ryderh Wood. 85 A20, W. of Hollingbourne. 85 Kiln Wood, Lenham, on Sandgate loam, ‘62. The Brooks, Harrietsham, B.D. 66, 65, 75, 85, 74, 84


13) Meadows NW of Chiddingstone 1944, 1947 MNE. Southborough cemetery, HNC. Finchcocks, 1896, JS TLS. 44, 54, 64, 73, 83, (NOT 53), (NOT 63)

14) 83 Near Breeches pond, 1947. 73 Hawkhurst, DS. Knock Wood Tenterden RAC. (NOT 72), 82, 92

15) Dungeness, 1953, MNE. 02, 01

16) Folkestone Warren KDR. 13, 23

(C. isacarapa Ehrh. occurs in valley bogs in the New Forest, Hants, in Suffolk, and in rich fen at Cucq, Pas de Calais, but is unrecorded for Kent, Surrey, Sussex and Essex.)

C. acutiformis Ehrh. 15, 16 37/51 [Lesser Pond Sedge]

Native. River and stream banks, ponds, fens and ditches in neutral or calcareous waters; widespread, and generally common and abundant in the basins of the Darent, Medway, Stour, and Thames, in 1), 2), 3), 4), 10), 11) 12); but very rare in the Thames-Medway estuary below Northfleet and Tochester, and unrecorded in the Stoke-Grain-Sheppey-Teynham areas: very rare in the High Weald (Lamberhurst only) in 13), rare in 16): absent from Romney Marsh 15), and the chalk districts 5)-9). Frequent in Surrey, Sussex, Essex, and Pas de Calais in suitable habitats.


3) Alnetum, Hunstweed Wood, Chatham Harch, 1956 MNE.


12) 14 Stowing Meadows, 1954 MNE. 04 Cuckoldscoomb, Brook. 95 SE of Lenham. 94 Charing Heath, Alder Carr, ES. 05 Chillham, by Stour, 1938 F.R.B.: 1959! MNE. Lenham E 51/95 (recent); Ho[th]fie[ld] 51/94; Ashford 61/04; Stowing 61/14; Chilham 61/05; C[lanter]bury 61/15


15) (not at Dungeness 61/01 nor Romney area 61/02) in Woodch[urch] 51/93; in Ham St[reet] 61/03; in 61/13 Hythe.

16) 23 Sandling Park RAC. Fen, Darnley Vale, Cheriton, 1955 MNE. 23

C. riparia Curt. 15, 16 32/51 [Greater Pond Sedge]
C. pseudocyperus L.

Native.

3) Pond, Randall Wood, Shorne, 1954 MNE.


Breeches Pond, 1947.

15) Largest 2 lakes, Hoppen Pits, Dungeness 1947-1953 MNE; H. Lamb, 1901 MNE. Dike, Windmill Channel, E of Freezingham, Rolvenden, 1959 MNE.

C. rostrata Stokes

Swamps, ditches, and lake borders, usually on peaty organic substrata, in calcareous to flushed weakly acid waters; it forms a pioneer stage in the hydrosere leading to the formation of fens. Now rare and local in Kent, though still frequent in 4). Local and scattered in Surrey and in Sussex, extinct in Essex, very local in Pas de Calais.
3) 05 Sphagnum bog in Alder carr, Hunstead Wood, Chatham Hatch, 1956 MNE.
11) 54 Marshes above Tonbridge, c.1944, H.W. Pugsley: not seen by me. 54
12) 94 Hothfield Common, 1903, H. Lamb MNE; 1943-62 MNE. 13 Gibbons Brook, 1954 MNE. (Pl[ant) with forked spikelet, 1943.) 94, 13
14) [Reported from Breeches Pond, Tenterden, in Fl. Kent.]
15) 01 Hoppen Pits, Denge Beach (I, II, III and VI) 1946-62 MNE.

C. vesicaria L. 15, 16 13/51 [Bladder Sedge]
Native. River- and stream-banks and pond margins, usually on clayey inorganic substrata of non-calcareous, neutral to weakly acid water. Very local: almost confined to the Weald, where it is frequent on the Weald Clay of 11) and 12), and in the High Weald occasionally in 13), rare in 14). It is rare lower down the Stour in 12) and unknown today elsewhere in the County. Distribution-pattern similar in Surrey and Sussex; very rare in Essex and Pas de Calais.
1) Sparrow Fields, F. & C.A. Swain.
10) Westerham Wood, 82!
11) 54 R. Eden NE of Chiddingstone. 44 W. of Chiddingstone, 1947. 44 Edenbridge, 1947. 54 By Eden, W. of Penshurst 1944 MNE. 54 Straight Mile, Leigh. 54 Marsh ditches W of Tonbridge 1944 MNE. 64 E of Tonbridge, 1944 MNE. 74 Pond S. of Yalding, by B2162. 64 N. of Beltring, 1944 MNE. 64 Pond ¾ m E. of Hale Street, E Peckham, 1952 MNE. 84 In Sallow carr round Pond 1m E of Headcorn, 849437, 1949 MNE, 1962. 84 Smarden. 84 Beult S. of Ch[urch], Headcorn, 831440, '62. 84 W Leighbridge Pond Headcorn, 813454, '62. Beult W of Cross at Hand, 1963. 94. 44, 54, 64, 74, 84, 94
12) 93 Pond, Stubbs Cross, E.S., 1952 MNE. 04 By Lake, Mersham Le Hatch, 1960, FR and ES MNE. W of Kingsnorth. 04 N. Smeeth RAC.
14) 83 Breeches Pond, Tenterden, 1947, RAC. Robhurst Fm, High Halden, RAC.

C. pendula Huds. 15, 16 36/51 [Pendulous Sedge]
Native. Deciduous woodland, mainly of oak, alder or hornbeam, on heavy, mostly non-calcareous, clay soils, usually gleys; abundant through the High Weald of 13) and 14), the Weald Clay areas, and the spring lines of the L[jowej Greensand, and on the Gault in 10), 11), 12) and 16): locally common on Eocene clays and loams in 3): now rare in 1): a solitary locality on Woolwich Beds in 2) (Newington, Hawes Wood): absent elsewhere, in the chalk districts 2), (1) and the marsh districts 2), 4) and 15). It has a similar distribution pattern in Surrey and Sussex. In Essex it is widespread on the clays throughout the inland parts. In Pas de Calais it is largely confined to the Boulonnais and the NE.
2) 86 Hawes Wood, Newington, 1959, on Woolwich Beds MNE.
5) Betsoms Hill on clay, RAC.
8) Reindens Wood, 1959, B.N. and DACL, on clay with flints.
10) 45 Westerham Wood, 82! 55 W. of Kemsing. 45, 55
C. silvatica

Native. Deciduous woodland on a very wide range of soils, from Beechwoods on chalk and Ashwoods on ragstone to damp oak and alder woods: absent from unflushed waterlogged gleys (where it is replaced by C. remota and C. pendula) and from very acid soils (pH below about 5.5), and its abundance in a site generally indicates good aeration, fair water supply, and reasonable base-content. Common throughout Kent wherever there are old woodlands, thus absent from the marsh districts 2), 3) and 15). (apart from woods on Tertiary outliers in 2) and 4)). Absent from Sheppey. In the Heathy Oakwoods of Quercetum petreae type on Greensand and Hastings Sands, it is confined to gills, puddle tracks, hollows, and flushes where the base-status of the soil rises. Common in all adjacent counties and in N. France.


2) 87 Copse N of Fenn Street, St Mary Hoo, 1955 MNE. Hawes Wood, Newington.


C. strigosa Huds.

Native. Damp deciduous woodland on base-rich soils, mainly in calcareous or basic flushes in Alneta, but also in rides: widely distributed in the Weald, mainly in gills on the Wadhurst Clay of 13) and 14) (becoming rather common eastwards about Tenterden to Oxney); on the ragstone of 10) and 11), and on the gault of 11) and 12); also occurring on the Eocene, particularly on the glauconite Thanet Sand and the Woolwich Beds, in six localities in 1) and 3) - also occurring on the Weald Clay and Greensand as well. Rare and local in Essex. Rare in Pas de Calais on Jurassic strata in base-rich Alneta. It is far commoner in the Wealden region than elsewhere in Britain.


Millbay Wood, Nettlestead. N of Bough Beech '55. 863438 N of Marley Fm Smarden DMcC.

11) Copses S. of St Julians, W Simpsons Lees. Near Pond, SW of Sellindge Ch [urch], RAC. Cuckoldscoombe '97. 94, 04, 03, 95


26/52 [Thin-spiked Wood Sedge]

46, 47


C. flacca Schreb.  15, 16  

Native. Grassland and scrub on chalk, abundant and very constant; fens and fen-meadow, common; basic grasslands on sand and clay soils, less common and usually in open associations and near the sea. Well distributed and generally frequent throughout Kent, except on alluvial flats in the Sheppey-Grain Thames-Medway estuary below Rochester and Greenhithe, and the inland parts of Romney Marsh. Not about Appledore, Minster, Grain, (Gravesend).


2) 76 Holborough Marshes.

3) 05 Grassland N. of Dunkirk. 05 Grassland NE of Rhode Common. Ellenden Wood, Penn Hill REW. 16 Thornden Wood. 15 Marsh on hills W. of Fordwich. 16/10650 ...on clay, Duncan Down, Whitstable, 1961, HMW. 06, 76

4) 35 Ham Fen. 35 Hacklinge Fen 1946 MNE. 45 Worth Minnis. 25 N. of Wingham. 26 Preston Marshes. 35 Dune Slack S. of Hotel, Sandwich Bay. 35, 26, 36

5) 46 Darwins Bank, Downe. 56 Pilots Wood PCH. 45 NE of Pilgrim Ho[use], Westerham W. of West[erha]m Hill RAC. 45, 46


10) Westerham Wood 1977, 82!


13) Ditch, Chittenden Wood, 1944 MNE. Modest Corner / Vauxhall Lane, Southborough, HNC. [Old pit, Spelmonden, 1903 JS TLS.] 44, 54, 64, 53, 63, 73, 83

14) Penhill, 1947. Marsh in Gill 1m E. of Rolvenden, 1954. 72, 82 (NOT 92)

15) 01 Marsh E. of School, Dungeness, 1962. Romney Warren. NE of Dymchurch. By canal, St Marys Bay, LJM. 01, 02


C. panicea L. 15, 16 23/51  

Native. Fens, fen-meadows, basic flushes, and the more flushed parts of valley bogs: abundant and fairly constant in such habitats: usually in short vegetation and tolerant of grazing. In the alluvial marsh areas 2) and 15) it is rare, normally confined to areas of calcareous flushing. Widespread but only locally common: absent from the dry chalk of 5)-9). Commonest in the fen areas of 4).

1) 46 Keston Bog, J.E.L., G.M. Brown. 47 Chislehurst Common, GMB. 47, 46

2) 76 Holborough Marshes. 57 Dartford Marshes, G.M.B. 06 Brackish Dike S. of Harty Ferry, 1961, H.M. Wilks. 57, 76, 06


10) 55 Meadow W. of Otford Rd (¼m N. of Bat & Ball) Sevenoaks 1950 MNE. 56 Meadow N. of Shoreham 1954 MNE. 55, 56

11) 65 Leybourne, 1944. 66 Birling Marshes. 65 Lunsford 1944. 35 Sandway Bog, Lenham 1954 MNE. 65, 85, 66
15) 01 Hoppen Pits, Denge Beach, 1945-1956 MNE 1962. 01 Marsh E. of old school, Dungeness.
16) 23 Valley fen, Darnley Vale, Cheriton, 1955 MNE.

[C. depauperata Curt. ex With. [16] Starved Wood Sedge] Formerly native of Charlton, but long extinct, where it occurred in dry woodland on Eocene strata (probably calcareous Thanet Sand). Still found but very rare, on Bargate limestone at Godalming in Surrey: elsewhere in Britain only in Somerset (Axbridge) and Anglesey.


C. laevigata Sm. 15, 16 15/51 [Smooth-stalked Sedge]
Native. Weakly acid, base-deficient flushes in woodland, usually Alneta; abundant in the greater part of the High Weald of 13) and 14), though rarer westward and absent from the Oxney-Newenden area; scattered on the Folkestone Sand in 12), where it is found in open bogs as well as in carrs; locally common in the SW part of the Bean woods in 3); unreported elsewhere. A characteristic High Wealden species, abundant throughout the Sussex High Weald except in the extreme east; rare in Surrey (Alneta on Hythe Beds), very rare in Essex (Woodham Walter); once recorded, possibly in error, from Pas de Calais, but in the Ardennes.


C. binervis Sm. 15, 16 14/51 [Green-ribbed Sedge]
Native. Sheltered ground on heaths, heathy oak-birch or pine woods, often in the rides: very local, and largely confined to the High Weald of 13) and the NW part of 14), where however it is frequent and locally abundant: outlying areas of distribution exist in the rather similar habitats of the Blean Woods in 3) and at one locality each on heaths in 1) and 12). Common in the High Weald of Sussex, local in Surrey, very rare in Essex and very local in Pas de Calais. This is a highly oceanic species, requiring a humid atmosphere: it quickly fades out as one passes into the Continent.


(4) Ham Ponds, ESM: error for distans.)

10)

12) Hothfield Common, 1946; 1954 MNE. (Recorded from Barrack Wood, Mersham by G.E. Smith in FGEK; we could only find laevigata there, which he does not record; FR & ES, 1960.)


14) 83 The Brogues, Biddenden. Brook Wood, NW of Woodchurch.

C. distans L. 15, 16 18/51 [Distant Sedge]

Native. Fens, meadows, marshes and their dikes, in brackish habitats near the sea and estuaries, and in calcareous habitats inland; uncommon, occasional near the coast and estuaries in 2), 4), and 15), inland frequent in 4), local in 12) and 16). It resembles Oenanthe lachenalii and Schoenus nigricans in its tolerance of both sodium- and calcium-rich environments. Local near the coast in Sussex, Essex and in Pas de Calais in similar habitats: extremely rare in Surrey.

2) 67 Northfleet Brooks, 1944, MNE. 77 Meadows S. of Cliffe Station, 1943. 76 Holborough Marshes, 1944 MNE. 76 Snodland Marshes, 1944. 06 Meadow N. of Oare Mill Pond, 1959 MNE. Shellness. 06 Harty, 1946. 87 Grain, 1946.


6) 57 Chalk pit, Swanscombe, 1947 MNE.

7) Chalk pit (flooded), Eccles, 1953, RGW.

11) [Birling Marshes, 1943 MNE, ploughed up, 1944.]

12) 14 Stowting in fen meadows, 1946-54 MNE. 04 Brabourne coomb, in fen-meadows 1946. 04 S. of Brabourne Church, 1954 MNE. 04 Cuckolds coomb, Brook, in fen-meadow, 1945-58 MNE. 94 04, 14


C. distans x extensa = C. x tornabennii Chiov. 15 Littlestone, 1902, in Hb. G.C. Druce (as C. extensa) det. J.P.M.B.

(C. punctata GaudinSO)

C. extensa Gooden. 15 1/51 [Long-bracted Sedge]

Native. Sandy salt marshes and saline dune-slacks: very rare; abundant at the mouth of the Stour, but occurring nowhere else at present. Absent in Surrey; very rare in Sussex (confined to the Selsey and Littlehampton areas): extinct in Essex: very rare in Pas de Calais (Ambleteuse!).

4) Abundant in sandy saline slacks of the dunes, 200 yards S. of Bloody Point, Mouth of the Stour, Sandwich, 1946-62 MNE.

[Former estuary, E. of Reculver, Hb. JSM: Phyt. N.S. VI p56. Not seen there recently: the coast is much altered since JSM’s time.]

9) Small salting behind beach, below cliff, Cliffsend, Pegwell Bay, 1947, MNE.

(C. hostiana DC.)SO

SO No records given.

SOL No records given.
(C. flava L.  
This “Continental” species is confined in England to Yorks and Lanc; but it occurs in the fens of the Somme in N. France.)

C. viridula Michx. subsp. brachyrhyntha (Celak) B. Schmid 15, 16 5/51 [Long-stalked Yellow Sedge]

Native. Calcareous spring-fens and fen meadows in short vegetation; very rare and local, and confined to areas fed by springs from the chalk (or ragstone). Drainage tends to restrict it to dike-borders. Extremely rare in Sussex (in two localities by chalk springs), absent or extinct in Surrey and Essex: still locally abundant in fens in Pas de Calais.

(1) This was reported by me on an LNHS excursion from the uppermost lake in Holwood Park in 1948: furter material collected from the same spot in 1962 by F. Swain makes it clear that what was seen was C. demissa Hormem.)


11) 75 Marsh between Church and railway, Barming (v.c.16) H. Lamb, 1900 MNE. The marsh exists still but I have not refound this plant 75

12) 04 Calcareous fen meadow by chalk stream, Cuckoldscoomb, Brook, MNE, 1944-54, with A. tenella, etc., abundant. Both gone, 1978. 04


C. viridula Michx. subsp. oedocarpa (Andersson) B. Schmid 15, 16 20/52 [Common Yellow Sedge]

Native. Damp- and wet-heaths, valley bogs, damp acid woodland rides, sandy or peaty borders of acid ponds: frequentin the Weald in 13) and 14) and on the Folkestone Sand in 12): rare on the Weald Clay and Gault in 11) and 12) and on the Eocene Sands in 1 and 3): absent elsewhere 5)-9), 2), 4, 10), 15) and 16) though it would have been expected in 10) and 16). Locally frequent in suitable habitats in Surrey and Sussex, very rare in Essex and Pas de Calais.


10) Westerham Wood 82!


504 Given in the manuscript as C. lepidocarpa Tausch subsp. lepidocarpa to which it has reverted after the name given here, from Stace edn. 2.

505 Given in the manuscript as C. demissa Hornem., to which it has reverted after the name given here, from Stace edn. 2.
53, 63, 73, 83, 54, 64


15) [Lydd, 1901, H. Lamb MNE, det. FR.]

C. viridula Michx. subsp. viridula

Native. Shingly lake shores: extremely rare, and only seen at intervals. Very rare in W. Sussex and SW Surrey: extinct, if it occurred, in Essex: unrecorded in Pas de Calais.


15) Very rare, on shingly shore of smallest lake, Hoppen Pits, Denge Beach, 1947, P.R.B. and F.R. MNE: not found since.

C. pallescens L.

Native. Woodland on moderately damp, usually somewhat acid, loams and sands: local and rather uncommon, but widely distributed: occasional on the Eocene in 1) and 3), on Pliocene sands and loams in 8), Gault and greensand in 10), Weald clay in 12): most frequent in 13) on the Hastings Sands, where it is rather common.


7) E. part Longbeech Wood, EP.

8) 14 West Wood, Stowting, 1953. 05 Denge Wood, on Pliocene loam, ½ m NE of Penny Pot Inn, 1959 MNE. Larkey Valley Wood, on loamy drift, 1955 MNE. Park Wood, L of Six Mile Tolls, E.P. 14

10) 45 Westerham Wood, 1947 MNE, 82! 45 Scords Wood, Brasted, on loam, 1955 MNE. 14

11) Wood W. Of Chiddingstone Causeway, E.P. North Frith, E.P.

12) 04 (near Brook). 95 Wood S. of New Shelve, E. Lenham. 93 Longrope Wood, 1946 MNE. 95, 04, 93


54, 64, 53, 63, 73, 83

(C. humilis Leyss. occurs on chalk downs in West Hants., but no nearer to Kent.)

C. caryophyllea Latourr.

Native. Old dry pastures, grass-heath, ancient short turf on chalk, banks on wood-borders; widespread and frequent locally in the High Weald, on the Greensand, the chalk downs, and the Eocene districts, but not really common. Frequent in Surrey and Sussex, rarer in Essex, fairly frequent in Pas de Calais.

1) 46 Hayes Common, DMcc. 46 Holwood Park, near Lakes, 1954 MNE. 46 Keston Common, G.M.B. 46, 56

3) 05 Grass heath N. of Dunkirk 1945 MNE. 05 Grassland NE of Rhone Common. 96 Bysing Wood, 1946 MNE 16 Thornden Wood. 06 Edge of Blean Wood, Hernhill, 1945. Harbledown RGW.

05, 15, 96, 06, 16

(NOT 25, NOT 35)

506 Given in the manuscript as C. serotina Mérat


10) 45, 55


12) 04 by Smeech Ridgeway, 1945. 94 Ashford Warren. 93, 94, 04

13) 63 Patrue ½ m S. of Horsmonden. 53 Near Hawkenbury Bog. 73 Combwell, 1896, JS TLS. 63 W of Lamberhurst, freq[uent], JRW. 53 Tunbridge Wells Common 1960 CAS. Combwell Wood. Dunorlan Park, 1959 CAS. Pentecost field Southborough HNC. 54 ('55), 53 ('56), 63, 73

14) G[rea]t Ninevah, Benenden. (C. ericetorum Poll. Is not known nearer than Cambridge and Suffolk in England, but has old records from Pas de Calais.)

(C. montana L. occurs at Erige, Sussex in grass-heath, only ½ mile across the present Kent border. The old Kent records in Fl. K., Bysing and Thorneden Woods in 3) are unconfirmed and probably errors for C. pilulifera: I have searched thee areas closely and only found the latter species. C. montana has never been found on the Kent side of the boundary near Tunbridge Wells, either in VC14 or 16: reports are due to misunderstanding of the boundary line.)

C. pilulifera L. 15, 16 31/51 [Pill sedge]

Native. Dry heathland, open heathy woodland, on more or less podsolised sands and gravels; calcifuge, common in such habitats. Common in 1) and 3), local in 6E), on the Eocene, local in 7) and 8) on the Pliocene formations over the chalk; plentiful on the Lowr Greensand (Folkestone Sand and Hythe Beds chert) in 10), 11) and 12); and on the Tun[bridge] Wells Sand and Ashdown Sand in 13) and 14). Absent from the marsh districts 2), 4) and 15), and from the London, Gault, Weald and Wadhurst clays. Common in similar habitats in Surrey and Sussex, rare in Essex and in Pas de Calais, where such habitats are few in number and extent.


5) 45 Apparently on chalk, Beech hanger ½ m S of Cudham, 1958 MNE.

6) 57 Darenth Wood. 66 Cobham Park, 1944 MNE. 66 Great Wood, Cobham 1944 MNE. 67 Common by Shorne windmill. 66 By A2, S. of Brewers Wood, Cobham (Thanet S[and]) 1945 MNE

7) 86 Heath on Thanet Sand, Dannaway, S. of Newington, 1957 MNE. Syndale Wood; Coxett Wood, REW. 86


(C. limosa L.)

C. acuta L. 15, 16 10/51 [Slender Tufted Sedge]

Native. River banks, ponds, and swamps in rather base-rich waters: local and uncommon, and largely confined to the Medway and its tributaries and neighbouring ponds in 11), 13) and 2), and to the middle Stour in 12) and 14). Local in Sussex and Surrey, rare in Essex, rather frequent in Pas de Calais.

2) 75 Medway bank S. of New Hythe, C. West, 1943 MNE.
4) 16 Marsh Dike below Trenley Park Wood, fordwich, 1949 MNE.
10) 55 Pond, Wildernesse Park, Seal, 1944 MNE.
11) 44 By Eden, W. of Chiddingstone '53. 54 W. of Penshurst 1944, 1953 MNE. 75 Medway, Maidstone, 1960, E.G.P., MNE. 64 Medway, S. of Yalding, 1953 MNE. 54 Medway, 1 mile above Tonbridge. 64 Medway bank, E. of Tonbridge, 1939, F.R.B. 64 Pond E. of Hale Street, E. Peckham, 1952 MNE. 65 Medway, Wateringbury, 1949 MNE. 75 Above Teston Bridge, 1959 MNE. 73 By Teise, Goudhurst, 1896; 1907; J. Stirling (as C. elata), TLS.
12) 94 Godmersham DACL.
13) 73 Swamp, Anglewood, Cranbrook, 1955 MNE.

var. sphaerocarpa (Attr.) Kük
11) Medway E. of Tonbridge, 1939, F.R.B.

C. nigra (L.) Reichard 15, 16 27/51 [Common Sedge]

Native. Marshes, fens, valley bogs and meadows, usually on peat, and where the water is weakly acid to calcareous (pH 5.0 – 7.5): in short sedge-grass associations (parvocariceta).

1) 46 Keston, JEL. 46 Hayes Common, DMCC. 47 Chislehurst Common. Ravensbourne, Bromley, AGD, 1919 MNE.
2) Holborough Marshes, 1944.
3) 05 Alder carr bog, Hunstead Wood, Chartham Hatch, 1956 MNE. SE part Church Wood, REW, 1955. 05, 15
25, 35, 36, (NOT 26), (NOT 36)
11) 65 Damp heath, Valley Wood, Wrotham Heath 1955 MNE. 75 Marsh W of Sandling 1944 MNE. 85 The Brooks, Harrietsham, 1962, Mrs B. Dodds. Sandway Bog, Lenham, Mrs B.Dodds. 65, 75, 85, 66
15) 01 Hoppen Pits, Denge Beach, abundant in fen zones, 1945-62 MNE. 01 Marsh E. of old school, Dungeness, 1956-62, MNE.
16) Darnley Vale, Cheriton, 1955 MNE. 01, 23

(C. trinervis Degl. Is abundant in dune slacks in Pas de Calais and Somme; in Britain it has a solitary record for E. Norfolk, where it seems to be extinct now.)

C. elata All. 15 2/51 [Tufted Sedge]

507 No further entry given; indeed, it is difficult to see why it was mentioned at all.
Native. In calcareous fens, and dune slacks: rare and local and confined to 4), but locally abundant between Sandwich and Deal, and at Wingham. Very rare in Sussex, extinct in Surrey and Essex: abundant in fens behind the dunes in Pas de Calais. Common in the East Anglian fens. This robust tussock-forming species can be recognised by its broad blunt black female glumes and membranous leaf-sheaths, which readily tear into filamentous shreds. 


C. pulicaris L. 14 (Kent), 15 4/51 [Flea Sedge]

Native. In flushed though acid valley bogs, as well as in alkaline fens: now very rare, though still locally plentiful. Rare in Surrey and Sussex, very rare in Essex and in Pas de Calais.


4) Formerly at Ham Fen: Fl. K.; no recent records.

12) Hothfield Common, frequent in flushed part of main valley bog, 1943-64 MNE. Gibbons Brook, G. Walton: 1954! MNE.


(C. dioica L. formerly occurred in Surrey and Sussex but appears to be now extinct in each.)

POACEAE

[Leersia oryzoides (L.) Sw. Occurs in western Surrey and West Sussex.]

Nardus L.

N. stricta L.


Milium L.

M. effusum L.


2) Holly Hill REW.


5) Jewells Wood, Biggin Hill, 1949 MNE. W of Westerham Hill 426577 RAC.

6) Whitehill, E of Shoreham 1945 MNE. Wood near Ch[urch], Fawkham, Swain; DVS Woods.


10) Westerham Wood. Brasted Chart, 1957 MNE.


12) Hinshill.
14) 50 acre Wood / Cole Wood, Woodchurch ES.

Festuca L.
F. pratensis Huds. 15, 16 31/51  [Meadow Fescue]
Native. Pastures and meadows, nearly always on base-rich riverine alluvial or peaty soils; common in suitable habitats; absent from the chalk country, and from the alluvial flats including Romney Marsh; and very rare in the High Weald. Its absence from alluvial coastal flats is probably due to the lack of suitable habitats with periodic flushing or flooding with base-rich non-saline water.
1) Shooters Hill, G.M.B. North Cray Meadows 1955 MNE. Ruxley pits, S&S. 51/46 Orp[ington]; 51/47 Bexley
2) 51/66 Meopham; 51/76 Medway; 61/06 Fav[ersham] S.
61/25 Wingham; 61/35 S[and]wich; 61/16 Chislet S; 61/36 Thanet S.

5) Path in wood on c[lay] w[ith] f[lints], Chevening Park, 1961 MNE. 51/77 Cliffe
10) Darenth Meadows 1944-54 MNE. Meadows k m N. of Bat & Ball 1951 MNE. Meadow N. of Shoreham '54 MNE. S. of Lullingstone '56 MNE. Bradbourne Meads FSEF. 51/55 S[evenoaks]; 51/56 Farn[borough]; 51/57 Dart[ford]j.
51/65 W[est] M[alling]; 51/44 Edenbr[idge]; 51/54 Tonbr[idge] '55; 51/85 '58 Hollingbourne
51/95 Lenham '58; 51/45 Westerham '58; 61/04; 61/14 Stowting; 61/05 Chilham; 61/15 C[anterbury] '55.
14) 51/82 W. Oxney 1956.
16) 61/13 Hythe '56; 61/23 Folkestone S.

F. arundinacea Schreb. 15, 16 35/51  [Tall Fescue]
Native. Banks and rough grassland, nearly always on heavy soils inland, but on sand and chalk as well on the coastline, where it is more abundant than inland; locally common.
2) S. of Cooling. Northfleet. Snodland. 66 Seasalter HM.W. Meadow S. of Oare Creek 1959 MNE. Ham Hill Birling PCH. Luddenham Marshes HM.W. 51/66 Meopham '56; 51/76 Medway; 51/67 G[rolls]; 51/86 Halstow S; 51/96 Teynham S; 61/06 Fav[ersham] S '55; 51/85 '58 Hollingbourne
3) 16 Behind shore, 102660, W of Whitstable, HM.W, 1957. 05 Pasture on L[ondon] C[lay], N of Dunkirk 1955 MNE. 06 top of Beach, Medina Av[eue], Seasalter, HM.W. Herne Bay, 1843, R. Warnock (as F. sylvatica β decidua) but is F. arundinacea det. A. Melderis, see Flora K. p.409.
6E) Swanscombe Wood, cutting of A2 on clay.
10) 51/55 S[evenoaks]; 51/56 Farn[ingham] '56.
12) E. of Gibbons Brook on clay pasture 1954 MNE. 61/04 T[emple] Ewell; 61/14 Dover; 51/95 Lenham '59; 61/05 Chilham.
13) 51/77 Crundale 56. 61/64 Pembury S.
15) Pastures W. of Hythe 1952 MNE.

F. gigantea (L.) Vill.  [Giant Fescue]

511 Misplaced.
Native. Woodlands on relatively base-rich soils; common throughout Kent, except in the treeless Marsh districts and on very acid sands and heavy clays. On the Weald Clay it is usually confined (as is *Glechoma*) to alluvial deposits or flushed areas on stream banks.


2) 06 S. of Oare Pond '59 MNE. 87 Copse, St Mary Hoo, PCH. 97 Rare in Brambledown Oakwood, 1955. ...By Oare Meadow, 1962, HMW.

3) Shelving Wood, Hoath, 1962. S. of Stodmarsh Court FM REW.

5) Darwin’s Bank Wood, Downe, JEL. Chevening Park PCH.


12) Copse on Gault SE of Lenham '44. Copse (gault) S. of Brook 1952 MNE. 1 m NE of Chilham 1950 MNE.


16) Aldington Knowle 1950 MNE.

[F. altissima All.]

Probably never found in Kent. Of the localities cited in *Fl. K.*, “Harrison’s Rocks, Tunbridge Wells, Kent” (last report Townsend 1852) was a genuine locality for this species, but it is in Sussex: it is now extinct there. The Herne Bay and Cranbrook localities have never been confirmed. The former is highly unlikely; and intensive search of the Cranbrook area has not revealed the species, though the district has suitable localities for it: it still occurs in two rocky woods in the High Weald of Sussex, but not otherwise nearer than the Wye Valley, N. Warwick and the Derbyshire Pennines.]

F. arenaria Osbeck

Native. Fixed dunes, and white dunes becoming fixed; rare, but very locally abundant on the Sandwich dunes and at Shellness in Sheppey. Also at Camber, E. Sussex (1961!); Crabknowe spit, Essex (1956!); and on the dunes of Pas de Calais.

2) in Ammophiletum on shell-sand, Shellness, Sheppey, 1962 MNE.


(not reported yet from New Romney area, but it probably occurs there.)

F. rubra L. subsp. rubra

[Red Fescue]

Native. Hedgebanks, pastures on a wide variety of soils, saltmarshes: abundant throughout Kent. On the chalk downs it occurs on deeper soils, more gradual slopes, and damper sites generally than *F. ovina*, and is less abundant on the N. Downs than on the S. Downs. Common in all adjacent counties and in N. France.


2) Festucetum rubrae sub/emerg ratio 0.004: 3krs/732 p. month. 5 Minster Marshes '55. Eastchurch cliffs '55. E of Minster, ... of cliffs '54 MNE. Beach Seasalter HMW. Var. arenaria Shellness: N of Leysdown: Grain S. Beach.

3) Canterbury Golf Course, '55.


512 Given as *F. junceifolia* St.-Amans, placed after *F. rubra*, in manuscript.
5) Darwin’s Bank, Downe. Chevening Park. 396611 pCH.
6) G[rea]t Chalk pit NW of Horns Cross ’62. Mounts Rd, PCH. Down N. of Cuxton 45 MNE.
10) Westerham Wood 82.
15) V. arenaria Greatstone; Romney Warren MNE 1945; Lydd Common. Shirley Moor.
16) W of Hythe. subsp. commutata Gaudin

F. ovina L. [Sheep’s Fescue]
Native. Chalk Downs, in short open turf, on shallow, skeletal rendzina soils: characteristic and constant in such habitats, and very nearly faithful to them; occasionally in dry pastures on neutral non-calcareous sands and gravels. If sheep-grazing ceases, F. ovina tends to be replaced by B. erectus instead, or by Brachypodium pinnatum, especially nearer the sea; except on steep, hot slopes where solifluction tends to maintain a skeletal soil and thus an open sward of short grasses. General on the chalk downs of Surrey and Sussex; naturally very local on the limited chalk areas of Essex; general on the chalk of N. France.

1) Ruxley pits, S&S.
3) Whitstable harbour REW.
4) Dunes, Deal links.
13) Timberley Orchard, JRW. By Hawkenbury Bog, CAS, 1958.

F. tenuifolia Sibth. (F. filiformis) [Fine-leaved Sheep’s Fescue]

513 A location near New Addington, just within the vc16 border.
15) Shingle Beach, Dungeness, 1945, MNE.

**Festuca x Lolium** = **Festulolium** Aschers. & Graebn.

**Festuca pratensis x L. perenne** = **Festulolium loliaceum** (Huds.) P. Fourn.

4) Fen-meadows N. of Wingham, 1946 MNE.
10) Darenth Meadows, 1946 MNE. N.E. of Riverhead in Meadows, 1954 MNE.
13) Field by High Woods, Hawkenbury, 1960, CAS.

**Festuca x Vulpia**

**F. rubra x V. fasciculata**

4) Dunes, Sandwich Bay, Miss McCallum Webster, 1954, det. A. Melderis.

**Lolium L.**

**L. perenne L.** [Perennial Rye-grass]
3) Pasture on gravels S of Highstead Heath ’62.
4) Sandwich Bay, etc.
5) Field W. of Shoreham PCH. Chevening Park PCH. 3964 Well Wood PCH.
8) Foot of Westwell Hangers ’62. d[ominant] Brook Hillock (ley) ’62. 137508 Petham MEM.
10) Riverhead meadows ’54 MNE. Otford PCH. Meadow N. of Shoreham 54 MNE. Eynsford PCH. W. of S. Darenth PCH. St John Jerusalem PCH.
11) Wrotham Heath ’44 MNE. E. Farleigh, LRAG, 1958 MNE.
12) Hothfield Common 1943 MNE.
13) Southborough HNC.
15) Lydd Airport DMcC.

**var. sphaerostachyum** Mast. Wye, Mrs M. Cobbe, BEC Rep. 1925, p224.

**L. multiflorum** Lam. [Italian Rye-grass]
1) Crofton Heath PCH. R. Cray, N. Cray PCH. 37 Beckenham Place, 1954, PCH. W. Wickham AE Davis 1916 MNE. Woolwich Common 1934 LRAG MNE. Ruxley pits S&S.
3) Sharmal St[reet] Sta[tion] PCH. Blue Anchor, Seasalter, REW. Grain, 885765, AGS.
4) Plucks Gutter 1953 MNE.
5) Stubble, nr Well Wood, 396642, PCH.
7) E of Bluebell Hill H.L. 1899 MNE]. Orchard E of Long Beech Wood ES.
8) Ringwould, B.N. Kale SE of Eastling Wood B.N.
10) Otford: Eynsford PCH. S. Darenth PCH. St Johns Jerusalem PCH. Bradbourne pits FSEF. 7oaks tip DMcC. [Boxley H. Lamb, 1898 MNE].
11) W Field, 917397, SE of Baskhall, Bethersden. Eenbridge tip DPY.
13) Cranbrook DS.
16) nr. Klin Wood, Sandling, LJM.

**L. rigidum** Gaud.

4) Sandwich, 1960, DMcC.
9) Birchington, 1960, DMcC, MNE.

---

514 In the manuscript, given as V. membranacea.
515 Placed after L. temulentum in the manuscript.
6. *L. temulentum* L.  

Darnel


**Vulpia** C.C. Gmel.

**V. fasciculata** (Forssk.) Fritsch\(^{516}\)  

Native. On fixed dunes, especially in rather open turf or disturbed areas: confined to the Sandwich dunes, where it is however very abundant. Surprisingly it appears to be absent at Romney. Absent at Camber, E. Sussex, but plentiful at Littlehampton. Unrecorded in Pas de Calais.

4. Fixed dunes, St. Georges Links, Sandwich Bay, 1945-62 MNE  

Fixed dunes about Guilford Hotel, Sandwich Bay.

**V. bromoides** (L.) Gray  

15, 16  

[Squirrel-tail Fescue]

1. Eltham Common LRAG 1934 MNE.  

Ruxley pits, S&S. Hayes Common 1945 MNE.  

Keston Common. SE of Chelsfield 1945.  

Farningham Wood.  

Joydens Wood, PCH.

2. gsd. On Bagshot Sand, Cliffs E of Minster, 1954 MNE.


06 topof Beach nr Medina av[enue], Seasalter, MNE, 1945-60.

4. about Guilford Hotel, Sandwich Bay MNE 1945-60. Deal Links. Richborough.

6E) Green St[reet] Green, 1945 MNE.  

Common by Shorne Windmill.  

Randall Wood.  

Cookham Wood, Upnor 1960 MNE.

7. Newnham gravel pit.  

Stockbury, Three Squirrels Down, 1944 MNE.

8. Chilham Hill ES.

10. Sevenoaks 1903 H.L. MNE.

11) Wrotham Heath 1942-60 MNE.  

Ryarsh Sandpits.  

Leybourne Wood 1955 MNE.  

A20 W. of Hollingbourne.  

A20 E. of Hollingbourne 1955 MNE.  

Sandpit 1m. SE of Harrietsham 1958 EGP, MNE.  

By Pond E of Hale St[reet] CAS.  


E. Malling 1944 MNE.  

Aylesford Gravel pits EGP.

12) 915405, path, Birch Wood Bthersden (sandy) 1962.  

Hothfield Common 1945 MNE.  

Ashford Warren.  

Willesborough Lees.  

Brabourne Lees 1945 MNE.

13) Stone Cross, Ashurst, 1959 CAS.  

By Brighton Lake, T[unbridge] Wells, 1960 CAS.  

Penshurst Park 1944 MNE.

High Rocks Lane, on rubbish heap, '51. KEB.

14) 50 Acre Wood, Woodchurch ES.

15) Romney Warren.  


**V. myuros** (L.) C.C. Gmel.  

[Rat's-tail Fescue]


2) R[a][i]l[wa]y bank, Cuxton, 1945 MNE.  

Grain, PCH. River Wall, Stone Marshes, 1945 MNE.  

River Wall, Swanscombe, 1946. Tonge Marshes 1958, DMcC MNE.  

Waste g[roun]d, Faversham Creek 1960 MNE.

3. Hernhill village, 1955 MNE.

4. Richborough waste g[roun]d. Kingsdown Beach, 1946 MNE.  

Plucks Gutter, 1955 MNE.  

Old r[a][i]l[wa]y and Wall of Churchyard, Wingham BN.

6E) Cliffe Sta[ton] PCH.  


Dry ground, Green Street Green 1945 MNE.

8. Bridge, JG.

11) Birling Marshes, 1945, MNE.  

W. Malling Station Road, 1960 MNE.  

Cinder Path by Medway, near Gasworks, Tonbridge, CAS, 1960 MNE.  

Kemsing Sta[tion].  

Boro[ugh] G[ree]n, DMcC.  

Wrotham Heath 1945 MNE.  

Aylesford sandpits, 1957, EGP, MNE.  

A20, Warren Road, Broomfield, 1945 MNE.

12) Headcorn Sta[tion], '62.  

[Wye, Lady D., 1902] Brabourne Lees, 1945 MNE.  

Canterbury W. sta[tion] sidings MEM.

13) near Brighton Lake, Tunbridge Wells, CAS.

15) Dungeness, Shingle beach near Long ballast pit, 1946 MNE.  

Beach W. of Hythe, 1955, MNE.

---

516 In the manuscript, given as *V. membranacea* (L.) Dumort.
† V. myuros f. megalura (Nutt.) Stace & R. Cotton\textsuperscript{517}
12) Sellindge, 1951, D.H.K.

V. ciliata Dumort.\textsuperscript{518} [Bearded Fescue]
1) Sandy grass heath, W side of Farningham Wood, 1946 MNE.
6) Chalk gravel pit 1946 MNE.

V. ciliata subsp. ciliata Dumort.\textsuperscript{519}

V. unilateralis (L.) Stace\textsuperscript{520} [Mat-grass Fescue]
8) Wye.

Cynosurus L.\textsuperscript{521}

C. cristatus L. [Crested Dog’s-tail]
1) Blackheath GMB. Shooters Hill. Ruxley pits. Woolwich Common 1934 LRAG MNE. 36 W. Wickham Common PCH.
5) Field W. of Shoreham PCH. Darwins Bank Downe. Pilgrims Way Pohill PCH. Chevening Park PCH.
6) Swanscombe Wood PCH. Kemsing Downs PCH.
8) 137508 Petham SE Down MEM.
10) Knole Park PCH. Otford PCH. Darenth water meadows PCH.
15) Lydd Airport DMcC. Denge Beach, J. Hubbard. Shirley Moor ’65.

C. echinatus L. [Rough Dog’s-tail]
1) [1 plant, Bexley, 1946. Hayes, casual, D.McC.] [Beckenham, 1934, A.G. Davis MNE.]

\textsuperscript{517} In the manuscript given as V. megalura (Nutt.) Rydb.
\textsuperscript{518} In the manuscript given as V. ambigua subsp. ciliata (Le Gall) More; but this would better have been called ssp. ambiguus.
\textsuperscript{519} In the manuscript given as V. ciliata Link. which is the casual subspecies, better treated as subsp. ciliata, instead of this being attributed to the previous taxon.
\textsuperscript{520} In the manuscript given as Nardurus maritimus (L.) Murb. and placed after Catapodium.
\textsuperscript{521} In the manuscript, Cynosurus follows Dactylis.
Puccinellia Parl.

**P. maritima** (Huds.) Parl.  15, 16  [Common Saltmarsh-grass]


4) E. of Reculver 1946. Stour estuary Salt Marshes, Sandwich to Shellness.

8) Shakespeare Beach, Dover, KDR.

15) Salting behind Dymchurch Wall. Midrips, J. Hubbard.

**P. distans** (Jacq.) Parl. 15, 16  [Reflexed Saltmarsh-grass]


3) Swalecliffe sea wall, 1959, **HMW**.


**P. distans x rupestris** = **P. x pannonica** (Hack.) Holmberg


**P. pseudodistans** (Crép.) Jansen & Wachter 523


**P. fasciculata** (Torr.) Bicknell  [Borrer’s Saltmarsh-grass]


3) Swalecliffe, **HMW** 1959 **MNE**.


15) 982264 Fairfield, 152: 1962, Mrs. K.D.R. NE of Littlestone 1947, 1950 **MNE**. St Mary’s Bay 1947, **MNE**. By Canal, W. of Hythe, 1956, LJM.

522 In the manuscript, cited as **P. distans** (L.) Parl.

523 This taxon has since been treated as subsumed in **P. fasciculata**.
**P. rupestris** (With.) Fernald & Weatherby  

[Stiff Saltmarsh-grass]


3) Swalecliffe, 1959, **HMW** **MNE**.


---

**Briza** L. 524

**B. media** L.  

[Common Quaking-grass]

1) Keston Common AGD 1916 **MNE**. Holwood Park near Lakes, 1954 **MNE**.

2) Meadow ½ m S. of Cliffe, 1944.


4) Hacklinge Meadows. Sandwich Bay.


6) Down E. of Molehill Wood, Buckland '61. White Hill, Downs E. of Shoreham, PCH; FR. Preston Hill Down PCH; FR. Kemsing Downs PCH. Downs above Trottscliffe PCH.


10) N. of Bat & Ball Sevenoaks 1950 **MNE**. Darenth Water Meadows, PCH.

11) Wrotham Heath 1944, on r[oa]dside **MNE**. Clare Park, E. Malling. Meadows ½ m W. of Penshurst 1944 **MNE**.

12) Cuckolds Coomb fen, Brook, 1945-54 **MNE**. Stowting fen 1954 **MNE**.


14) 926347 ...by r[oa]d E of Robhurst ES.

---

**B. minor** L. 525

**B. maxima** L.  

[Great Quaking-grass]


---

**Poa** L. 526

**P. annua** L.  

[Annual Meadow-grass]

1) Blackheath GMB. Bostall Heath PCH. Ruxley Pits. Shooters Hill. GMB. Bexley Mill Pond PCH. N. Cray Wood, PCH. Joydens Wood PCH.


3) Swalecliffe Sea Wall, '59, **HMW**. Church Wood: Blean Wood. RGW.

---

524 In the manuscript, *Briza* follows *Cynosurus*.

525 Listed, but no records given.

526 In the manuscript, species are given in sequence; annua, bulbosa, nemoralis, compressa, pratensis, angustifolia, humilis, trivialis, palustris, chaixii.


8) Down, NE of Elham Park Wood 1958 MNE.

10) Bat & Ball tip CAS. Otford PCH. River Path N of Shoreham PCH. Eynsford PCH. Shoreham Ch[urch] Y[ar]d PCH. W. of S Darenth PCH. St Johns Jerusalem PCH.


13) Stone Cross, Ashurst 1959 CAS. S. Park Penshurst, by track 62. Southborough HNC. Bayham Abbey CAS.

15) Lydd Airport DMCC.

P. trivialis L. 15, 16 [Rough Meadow-grass]

Native. Meadows, dry to damp woodland and carrs, roadsides, hedges, waste ground; abundant everywhere, except open grasslands on chalk and sands.

1) Blackheath GMB. Ruxley pits, S&S. Abbey Wood, RAB. Farningham Wood, PCH; 82!

2) Stone Marshes, St J.M. (var. glabra Doell.) BEC Rep 1921 p403. Oare mill pond meadow, 1959, MNE. Marsh E. of Oare Creek 1959 MNE.

4) Sandwich Bay.

5) Darwins Bank, Downe, JEL.


10) Meadow N. of Bat & Ball, Sevenoaks, 1950 MNE. Westerham Wood 82! By R[iver] above S. Darenth, PCH.


13) Southborough HNC.


15) Lydd Airport DMCC. Shirley Moor ‘65.

P. humilis Erh. ex Hoff. 15, 16 [Spreading Meadow-grass]

Native. In dry habitats in Kent (walks, sandy ground, dunes, etc.) and probably not uncommon. In other counties it is reported in wetter places.

4) Sandwich Bay dunes 1949 MNE; 1963, KFC, det. A. Melderis.


12) Hothfield Common, 1945 MNE: 1962, E.G.P. + KFC.

15) Dungeness Beach, 1951 MNE.

16) Folkestone Leas, 1946 MNE. Ragstone scars W. of Hythr, 1955, MNE.

P. pratensis L. [Smooth Meadow-grass]

1) Blackheath GMB. Abbey Wood, GAM. Shooters Hill, GMB. Ruxley pits, S&S.

2) Grain N. Beach 1955 MNE. Meadow SW of Upnor 1960 MNE.

4) Sandwich Bay 1946 MNE.

5) Cudham Ch[urch]Y[ar]d (s.s.) D.P.Y. Morants Court Hill 1951 MNE. 3964, Well Wood, PCH.


6E) Gravel pits, Chalk 1946 MNE.


527 In the manuscript given as P. subcaerulea Sm., with humilis added in later hand.
10) St Johns Jerusalem PCH. R[ai][wa]y, 1 m W. of Kemsing Sta[tion], 1946 MNE.
11) Ragstone Walls, E. Malling MNE, Heath Rd; New Rd; Well St[reet]; Well St[reet] Rocks. W. Malling. Aylesford Friary Wall 1952 MNE. R[ai][wa]y bank, Hildenborough 563482 CAS.
12) Hothfield Common 1946 MNE. Stubbs Cross, Kingsnorth 1952 MNE.
13) Stone Cross, Ashurst, 518381, 1959, CAS. Southborough HNC. Hawkenbury Bog, CAS. Bayham Abbey CAS.
16) Folkestone Leas 1946 MNE.

P. angustifolia L. 15, 16 [Narrow-leaved Meadow-grass]
Native. Dry grasslands, on chalk or sand; probably common, but under-recorded, as I did not attempt to separate it from P. pratensis in earlier survey work.

8) Downs NE of St Margaret's, 1955, DPY, det. CEH.
9) Walls, Minster Thanet 63.
11) Sandy vege of A.20, 1m W. of Hollingbourne, 1944 MNE.

P. chaixii Vill. 528

P. compressa L. 1 [Flattened Meadow-grass]
Native. On old walls, widespread but uncommon: also in old shingle workings on Denge Beach. Most frequent on the Kentish ragstone belt. Rare in Surrey, Sussex and Essex and Pas de Calais.
1) Ruxley pits.
2) 06 Bank S. of Oare Creek HMW.
3) 15 Wall, St. Augustines Abbey, Canterbury.
4) 35 Old walls, Sandwich. Wingham Ch[urch] y[ar]d Wall, ‘59, BN.
7) 86, Wall, Kemsley Street Farm, Bredhurst, 1960 MNE.
10) 56 Lullingstone Castle 1956 MNE. 56 Farningam Village on wall 1958 MNE. 56 Farmhouse wall S. of Shoreham GMB & PCH.
15) 01 Old shingle workings, N.E. of Bird Observatory, Dungeness, 1953-1962.

P. palustris L. 529

P. nemoralis L. 15, 16 [Wood Meadow-grass]

528 Listed, but without any entries.
529 Listed, but without any entries.


5) Wood W. of Shoreham PCH. Woods Darwins Bank, Downe, JEL. 396611 hedge of copse PCH.


6a) Cockham Wood Upnor, 1960 MNE.


8) Temple Ewell: Bridge JG.


14) Railway near Sandling Junction.

P. bulbosa L. 15 6/51 [Bulbous Meadow-grass]

Native. Fixed dunes and old dune pasture, turfed shingle beach, sandy cliffs: locally abundant on the E. Kent coast in 4) and 15), at Swalecliffe in 3), unrecorded elsewhere. Very locally abundant on the Sussex coast and westward on that of Hants and Devon: unrecorded for Essex and only adventives in Surrey, but it occurs rarely on the Suffolk and Norfolk beaches and in the Pas de Calais. Commoner on the Kent coast than in any other part of England.

3) 16 Beach, Swalecliffe, P. R. Bell 16.


16) Folkestone Leas, W. end, 1946, abund[ant] MNE; 1954 E.S. MNE.

Dactylis L.  D. glomerata [L.] [Cock’s-foot]


4) Sandwich Bay. Track, 271690, N of St. Nicholas ‘62.


13) Stone Cross, Ashurst, 159 CAS. South Park Pasture, Penshurst, ’62. Southorough HNC. Bayham Abbey CAS.


15) Dungeness near Lighthouse.


C. aquatica (L.) [P.] Beauv.

[Whorl-grass]

1) Near Ravensbourne W.W., Bromley, 1908, S.E.C. Hb. Croy. 46 Orpington Park, PHC.

2) 76 Holborough Marshes, 1946.


10) 45 Chevening, PHC. 55 S. of Otford in meadows GMB, ’56. 55 Sutton C[or]n[e], Darent, PCH, 1956. 57 Sutton C[or]n[e], by Darent Bridge, PCH, 1956. 56 Horton Kirby by Bridge PCH.

11) 65 Leybourne, ’44. 66 By Stream, Lunsford Lane, E. Malling, 1962, R.W. English. 65 Plaxtol, ’44. 83 Biddenden, ’44.


Catapodium Link

C. rigidum (L.) C.E. Hubbard 15, 16 [Fern-grass]


2) Stone Marshes 575755, HMP. Shellness, Sheppey. [Sheppey AE Davis 1917 MNE.] Swanscombe Marshes.

Grain 1945 MNE.


5) on chalk – steps N. of A.20, W. of Farningham Xroads, PCH. Chelsfield Ch[urch]. Down W. of Shireham 1945 MNE. Polhill Place LRAG 1934 MNE. Polhill above Tunnel 1948 MNE. Pilgrims Way, Westerham, RAC. Lane bank NE of Brasted RAC.


7) Hollingbourne Hill 1959 MNE. Higsted pits DMcC.


10) Dartford 1862 MNE.


12) Canterbury, old walls, DHK. Chilham Station platform, 1945, DHK.

**C. marina (L.) C.E. Hubbard**

*Sea Fern-grass*

**Parapholis C.E. Hubbard**

*Hard-grass*

**P. incura (L.) C.E. Hubbard**

*Curved Hard-grass*

**G. maxima (Hartm.) Holmberg**

*Reed Sweet-grass*

**Glyceria R. Br.**

*Blue Moor-grass*

---

530 Listed in the manuscript after Melica, but no entries given (and not a Kentish plant, anyway).

531 Follows Phalaris in the manuscript.

532 Placed at the end of Glyceria in the manuscript.

533 Grid reference is plainly wrong: perhaps TQ8494377.

14) Breeches Pond.  51/94 W Ashford; 61/14 Stowting 55; 61/05; 61/15 C[anter]bury.  51/83 Tenterden


G. fluitans (L.) R. Br.  [Floating Sweet-grass]

1) W. side Avery Hill LRAG, ’34 MNE. 36 Pickhurst Road, PCH. Shooters Hill, G.M.B. Ruxley pits, S&S. Pond in Farningham Wood, PCH.


6) pit N of Shorne 694735, PCH.


14) Pond nr Palustre Court, Wittersham 58 MNE.


16) Holywell, Folkestone.

G. fluitans x plicata = G. [x] pedicellata Townsend

1) Bowman’s Hollow, Plumstead, 1934, LRAG MNE.

2) Snodland Marshes, JPMB. Tonge, DMcC.

4) Marsh NE of Wickhambeaux ’56 MNE.

7) Marsh, Whitehill, Ospringe, 1959, MNE.


11) Ryarsh Wood ’43 MNE. Maidstone, EGP, ’61, MNE. Bearsted EGP & GHM, ’59 MNE. Nr Boxley Abbey, EGP. Aylesford, EGP. Harrietsham, 1944, FR & LJM.

15) Ditch, Burmarsh Rd, Hythe, LJM.

G. declinata Brèb.

1) Brook Hosp[ital] Woolwich, LRAG, 1934 MNE.


8) Gate Inn Pond, DACL.


G. notata Chevall.  534  [Plicate Sweet-grass]

2) Plumstead Marshes, 1944. Gravel pits, Aylesford, EGP, ’58 MNE. Stream, L[owe]r Halstow, 857669, ’62. Oare Pond Meadow 59 MNE. Abbey Fm, Faversham, HJN.

534 Given as G. plicata Fr. In the manuscript, and placed before G. declinata.
3) Denstroude, Pond, HMW.
12) Coldridge Wood S. of Lenham, 1958, Miss M.E. Milward MNE. SE of Lenham. Stowting Fen, '54 MNE.
13) Ditch by Hawkenbury Bog, CAS. Pond N. of Kippings Cross, 6444901, 1957, CAS. Cranbrook, DS.
16) The Lince, SE of Etchinghill, 54 MNE.

Melica L. 535
M. uniflora Retz. [Wood Melick]

10) Westerham Wood 82! Brasted Chart 82!
16) Blackhouse Shaw Saltwood Brockhill, LJM.

ostrich Besser ex Schukt. & Schult. f. 536
H. pubescens (Huds.) Pilg. [Downy Oat-grass]

Native. Chalk grassland, very common and general; also on fixed dunes at Sandwich Bay, locally abundant
4) Fixed dunes, St. Georges Links, Sandwich Bay, 1950-63 MNE.
6) Magpie Bottom, 1949, MNE. Upper Halling Downs 1943 MNE. N. of Cuxton 1951 MNE.

H. pratense (L.) Besser 537 [Meadow Oat-grass]

535 Placed after Briza in the manuscript.
536 Cited as Bess. In the manuscript and with the order of species reversed.
537 Cited as (L.) Pilg. In the manuscript.
6) Upper Halling Downs.
7) Burham Downs, 1946 MNE. Down, Foxbury Wood, E. of Lenham, 1946 MNE. Downs ½ to 1m. NE of Lenham, 1956-58 MNE. “Simia” down, HMW. 94 Westwell Downs, E.
10) Chalk grassland, Kingsgate, Thanet, 1959 MNE.
11) Meadows, Aylesford, 1943.

Arrhenatherum [P.] Beav.
A. elatius (L.) (P.) Beav ex J & C. Presl [False Oat-grass]
3) Old Park, Canterbury ’55. Shelving Wood and copse to W, Highstead, Hoath (Thanet and Woolwich Beds). (var. tuberosum — common in Blea, copses and wood borders, RGW.)
4) Rear of fixed Dunes, Sandwich Bay. Shingle Beach, Walmer; Kingsdown.
7) Below Downs N. of Village Boxley 62.
9) ST Johns Jerusalem PCH. Westerham Wood 82.

Avena L. 538
A. strigosa Schreb. 539 [Bristle Oat]

A. fatua L. 15, 16 [Wild Oat]
Alien, usually only casual in waste ground and in crops: rare.
2) Bobbing, Mrs Henson. Tonge DMcC.
3) Wingham Well, 1958 MNE. Worth, oatfield, 355555, DACL & KDR.
6) N of Stansted 605625 DVS Woods. Trottiscilffe, Mrs Bigg.
7) Belmont Park DMCC. Westwell cornfield, G. Morgan.
8) Selstead in oats 211454 / W of Halfway House, Barham 228488 , 1955, DACL. Denton 1955 DACL. Bourne Park DACL.
9) Cornfield W of Minster, Thanet, 1958 MNE.
10) 7oaks tip CAS.
15) Arable N.W. of Wittersham, 1958, MNE.

var. pilosissima Gray

538 Follows Koeleria in the manuscript.
539 In the manuscript, with A. byzantina, placed at the end of the Avena species.

A. fatua x sativa (A. sativa) L.
2) Sandpit W of All Hallows, 1958, AGS.  
7) Between Bluebell Hill and Boxley, 1899, H.L., MNE. Near Highsted, DMcC.  
9) Joss Bay, Mrs B. Dodds.

A. sterilis L.  [Winter Wild Oat]

A. byzantina
6) Longfield tip DMcC.

Trisetum Pers.  [Yellow Oat-grass]

Koeleria Pers.  
K. macrantha (Lebed.) Schult.  [Crested Hair-grasss]

540 In the manuscript given as A. ludoviciana Durieu.  
541 In the manuscript, placed after Koeleria.  
542 In the manuscript, K. cristata (L.) Pers.
A.20 bank 2m E of Ashford, 1954 MNE (Folkestone sand).


**K. alboe**nc DC. was reported at Sandwich by W. Barton (BEC Rep. 1914). Dr C.E. Hubbard considers the British plants reported under this name as indistinguishable from K. *cristata*.543

### Deschampsia [P.] Beauv.

**D. cespitosa** (L.) [P.], Beauv. 15, 16 Tufted Hair-Grass

Native.


2) Grain, PCH.


7) Kenneling Wood on chalk loam, o[ccasional], '62.


10) Westerham Wood PCH, 82! Bradbourne Meads FSEF. ByR[iver] above S. Darenth PCH.


15) Dungeness, 1944S MNE.

(D. *setacea* Huds. Hack.545

**D. flexuosa** (L.) Trin. 15, 16 Wavy Hair-Grass

Native. Dry woodlands and dry heaths on acid sandy or gravelly soils; locally common in such places, but absent from the chalk districts (except where light drift soils occur), from the clay aream from the marsh districts 2), 4), 5), and indeed from the whole coastline. Common in 1), 3), 6E), 10), 11), 12), 13) and 14). An “atlantic” species, much at home in the humid climate of the western Greensands and the High Weald.


543 i.e. K. *macrantha*.

544 Follows Holcus in the manuscript.

545 Follows D. *flexuosa* in the manuscript. No entry given, but this is not a Kent plant.
12) Ashford Warren. Hothfield Common 1943-63 MNE.

**Holcus L.**

**H. lanatus L.** [Yorkshire-fog]

2) Woolwich Arsenal PCH. Sewer Bank Plumstead PCH. Shellness.
4) Sandwich Bay.
5) 396611 PCH. Pilgrims Way, Polhill PCH. Chevening Park PCH. Darwin’s Bank Downe.
7) Base of Hangers W. of Westwell, '62.
8) R[are], Down EN Eof Giddy Horn, ’62. Wolverton crossroads ’62.
9) By River below Shoreham PCH. By River above S. Darrenth PCH. St Johns Jerusalem PCH. Westerham Wood 82.

**H. mollis L.** [Creeping Soft-grass]

2) By River below Shoreham PCH. By River above S. Darrenth PCH. St Johns Jerusalem PCH. Westerham Wood 82.
3) By River below Shoreham PCH. By River above S. Darrenth PCH. St Johns Jerusalem PCH. Westerham Wood 82.
5) Andrews Wood, Badgers Mount PCH.
6) By River below Shoreham PCH. By River above S. Darrenth PCH. St Johns Jerusalem PCH. Westerham Wood 82.
7) By River below Shoreham PCH. By River above S. Darrenth PCH. St Johns Jerusalem PCH. Westerham Wood 82.
8) By River below Shoreham PCH. By River above S. Darrenth PCH. St Johns Jerusalem PCH. Westerham Wood 82.
9) By River below Shoreham PCH. By River above S. Darrenth PCH. St Johns Jerusalem PCH. Westerham Wood 82.

**Corynephorus canescens** (L.) [P.] Beauv.

This was reported in Kent by L’Obel in 1655, and by GES in C.P.S.K., but the evidence is slender and unconfirmed, though it could well have existed on the Sandwich dunes. It is not uncommon on the fixed dunes in Pas de Calais: in Britain it is probably only native on the Norfolk and Suffolk coast, and formerly occurred in Breckland.

**Aira L.**

**A. caryophyllea L.** 15, 16

Native. Dry open grassland or disturbed ground on sand or gravel, usually on leached soil: widespread, but not common generally.
2) On Bagshot Sand, E of Minster, 1954 MNE.

546 Follows *Arrhenatherum* in the manuscript.
547 Follows *Aira* in the manuscript.
548 Follows *Deschampsia* in the manuscript, and begins with *A. praecox*.
4) Deal Links. Richborough Port, '55, PCH. St Georges Links, Sandwich (Sand) 1946, W.J.L.S.
12) Hothfield Common, 1950 MNE.
14) R[ail][wa]y bank NE of Sta[tion], Tenterden, 1959 MNE.
15) Denge Beach, J. Hubbard.
16) Kiln Heath, Sandling, LJM.

A. praecox L.  
15,16 Early Hair Grass  
Native. Dry open grassland, usually on leached soils: common in suitable places.

A. odoratum L.  
[Sweet Vernal-grass]
1) Blackheath GMB. Eltham Common 1934 LRAG MNE. Ruxley pits, S&S. Farningham Wood, PCH. 82.
4) Sandwich Bay.
5) Chevening Park PCH.
6E) Randall Wood, Shorne (Thanet S[and]) 1953 MNE.
10) Bradbourne Meadows FSEF. Knole Park PCH.

**Phalaris L.**

P. arundinacea L.  [Reed Canary-grass]


2] Sewer Bank, Plumstead, PCH. Plumstead Marshes. Northfleet, Ebbsfleet Channel. 66 Birling Marshes PCH.

3] Oare Meadow HMW. Near Waystreet Fm Hernhill HMW,


6] Swanscombe Wood, in marshy cutting PCH.

8] Dour head Chilton KDR. Bridge, Nail Bourne, JG.


13] Bayham Lakes, CAS.


16] L[owe]r Sandgate Rd, Folkestone VFPD.

var. picta

8] Coldred Pond.

11] Bourne Fm, Plaxtol, 1960, DMcC.

13] Toad Rock Tavern, Bishopsdow, KEB.

³⁴⁹ Sic, =Withersdane?
**Shoddy alien:**
1) Green St[reet] Green, 1938 DMc.
4) Sandwich.
9) Birchington; 1960, DMcC.

**HP. brachystachys** Link.

**Agrostis** L. 550

**A. capillaris** L. 551 [*Common Bent*]
6) 668628, Holly Hill (B. Bels) 62. Darent Wood, H.M.P.
10) Sandpit by r[ai]l[w]ay E. of Riverhead CAS. Bat and Ball tip CAS.
12) Ashford Warren MNE. Hothfield Common, 1903, HL to 1963! MNE.
15) Blackwall Farm, Dungeness, 1956 MNE.

**A. gigantea** Roth.
2) Dartford 1898 H.L. MNE. Tonge, DMcC. Snodland, 1898 H.L. MNE.
5) Arable, Blackmans, 397684, PCH.
6) Greenhithe Waste Ground, H.M.P.
7) 95 Field below Timbolds Hill, Wichling, 1959 MNE. 95 Eastling, C.T. 86 Field, Guildsted, Stockbury, 960 MNE.
10) Sandpit by r[ai]l[w]ay E of Riverhead, CAS.

**A. stolonifera** L. 554 [*Creeping Bent*]
1) Blackheath GMB. Shooters Hill GMB. Ruxley Pits, GMB.
5) A.20 NW of Farningham PCH. Chevening Park PCH.

Follows *Calamagrostis* in the manuscript and gives species in sequence: A. curtisi, canina, vinealis, capillaris, gigantea, stolonifera, avenacea

Given as *A. tenuis* Sibth.
9) East Wear Bay 1947 MNE. Lydden Spout 1955 MNE. Abbots Cliff 1956 MNE.
10) Sandpit E of R[ailwa]y, Riverhead, CAS. Bat and Ball tip CAS.
15) Lydd Airport DMcC.

A. avenacea J.F. Gmel.
Shoddy alien.
4) Sandwich 1959 MNE. 11) Comp, 1960 MNE: both D.McC.

(A. curtisii Kerguélen)  

A. canina L.  
3) Church Wood Blean, SE part, RGW.
16) Ride, Kiln Wood, Sandling Park (F[olkestone] Sand) 1958 MNE.

A. vinealis Schreb.  
1) Keston Common.
12) Hothfield Common.

Agrostis x Polypogon = X Agropogon P. Fourn.
A. stolonifera x P. monspeliensis = X Agropogon littoralis (Sm.) C.E. Hubbard
[Plumstead Marshes, by Practice Butts, 1845, 1846, 1850, MNE. Extinct here now.]

Calamagrostis Adans.
Native. Roadside ditches, woodborders, etc., on heavy moist soils; also in old quarries: rather rare, but widespread. Rare in Surrey and Sussex, commoner in Essex; very common in Pas de Calais, even on the dunes. 10 localities 9/51.
1) 46 Roadside Ditch, Hayes Common, D.McC; 1946-62! MNE.

552 Given as A. setacea Curt. without any entry; it is not a Kent plant.
553 Given as subsp. canina and distinguished from subsp. montana (now A. canina subsp. montana (Hartm.) Hartm. 554 In vc14, East Sussex.
555 Given as A. canina subsp. montana (Hartm.) Hartm. 556 Contradicted by the total above of 10/52.
3) 16 Roadside on clay, A.291, E. of West Blean Wood, 1946 MNE.
6) 57 Horns Cross Chalk pit, 1964, Mrs AG Side. 77 Damp floor of chalk pit, SW of Cliffe, 1963.
6) E) 77 edge of Chattenden Wood, Lodge Hill, 1954 MNE.
8) 14 Border of West Wood, Stowting, W. of Gate Fm, on Pliocene loam, 1956, Miss DAC Long 1958 MNE (1956!). Near Winterage Wood Acrise DACL.
15) 01 Damp ground, old shingle workings E. of Old School, Dungeness, 1956, Miss DACL: 1961! MNE.

\textbf{C. canescens} (F.H. Wigg.) Roth\textsuperscript{557} 15 1/51
Native. Swamps; extrememly rare, and now apparently confined to one locality. Very rare in Sussex and Essex; rare in Pas de Calais. Commoner in Suffolk and Norfolk, unrecorded in Surrey. Reported at 1) Charlton, FK; and Walmer see FIK: (probably errors).
12) Swamp below Lit[tle] Hoddiford, Sellindge, FGEK.
16) Woods near Hythe, Ann Pratt.\

\textbf{(Ammophila arenaria x Calamagrostis epigejos} = X Calammophila baltica\textsuperscript{558} (Flüggê ex Schrad.) Brand occurs on the dunes at Ambleteuse, Pas de Calais (C. Stace, 1959, det. C. Melderis 1962). In Britain it occurs in Norfolk, Suffolk and Northumberland; it may appear on the Kent coast.)

\textbf{Ammophila Host}\textsuperscript{559}
\begin{itemize}
\item \textbf{A. arenaria} (L.) Link 15, 16 Marram Grass 7/51
Native. Sand dunes and sandy beaches: very local but locally abundant in all suitable habitats: the chief agent in sand-dune building in Britain. Unrecorded in Surrey. Very local in a few places in Sussex and Essex, abundant on the extensive dunes of Pas de Calais and Somme.
\item 2) 87 Grain S. Beach, 1946-59 MNE. N. Beach, 1945; gone, 1959, MNE. Beach opp[osite] “Rose in Bloom” Sealsalter, 1959, HMW, 098657 and to W. 06 Shell sand beach, Shellness, Sheppey, [locally] d[ominant]. 07 Beach N. of Leysdown, 1918 AGD MNE 1945!
\item 4) 35 Abundant, to dominant on white dunes, Deal Links to Shellness, 1946-62 MNE. 36 Beach, Pegwell Bay, 1946. Old Fixed Dunes E of Downs Fm '62.
\item 9) 36 Cliffsend, Pegwell, 1946.
\item 15) 02 Lydd on Sea, a small patch, 1946. 02 Lydd Common, on ancient dunes 2 miles inland, 1946-62, MNE. 02 Greatstone Dunes, [locally] d[ominant], 1946-60 MNE. Romney Warren, abundant near sea wall, and rarer inland, 1946 MNE. 01 W of Dungeness, 1957, E.G.P. MNE.
\end{itemize}

\textbf{Gastridium} [P.] Beauv.\textsuperscript{557}
\textbf{G. ventricosum} (Gouan) Schinz & Thell.

\textbf{Lagurus} L.
\textbf{L. ovatus} L.
Escape in waste places 51/58-36; 52-54; 56;68; 54-74. Normandy, Brittany, S[usse]x, S. Hants, Channel Islands – native, Dawlish Warren. Could be an old native, or more likely is extending its range with walmer climate on this side of the Channel.
\item 6) Longfield tip, DMcC.
\item 11) Ditton, 1933, FF.

\textsuperscript{557} Cited as (Weber) Roth.
\textsuperscript{558} Given as \textit{Ammocalamagrosis baltica} (Schrad.) P. Fourn., and following \textit{Ammophila}.
\textsuperscript{559} Placed between \textit{Aira} and \textit{Calamagrostis} in the manuscript.
\textsuperscript{560} Follows Polypogon in manuscript.
Apera Adans.
A. spica-venti (L.) [P.] Beauv.
1) Plum lane Brickfield, Elmstead, AHWD, 1893 MNE. Green Street Green (casual) J.P.M.B. Marlborough La[ne], Shooters Hill, G.M.B.
7) Upper Bell, F.F.
8) Arable field, at Lydden, 1964, Miss D. Moore.

Polypogon Desf.
P. monspeliensis (L.) Desf. 15, 16 2/51 Annual Beard-Grass
Native. Brackish marshes, and alluvial dikes, usually on mud drying out in late summer; very rare, but locally plentiful. It also occurs as a shoddy casual. In Sussex, very rare in extreme west only: unknown in Surrey: very rare in Essex. Only as an adventives in Nord: not in Pas de Calais.

[ Woolwich, F. Barham, 1846 MNE: =Plumstead Marshes, 1850 MNE. ] [ 52 Stone Marshes, 1930, G.C. Pownall. ]
[22 Siding, Sharnel Street, with shoddy aliens, PCH] 4) [ 36 Dikes, alluvial flats, N. E. of Sandwich, Fl. K. ] [As a shoddy casual alien at: 4) Sandwich: 11] Comp and Wrotham, all 1960, D.McC. MNE].

Alopecurus L. 561
A. pratensis L. [Meadow Foxtail]
1) Blackheath GMB. Shooters Hill, GMB. Chislehurst Common. Ruxley pits, S&S.
2) Meadows W. of Upnor, 1945-1960 MNE. Sheerness Canal, OD.
4) Wenderton Meadows, BN. Mead[ow]s, ½ m N. of Wingham.
5) Meadow 396611 PCH.
7) Upper Bell '55.
10) Bradbourne Meads FSEF.
13) Meadow by Teise S. of Lamberhurst Ch[urch], 684365, CAS. Southborough, HNC (common).
14) Meadow W. of Pigeon Hoo, E of Tenterden '62.
15) Dungeness near Bird Obs[ervatory], J. Harper.

A. geniculatus L. [Marsh Foxtail]
3) Pond by Church, Blean, 1945.
4) 26 Stodmarsh 1955 MNE. 26 Levels N. of Paramour Street, Ash, 1956 MNE det. A. Melderis. 26 Minnis Bay, Miss T. Webber. 25 Wenderton Meadows, Wingham, BN.
6) Pond, Cobham, 1945.
8) Pond NE of West Wood Stowting 1956 MNE.
11) Goddington, Harrietsham, Mrs B. Dodds. Aylesford gravel pits 1958 EGP MNE. Ham Hill Boixley 1943 MNE. Near Teston lock H.L. 1897 MNE. Meadows Edenbridge DPY. Pond E of Hale Street 1956 MNE. 94 Pond, Lovelace Fm, Bthersden, 921402, ES.
13) 63 Ditch by Teise S. of Lamberhurst Ch[urch] 684365, CAS. 54 Pentecosts field Southborough HNC.

561 Placed after Phleum in the manuscript, and with species in order A. myosuroides, pratensis, geniculatus, x hybridus, aequalis, bulbosus.
15) 82 Sandhurst Levels 1954 MNE. 83 Windmill Channel SE of Rolvenden 1959 MNE. 93 Shirley Moor ES. 01 01 Dungeness KDR. 02 Canal St Marys Bay LJIM. 13 Willow Tree Fm, Burmarsh Rd, LJIM.

A. geniculatus x pratensis = A. x brachystylus Peterm. 562

A. bulbosus Gouan
Bulbous Foxtail
Native. Brackish meadows: extremely rare, and only seen in recent years563 at Frindsbury. Very rare in Sussex and Essex.

A. aequalis Sobol.
1) Hayes Common. W.C.R.W.
2) Hart, R.D. English.
11) Pond in NW part of Ryarsh Wood, 1944 MNE.
13) Finchcocks Road, J. Stirling TLS.

A. myosuroides Huds.
1) Ravensbourne, Bromley 1912 AED, MNE. Near Chelsfield Station 1946 MNE.
2) Arable, Scocles Fm, Minster in Sheppey, 1958.
3) Corn Fields E of Seasliter Church, 0964 0965, H.M.W.
4) Chislet Marshes MEM. Beet field, Ebbsfleet, MEM.
5) Chelsfield, 1945. 426577 W. of Ebbsfleet, MEM.
6) Near Ash Ch[urch], DVS Woods 603645.
8) St. Radigunds, K.D.R.
10) Arable N of Westerham, 1958 RAC.
12) Arable, Hinxhill, 1956 MNE. Arable, New Street Fm, G[rea]t Chart 972407, 1952, DMcC & CNP.
13) Southborough Garden HNC.
14) Arable, Wittersham 1956 MNE.

Phleum L. 564
P. pratense L.
1) Beckenham (Elmers End) 1915 AED MNE. 36 Near Hayes Sta[tion] PCH. Eltham Common 1934 LRAG MNE. Ruxley pits, S&S. Past[ure] by R. Cray, N. Cray PCH.
2) Woolwich Arsenal PCH. Meadow near Fort grain, AGS.
3) Hernhill 1955 MNE.
6) Mounts Rd, PCH. Romney St[reet] PCH. Kemsing Downs PCH. Field above Trosley.
8) 24 R[oa]ds[ide], Hawkige BN.
10) By R[iver] above S Darenth, PCH. St J[ohns] Jerusalem, PCH.
11) Sandling Wood 1957 EGP MNE.
12) Hinxhill, 1956, MNE.
14) 50 acre Wood Woodch[urch] ES.
15) Shirley Moor ES.

562 Cited as A. x hybridus Wimm. No records given.
563 ‘Recent years’ will have been before 1985, possibly well before. It since transpires that, although rare, the grass is more widespread than this.
564 Follows Lagurus, and gives species in order P. bertolonii, pratense, phleiodes, arenarium.
P. bertolonii DC., P. nodosum auct.


P. arenarium L. 4/51 Sand Cat’s tail grass Native. On sanddunes, particularly on loosersand; rare, but very locally abundant in 2), 4) and 15).


Bromus L.565
B. arvensis L.
A casual: many old records for 1) and 2), 3), 6), 7), 8), 9), 10) and 13; (see Fl.K.) none recent. 13) Meadow, Scotney Castle, JS (TLS).


565 The treatment of Bromus as a broad family under the one name, but covering what was separated as Anisantha in the first edition of Clapham, Tutin & Warburg’s Flora of the British Isles (1952) and Ceratochloa in the second edition (1962), appears to be a very conservative ‘lumping’ approach. The sequencing given was: Bromus erectus, ramosus, sterilis, madritensis, diandrus, scoparius, tectorum, schraderi, patulus, mollis, ferroni, thominii, commutatus, molliformis, rubens, interruptus, arenvis, secalinus, unioideus, macrostachys, lepiidus, racemosus.
13) Lamberhurst on Roadside, 1943, J.R.W. Bedgebury, 1952, MNE.
14) Wittersham in hedges, Col. R. Meinertzhagen, BM.

B. hordeaceus L. subsp. hordeaceus 566
1) Blackheath, GMB. Woolwich Common, 1934, LRAG. Ruxley pits. N. Cray tip PCH. Farningham Wood 82!
3) Meadows, Hacklinge 1946 MNE.
4) Maytham Wharf, Wittersham, 1958 MNE. Sandhurst Levels, 1954 MNE.

B. hordeaceus subsp. divaricatus (Bonnier & Layens) Kerguélén. 567
Shoddy alien.
4) Sandwich, 1960, DMcC, MNE.
9) Birchington, 1960, DMcC MNE.
11) Wrotham, 1960, DMcC MNE.

B. hordeaceus subsp. ferronii (Mabille) P.M. Sm. 568
8) Shakespeare Cliff. Abbotscliff, 1953 MNE, 1960 MNE.

B. hordeaceus subsp. thominei (Hardouin) Braun-Blanq. 569
2) Chalk gravel pits, 1946 MNE. Grain S. Beach, 1945 MNE; 1955 MNE. Horrid Hill, Rainham, 1952 MNE. 56 Ham Hill, Birling, PCH.
6E) Lane End to Green Street Green, 1945 MNE 1951 MNE.
8) Shakespeares Cliff, 1955 MNE. Barham Downs 1955 MNE.
11) Meadow W. of Penshurst 1953 MNE.
12) Hothfield Common 1945 MNE.
13) Tunbridge Wells Common, 1961, CAS ("common here").
15) Dungeness, 1953-56 MNE. Old shingle Palmarsh, LJM.

B. lepidus Holmberg
2) Shorne Marshes, 1956. P.C.H.

566 In the manuscript, given as Bromus mollis L.
567 In the manuscript, given as B. molliformis Lloyd.
568 In the manuscript, given as B. ferronii Mabille.
569 In the manuscript, given as B. thominii Hardouin. It may be that many of these records, especially the inland ones, should be placed in Bromus x pseudothominei, which was not named until 1968.

B. interruptus (Hack.) Druce
Colonist, of doubtful origin; cultivated fields; not seen recently.  See Fl. K., p.413-4; J.Bot. 1895, p.344; J. Linn.Soc. 32, p426-430, 1896.  
1) Eltham, 1894, A.H.W.D.  Sainfoin field near Dartford Hospital (W of Darenth Wood), 1893, A.H.W.D. BM.  6) Cultivated field, Snodland, J.M. Roper, BEC Rep. 1923, p.413.  Lads Fm., Snodland, J.E.L.  Upper Halling, J.P.M.B.  Sainfoin field, Singlewell → Cobham, CEB, 1912 BM.  It has been found also in Surrey, Cambridge.

HB. secalinus L.
Colonist or casual in fields and waste ground: many old records for 1), 3), 4), 5), 6), 7), 8), 11), 12), 13) and 16) (see Fl. K.); recently only as follows:

HB. lanceolatus Roth. 570

HB. scoparius L.

HB. schraderi Steudel 571
1) & 2) Casual about Woolwich and Greenwich AHWD (see Fl.K.).

HB. patulus L. 572
Casual 2) Woolwich Arsenal, AHWD, 1892.

Bromopsis (Dumort.) Fourr. 573

B. ramosa (Huds.) Holub 574

570 In the manuscript, given as Bromus macrostachys (without citation; presumably Desf. Intended).
571 Nomenclature as given; may best relate to Ceratochloa.
572 May belong under B. squarrosus L.
573 In the manuscript, all Bromopsis species are subsumed into Bromus.
574 In the manuscript, given as Bromus ramosus Huds. and placed after Bromus erectus.
10) Bradbourne pits FSEF. River path below Shoreham PCH. Eynsford PCH. St Johns Jerusalem PCH. Wood S. of Darenth Church, 1944 MNE.


13) Holden Corner Southborough Common HNC. Bayham CAS.

16) Seabrook, 1955, MNE.

B. erecta (Huds.) Fourr.  

1) S. side Eltham Common 1934 LRAG MNE.


9) N. Foreland Golf Course 1954 MNE.

11) R[ail]wa[y] Bank by Straight Mile, W of Tonbridges, 1960, CAS.


Anisantha K. Koch  

4A. diandra (Roth.) Tutin ex Tzvelev  


1) Woolwich Common, GMB.

4) Pegwell Bay Beach, 1961, Mrs. B. Dodds. Beach N. of Sandwich Bay, opp[osite] Princes Club Ho[use], 1962. Sandwich Shoddy 1960 DMcC MNE.

11) Fairbourne Heath, 1960, Mrs B. Dodds, det. D.McC. MNE.

A. sterilis (L.) Nevskì  


5) Farningham R[oa]d St[atio]n Approach PCH. Field W. of Shoreham PCH. 3964 Well Wood PCH.


10) Otford, PCH. R[oa]sidle, Eynsford, PCH. S. Darenth PCH.


---

575 In the manuscript, given as Bromus erectus Huds.
576 In the manuscript, all Anisantha species are subsumed into Bromus.
577 In the manuscript, given as Bromus diandrus Roth.
578 In the manuscript, given as Bromus sterilis L.
13) Southborough Common HNC.
14) 93 Woodchurch ES.

†A. tectorum (L.) Nevski

2) 1 pl[ant] on sea wall, Dartford Marshes, 1961, M. Swain.

†A. madritensis (L.) Nevski

It could have been native near Sandwich.

Old records for 4) Sandown Castle (Petiver 1716) and Walmer Beach, 1866, 16) C.P.S.K. “frequent”: none since 1866 (see Fl.K.).

A. rubens (L.) Nevski

Shoddy alien.

4) Sandwich, 1960, DMcC MNE.

Ceratochloa DC. & P. Beauv.

C. carinata (Hook. & Arn.) Tutin

C. cathartica (Vahl) Herter


Brachypodium Beauv.

B. pinnatum (L.) Beauv.

13) Horsmonden New Church, abund[ant] on road verge.

B. sylvaticum (Huds.) Beauv.

579 In the manuscript, given as Bromus tectorum L.
580 In the manuscript, given as Bromus madritensis L.
581 In the manuscript, given as Bromus rubens L.
582 In the manuscript, given as Bromus carinatus Hook. & Arn., without any records.
583 In the manuscript, given as Bromus uniloides Kunth.
584 In the manuscript, preceded by B. sylvaticum.


3) Shelving Wood (Woolwich Beds) Hoath, 62.


---

585 Treated, with *Elytrigia*, as *Agropyron Gaertn.*

586 In the manuscript, given as *Agropyron caninum* (L.) Beauv.


Elytrigia Desv. 587
E. repens (L.) Desv. ex Nevs. 588

1) Blackheath. Shooters Hill. Ruxley pits. Crofton Heath PCH. Pickhurst Mad PCH. N. Cray tip PCH. Farningham Wood 82!


3) Hurnhill village banks ’55. Boughton Street banks ’55.


Var. lasiorachis Hack.


E. atherica (Link) Kerguélén ex Carreras Mart. 589


15) Denge Beach, J. Hubbard.

E. repens x E. atherica = E. x Oliveri (Druce) Kerguélén ex Carreras Mart. 590

587 Treated, with Elymus, as Agropyron Gaertn
588 In the manuscript, given as Agropyron repens (L.) Beauv
589 In the manuscript, given as Agropyron pungens (Pers.) Roem. & Schult.
Frequent where the parents meet along the coast and estuaries.
2) Greenhithe 1862 MNE. Cuxton 1944 MNE. Conyers Creek 1944 MNE. Sheppey, AGD, 1918 MNE.

**E. juncea** (L.) Nevski\(^{591}\)

Native. Sanddunes, the main primary colonist and builder of foredunes: locally common in such habitats on the coast from All Hallows to Greatstone. Frequent in suitable places in Sussex, Essex and N. France.


4) Beach, Pegwell Bay, 1946 MNE. Sandwich Bay to Shellness, abundant on foredunes and strand, 1946-62.

9) Below cliffs, Pegwell Bay, 1946 MNE.


**E. atherica x E. juncea = E. x obtusiuscula** (Lange) Hyl.\(^{592}\)

Not infrequent with the parents, on the dune systems.

2) N. of Cuxton, 1943, MNE: but *junceiforme* does not occur here, and perhaps never did. Grain S. Beach, 1949, 1959 MNE. Shellness, Sheppey, 1959, MNE.

4) Sandwich Bay, 1945 MNE.

15) Romney Warren, 1945 MNE.

**Leymus** Hochst.\(^{593}\)

**L. arenarius** (L.) Hochst.

Native. White Sand dunes: extremely rare, and only recently found. Probably planted in Sussex.

[Casual at 1) Murray Avenue, Bromley, 1946, G.W. Coxhead.]

4) Sandwich Bay, c. ¾ m. N. of Princes Club House on fore-dunes, about seven clumps, 1962, C.A. Lister, who showed it to me shortly afterwards.

**Hordelymus** (Jess.) Jess. ex Harz

**H. europaeus** (L.) Jess. ex Harz\(^{594}\) 16 1/51 Wood Barley

Native. In one Beechwood on calcareous soil derived from ragstone; extremely rare. It is strange that this species has not been found on the chalk downs of Kent: it occurs rarely (Effingham, Ranmore, Chipstead, etc.) on those of Surrey. It occurs in a wood on boulder clay near Thaxted in N. Essex, but is unknown in Sussex. The nearest French locality known to me is Forêt d’Eu in Normandy. It is of course common in the Chiltern and Cotswold Beechwoods.

10) Copse by Roadside, Riverhill, 1842, W. Borrer; Fl. Tonbr. suppl. p.26; 1955! in Beechwood on ragstone scarp on E. side A.21, not seen in 1960. It is remarkable that this locality appears to have been overlooked from Borrer’s time until 1955, but it does not appear every year.

**Hordeum** L.\(^{595}\)

**H. distichon** L.\(^{596}\)

**H. murinum** L.


3) Dry Pasture S. of Highstead, Hoath, 62.

6) Mounts Rd PCH. Swanscombe Wood PCH.


---

\(^{590}\) In the manuscript, given as *Agropyron pungens x repens* = *A. x oliveri* Druce.

\(^{591}\) In the manuscript, given as *Agropyron junceiforme* (A & D. Löve) A. & D. Löve.

\(^{592}\) In the manuscript, given as *Agropyron junceiforme x pungens* = *A. x obtusiusculum* Lange.

\(^{593}\) In the manuscript, given as *Elymus*, and its representative species as *Elymus arenarius* L.

\(^{594}\) In the manuscript the genus is cited as (Jessen) Harz and the species as (L.) Harz. The entry follows Hordeum.

\(^{595}\) The sequence of species in this genus is given as *H. secalinum, H. murinum, H. marinum, hystrix, glaucum, trifurcatum*.

\(^{596}\) Included in a note: *Guizotia abyssinica*, *Hordeum distichon*, *Secale cereale* – Longfield tip, 3657, PCH.
11) West Street, Harrietsham, BD. E. Malling. Maidstone MNE. By Pond E of Hale St[reet] CAS. Edenbridge Tip DPH.
13) Southborough Common HNC.
15) Lydd Airport DMcC.

_H. murinum subsp. glaucum_ (Steud.) Tzvelev\(^{597}\)

_Shoddy alien_

4) Sandwich 1960, MNE.
9) Birchington 1960 MNE.
10) Brasted 1960. All DMcC.

_H. secalinum_ Schreb.

1) Shooters Hill, GMB.
3) Swalecliffe.
8) Denton, meadow, DACL. Kingsdown, above Knights’ Bottom, B.N.
12) 93 Stubb’s Cross Kingsnorth, 1952, MNE. 95 Meadow E of Ch[urch], Lenham, 1960 MNE.
14) 83 R[oad]side E of Cranbrook, DS.
16) 13 Posting Wents KDR.

_H. marinum_ Huds.

Native. Sea-walls and dry banks near the sea, usually of clay: frequent to locally common in the Thames estuary from Stone to Shellness in Sheppey and Whitstable in 2), but rare in 4) and 15).

3) 16 Shore W of Whitstable HMW.
4) Kingsdown, beach, KDR.
15) Between the long pits, Denge Beach, J. Harper. [Dymchurch, 1902, Lady D.]

_H. geniculatum_ All.\(^{598}\)

_Shoddy alien._

4) Sandwich, DMcC 1960; MNE.
11) Comp, DMcC 1960, 61 MNE.


---

\(^{597}\) Given as _H. glaucum_ Steud.

\(^{598}\) Given as _H. hystrix_ Roth.
Secale cereale


Danthonia DC

D. decumbens (L.) DC


2) Minching Wood, Blean 1957 MNE. Heath, Church Wood, Blean, RGW.

3) Worth Minnis, 1950, MNE. Ham Fen, in meadow, 1956 MNE.

4) Downs in Chevening Park, 1961 MNE.

5) Chalk Downs, E. of Etchinghill. 1946-. Covert Lane, Kingston, 1946 MG.


Molinia Schrank

M. caerulea (L.) Moench. 15, 16 23/52


2) 16 W Blean Wood, 1945. 15 W of Rough Common, 1954. 15 Church Wood, L.W.W.; RGW. 05-.

3) 35 Worth Minnis, 1946 MNE.

4) 45 Ashford Warren, 1944-. 45 Willesborough Lees, 1944-55 MNE.


6) 94 Hothfield Common 1944-62 MNE. 04 Ashford Warren 1944-. 04 Willesborough Lees, 1944-55 MNE.


9) Dungeness, old ballast pit workings, 1958, Miss B. Nash, MNE.

---

599 Included in a note: Guizotia abyssinica, Hordeum distichon, Secale cereale – Longfield tip, 3657, PCH.

600 Given as Sieglingia Bernh. In the manuscript.

601 Given as S. decumbens (L.) Bernh. in the manuscript.
Phragmites Adans.
P. communis (Cav.) Trin. ex Steud. Native.

6) Flooded chalk pits, Swanscombe, /S. of Northfleet.
10) TheMoors, Bat & Ball, 530575 CAS.
11) Pond E of Bethoven ES, 941402. Pluckley Brickworks 919435, ES.
13) Furnace Pond, Horsmonden. [Tun[bridge] Wells, WWR TLS.

Leptochloa fusca (L.) Kunth
1) Stonehill Green, shoddy, 1948, DMcC, det. CEH.

Eragrostis curvula (Schrad.) Nees
Sandwich, D.McClintock, 1960.

Eragrostis cilianensis (All.) Vignolo ex Janch.

Eleusine indica

Eleusine africana O’Byrne

Dactylloctenium radulans [(R.Br.)] P. Beauv.
1) Stonehill Green Shoddy, DMcC, det. CE Hubbard, 1948.

Chloris Sw.

Shoddy alien, at 4) Sandwich, 1959, DMcC, MNE.

Cynodon Rich.

---

602 Cited as Trin. In the manuscript.
603 Given as Diplachne fusca (L.) Beauv.
604 Placed after Digitaria. No ‘introduced’ symbol (ɫ) given.
605 Placed after Digitaria. No ‘introduced’ symbol (ɫ) given.
606 Cited as L. and placed after Setaria.
607 In manuscript, follows Spartina. No ‘introduced’ symbol (ɫ) given.
C. dactylon (L.) Pers.  
2) Sheerness, 1964, Mrs. Hewson, plentiful on waste ground.  
6) Longfield tip, DMcC, 1956 MNE.

*Not* Cynodon incompletus Nees

Shoddy alien:  
4) Sandwich, 1956, DMcC.  

S. maritima (Curt.) Fernald  
3) Whitstable, RGW.

S. alterniflora x maritima = S. x townsendii H. & J. Groves  
Native. Salt marshes, now abundant. This allotetraploid hybrid appears to have arisen naturally in this country in Southampton Water. It is an aggressive colonist of mud flats and even of the lower Aster saltmarshes. It is not easy to separate natural and planted localities; it is often planted now to consolidate mud flats prior to reclamation. App[eared] 1870 in Brit[a]in. 1.35 record for 15: for 16. Now common on the Essex coast.  

Tragus racemosus (L.) All, 

*Not* Panicum L.  
P. schinzi Hack.  
7) Cobham Fm, Lenham, in Buckwheat, 1950, DMcc.

*Not* P. capillare L.  

*Not* P. miliaceum L.  
2) Snodland, 1955 MNE.  
6) Longfield tip, 1956, DMcc MNE,  
9) Pegwell Bay Cliffsend, 1958 LRAG MNE.  
10) Sevenoaks tip DMcc.

---

608 Given as C. hirsutus Stent. In the manuscript.  
609 Follows Nardus in the manuscript.  
610 Given thus, but all, or nearly all, of these records must be of Spartina anglica, which was not named as such until 1978.  
611 Placed after Dactylolycenium,  
612 Given after P. capillare and named as P. laevifolium Haeck.
11) Yalding Rubbish tip, 1961, CAS.
12) Deanery Canterbury MEM. Stadium C[anter]bury MEM.

Echinochloa [P.] Beauv. 613

E. crus-galli (L.) [P.] Beauv.
1) Hayes gravel pit, 1915, AED MNE. 1934, DMcC.
8) Walmer allotments, 1959, BN.
12) Goldwell qy, 64 ES. Chylmington quarry ES.

†E. frumentacea [Link]

Setaria (P.) Beauv. 614
S. pumila (Poir.) Schult.
1) Beckenham, A.E.D., 1934 MNE. Shortlands, 1897, 1900, Dr D.T. Playfair. Green Street Green, Farnborough, 1938, DMCC MNE.
4) Carrot [field], Stodmarsh, MEM. Beet [field], Ebbsfleet MEM.
6) Broomhill, Strood, G.C.P. Bush Rd, Cuxton, GCP.
8) Denton, garden, Miss D.A.C. L., 1958 MNE. Ottinge, Elham, 1940, EH Solly.

S. verticillata (L.) P. Beauv.
1) Eltham FF.
6) Longfield Dump, DMcc. Wickham (Strood) F.F.

S. viridis (L.) [P.] Beauv.
4) Walmer, Miss Schon & Miss B. Nash, 1960, MNE.
6) Longfield Dump DMcc.
8) Ottinge, Elham, 1936 EH Solly.
10) Sevenoaks tip, B[all] & Ball CAS.
11) East Malling, JHL. Allotments close to Tonbridge Castle, 1950, KEB.
12) Deanery G[arden] in Canterbury MEM.
var. weissmanii Sturry DMcc.

S. italic (L.) [P.] Beauv.
1) Green Street Green, Farnborough, 1938, D.Mcc, MNE. E Wickham tip, DMcc.
6) Longfield tip, 1956, D.Mcc., MNE.
11) Yalding rubbish tip, 1961, CAS.

Digitaria Haller 616
†D. ischaemum (Schreb. ex Schweigg.) Muhl. 617

†D. didactyla Willd.
1) Stonehill Green, shoddy, 1948 DMcc, det. CEH.

†D. sanguinalis (L.) Scop.

---

613 Follows Cynodon in the manuscript.
614 Follows Panicum in the manuscript. Given in order S. viridis, verticillata, lutescens, italic.
615 Given as S. lutescens (Weigel) Hubbard.
616 Cited as P.C. Fabr.
617 Cited as (Schreb.) Muhl. and no entry given.
1) Chislehurst; Bickley, DMcC (BEC (1937) 516).
8) (Garden of Miss Hutchence Elmer's End) Lyminge, 1955-56, Miss D.A.C. Long.
11) Addington, in arable, 1950, MNE.
16) Garden weed, Folkestone Lees, 1957, F. Clarke, Hb. DPY.

*Sorghum halpense*

*Zea* L. 618
*Z. mays* L.
13) Several plants, edge of Matfield Green, 1953, K.E.B.

*Sparaganiun* L. 619
*S. erectum* L. 15, 16 9/51 [Branched Bur-reed]  
*subsp. erectum*

Native. Streambanks, ponds and ditches, in fresh base-rich water: widespread but only locally common: the distribution of the segregate, however, is incompletely known.
1) By small Pond on Keston Common, 1961, H.A.S.
2) 57 Dartford Marshes, 543772 & 541761, ‘62.
6) 77 Pond, Northward Hill, High Halstow, 1958 MNE.
12) Ashford JG.
14) 82 Pond, Palstre Court, ½ m W. of Wittersham, Oxney, 1958 MNE. 02 Brenzett; New Romney.
15) 93 Shirley Moor, near B.2080, 1945 MNE. 92 Appledore, dike near Station, 1959 MNE. 82, 93, 92, 02

*S. erectum* L (agg.)  
*subsp. neglectum* (Beeby) [K. Richt.] 620 15, 16 20/51  
Native. Streamside, ponds, swamps and ditches: common in such habitats, but segregate distribution probably not fully worked out.

---

618 Placed after Chloris.
619 Follows *Wolffia* in manuscript.
620 Cited in manuscript as (Beeby) Schinz. & Thell.
2) 67 Northfleet. 77 S. of Cliffe. 76 Holborough Marshes. 65 Lunsford. 06 Faversham Ponds. 77 Higham. 77 Cooling. 76 Birling Common 1943 MNE. 86, Stream, [lowe]r Halstow 857669. 57 Ditch by Cray below Crayford, 1944.


10) Stream, Westerham, 441536, 1955, DPY. 57 Ditch by Cray below Crayford, 1944. 26, 35, 67, 77


12) 94 Pond W. of Hothfield Common. 04 Ashford, ESM. 04 Willesborough Lees ESM. 03 E. Stour near Sellindge, ESM.

13) 54 Pond N. of Penshurst. 54 South Park Lake, Penshurst, 1962. 54 Pond ½ m N. of Penshurst, 1955.


S. emersum Rehm. ([S. simplex] Huds. pro parte) [Unbranched Bur-reed]

2) Greenhithe, 1860 MNE. Snodland Brook, 1870 MNE. 06 Nagden Marshes, C.T. 45, 54, 65, 64, 85, 84, 82, 94, 93, 04, 03


11) Medway below Maidstone, 1897, H. Lamb MNE. 54 Medway, above Tonbridge, CAS. 74 Ditch by B.2162, N. of Collier St[reet], Yalding. Bubhurst, Frittenden, RAC. 84 R. Sherway, Headcorn, 1944. 94 New Ho[use] Fm, Pluckley, V.F.P.D.

12) 03 Mersham Mill, E.S. 04 Stour. 94 Stour.


S. natans L. 621

Native. Dikes in calcareous fens: very rare, but still locally abundant between Worth and Hacklinge: a relic of the flora of the primaeval fens of this area.

4) Fen dike, Worth Minnis, 1950-1960 MNE. Dike, ½ m E. of Hacklinge, 1960, MNE.

Typha L.

T. latifolia L. 621

Native. Ponds, streamsides, swamps, and ditches: common in these habitats and occurring in all districts except 5), 7) and 9), but (naturally) rare in 6) and 8).

1) Ruxley pits, S&S.Pond S. of Joydens Wood, PCH.

2) Plumstead Marshes, 1944. Northfleet Brooks, 1944. Dartford Marshes (Longreach) PCH. Snodland S. Marshes, 1944. Tonge Pond, J.M. 96 Luddenden Marshes, H.M.W. Oare Meadow and Pond HMW. Pits E of Oare Creek, HMW. 06 Seasalter HMW.

3) Denstroude, Pond, 093608, HMW.

4) Hacklinge Marshes. West Bere Marshes MEM.

5) Pond, Downe village, 1960, FHB.


8) Dour, River, KDR.


---

621 In the manuscript, S. minimum Wallr.
12) N of Brabourne RAC. Hothfield Common. Stowting Marshes ES. Mersham le Hatch CNP. Pond, Westwell, CNP. New Lake E of Chilham ES. 94, 04, 14, 95, 05, 15
13) Lake, South Park, Penshurst ‘62. Southborough Common, SW pond HNC. Bayham CAS. Boggy Wood SW of Pembury, 614395 PCH. 53, 63, 73
15) Romney Warren. 72, 01, 82, 92, 02, 83, 93, 03, 13, 23
16) Gault ponds, Folkestone Warren, ’65, BN.

T. angustifolia L. 15, 16 28/51 Lesser Reed-Mace
Native. Ponds, swamps, and ditches, in base-rich fresh or brackish water: locally common in 2), 4), 15), and on the Weald Clay in 11) and 12): rare in 1), 6), 10) and 13): unrecorded in 3), 5), 9), 14) and 16).
1) Ruxley pits, GMB; S&S. 46
6) Marshy chalk pit, SW of Cliffe 63.
10) Greatness moors RAC. 55
11) Edenbridge, A. Beadell. Pluckley Brickworks ES. Hartlake Bridge, JRW, 1943. 44, 54, 64, 74, 84, 65
12) Eastwell Lake ES. 94, 04, 14
13) Penshurst Place.

LILIACEAE

Narthecium Huds.
N. ossifragum (L.) Huds. 15, 16 Bog Asphodel 3/51
Native. Valley bogs and wet-heath: very rare, but very abundant locally at Hothfield Common; elsewhere now only at Keston Bog and Hawkenbury. Still locally common on bogs and greensand heath in W Sussex and in E. Sussex on Ashdown Forest: unknown in Essex, and long extinct in Pas de Calais.
* 1746: Bogs nr. Caesars Camp, Bromley, Blackstone, p.72.
12) Hothfield Common, GES in FGEK; abund[ant] in Valley bogs II, also in III and IV; H. Lamb, 1900-01 MNE; 1943-62 MNE →1996!

† Hemerocallis L.
‡ H. fulva (L.) L.
1) Ruxley pits, S&S.

Convallaria L.
C. majalis L. 15, 16 Lily of the Valley 16/51
Native. Dry woodlands, particularly of sessile oak, on light acid soils: on Eocene sands and gravels in 1), 3) and 6E), on Pliocene sands in 8), on lower Greensand in 10), 11) and 12), and on Tunbridge Wells Sand in 13); widespread but only locally frequent; but locally dominant in the field layer in many woods in 1), 3), 6E) and 11). Much rarer in Surrey, Sussex and Essex: locally frequent in Pas de Calais.
1) [Sydenham, J. Britten, Phyt. N.S. VI, 1863, p.592.] [Abbey Wood, 1870, Hb. Lamb MNE.] 46 Spring Park Wood. 46 In the drier shaded part of the valley bog, Keston Common, 1948. 57 Joydens Wood, 1945-64 MNE.

622 The sequencing of Liliaceae here is as given in Stace (1997), on the basis that Francis Rose had begun revisions which might have been expected to bring the various species ordered in accordance with that sequencing. But the manuscript treats Liliaceae, beginning with Narthecium, as starting after Zannichellaceae, and has a narrower concept of Liliaceae (so separating out some species under Amaryllidaceae, so as to follow Luzula).


10) 45 Brasted Chart, probably an escape, 1957, RAC.


12) 94 Ashford Warren, E. Scott: 1954!


**Polygonatum Mill.**

† *P. odoratum* (Mill.) Druce Alien in Kent.

[1] Reported at Joydens Wood in Hooker, Fl. Lond., Fl. K.: evidently an error, or confusion of nomenclature. I suspect that *Convalaria* was intended!

13) Naturalised in planted woodland, Capel Place, Horsmonden, 1946.

**P. multiflorum** (L.) All. 15, 16 Solomon’s Seal 15/51

Native. Dry woodlands, mainly on sands and gravels: widespread and certainly native in old woodlands on the Eocene sands and gravels (especially the Blackheath Pebble Beds) in N. Kent, in 1), 6) and 3), and also on Pliocene and other sandy drift soils, and the chalk in 8): less certainly native, thought probably so, in 10) and 7). Only naturalised in 13), the plants appear to be of hybrid origin at least at Lamberhurst. As a native, very rare in Surrey and confined to the extreme west in Sussex: extinct in Essex (formerly in Epping Forest), abundant in woods on a range of soils in Pas de Calais.


3) 05 Just E of stream, Whitehall Wood, 1950, MNE.


7) 75 By old lane up downs, 794588, on chalk, Detling, Coombe to N.W., 1944: 1957, HMW. Chalk Wood, Cades, Whitehill, REW. 76 Wood nr Westfield Sole, on loam over chalk, E. Philip. 75, 76


12) 05 On alluvial gravels, Shalmsford St[ation], alder wood by Stour, Zm NE of Chilham.


16) 13 Asholt Wood, R.E. Wood, on Gaulth.
Maiathemum Weber

M. bifolium (L.) Schmidt

It formerly occurred in Ken Wood, Middlesex, where it may have been native. This Continental species is abundant in dry, acid woodlands in the more inland parts of the Pas de Calais and Nord departments.

13) Naturalised in the grounds of Scotney Castle, Lamberhurst, teste K.E. Bull.)

Paris L. 623

P. quadrifolia L.  15,16  Herb Paris  24/51

Native. Woodlands on moist base-rich or calcareous soils: very common in coppice on moisture-retaining loams derived from the chalk, over the greater part of districts 7) and 8), though apparently absent in 8) NE of the line L[ower] Hardres – Womens wold – Barfreston – Wadersharn – Dover, and in 7) E. of the line Milsted – Doddington – Stalisfield. Unrecorded in 5); in 6) only near Halling. Frequent and characteristic of coppice-woods on the Gault belt from Westerham in 10) across 11) and 12) to Postling Wents in 16). In eighty ash-elms north of Plaxtol and Elmstone Hole in 11): on Folkestone Sand at Sandling 11), and on Sandgate Beds at Klin Wood, Lenham and Park Wood, Smeeth. Very rare and possibly now destroyed on the Thanet Sand in 7), still in 5 locations on this formation in 3): in the Weald only at Hawkhurst on calcareous Wadhurst Clay in 14), absent elsewhere. Probably commoner on the E Kent chalk area than elsewhere in Britain. It is very rare in Surrey (nearly confined to the extreme east) and has one E. Sussex [location] and a few West Sussex ones. Rare in Essex (except in the north on Boulder clay; abundant in N. France. Its rarity on the chalk of West Kent is at first sight strange, but the cause may be climatic: there may be an association between the wetter climate of the East Kent chalk country and the development of the deeper, moisture-retentive calcareous loams in Paris seems to require; other species (Allium ursinum, ..., Stellaria, Angelica) show a similar pattern.

1) 439663, High Wood, Crofton, WCRW, 3 infl[orescences LFB C. Swain, 1957! MNE, now destroyed.  462679, Broom Wood, St Mary Cray, WCRW.  432647, ...Ninians 624 Wood, Locks Bottom, WCRW.  46


5) no records


76 Westfield Wood.  86 Bredhurst Hurst 1944 MNE.  76 Wigmore, 1944.  75 N. of Detling 1942.  96 Cromer Wood, N of Milsted, 907604, J. Felton.  85 Wood 5 of 3 Squirrels [pub], 1958, 840605 MNE.  85 Longton Wood, 827597.  Squirrels Wood, 45.  Lords Wood, BC.  Hempstead, BC.  Monkdown Wood, BC.  85 Hucking, NW of Pond Fm, 838593.  SE of Rumsted Court, 842595.  85 Wood in valley W. of Worms hill, 1943, 875575 & to SW, 871569.  85 Trundle Wood, Milsted, 1956 MNE, 888586.  95 Wrinsted Wood, Wichling, 901553, 1958 MNE.  95 Filmer Wood 925558.  95 Oaken pole Wood, 922546.  95 coppice ½ m N of Ch[urch], Stalisfield, 970531.  95 coppice ½ m E of Ch[urch], Stalisfield, 971518.  95 Wichling Wood 909555 MNE.  95 W. of Payden St, 916542.  85 Spuckles Wood, Stalisfield, 960525.  95 Kennelling Wood, Stalisfield, 956520.  85, 95, 66, 76, 86, 96 (also 05)


623 In the manuscript, this entry follows that for Colchicum.

624 Presumably Ninehams Wood.

Asparagus L.

A. officinalis L. subsp. officinalis 15, 16 7/51

Alien, inland: but it may well be native on coastal fixed dunes as at New Romney and Sandwich. This subspecies occurs on dunes in Sussex, and in Pas de Calais, where it is common on the dunes, and is regarded as a native by some French Botanists.

1) Ruxley pits, S&S. Ravensbourne, Bromley, 1915, AG Davis MNE. Dartford Heath, in scrub, 1962, HAS.
3) Deal Links: plentiful on fixed dunes, Sandwich Bay, H. Elgar, 1896 MNE: St George’s: Prince’s Links; Shellness 1946-62 MNE. First noted here by E.s.M. in Fl. K., but it may have been here for a long time. Lampen Wall, Stodmarsh, Mrs. B.
4) Stone, 1960, H.M.P.

Asphodelus L.

† A. fistulosus L. 626

Alien: waste ground.

1) Beckenham, A.G. Davis, 1934 MNE.
1) Eltham, Mrs. Wedgewood, BUC Rep. 1921, p.400.

[C[olchicum] L. 627

C. autumnale L. Meadow saffron, Autumn Crocus

Alien

3) Swalecliffe churchyard, 1950, R.E.W.

This may have been native formerly NE of Shooters Hill in moist fields (Cooper, Fl. Met., p51) but it is certainly now extinct: the other records are improbable as native localities (Littlebourne and Cranbrook, Fl. K., N of New

625 Annotations of ‘(ch[al]k)’ and ‘MNE’ belong either to this entry or the next.
626 This species appears twice in the manuscript, with different records for district 1), both given here.
627 In the manuscript, this entry follows that for Muscari.
Hythe F.F.) for this species whose British distribution is markedly midland to western, though it is common in Central Europe. It has been commonly cultivated in Kent gardens for a long time. In Surrey it is probably extinct, if ever native, but may still occur very rarely as a native in both E. and W. Sussex. Extinct in Essex: not uncommon inland in Pas de Calais and Nord, but absent near the coast.

Ruscus L.

R. aculeatus L. 15, 16

Butcher’s Broom

Native. Dry woods, mostly of oak or beech; commonest on the Eocene Sands and gravels of N. Kent in 1), 3) and 6E), but also frequent on the chalk and on the moderately acid soils of the Lower Greensand country: rare in the Weald, absent from the alluvial marsh areas. Locally frequent in Surrey and Sussex, though rare in the Wealden areas: rare in Essex: very rare in Pas de Calais: Oceanic Southern.


5) 45 Copse, Chevening Park, 1943, JRW.


7) 86 Queen Down Warren, 1962. 76 Lords Wood, BC. 86 Borden, 1946. 95 Milstead, 1946. 95 Kennaways, 1946. 94 NW of Westwell, 981485, ES. 04 By White Hill, 036492, ES. 04 Soakham, 047496, ES. 04 Godmersham, 057500, ES. 05 Kings Wood, Molash, 1946. 05 Park Wood, Chilham, 042524, ES. 05 E of Lees Park, 032555, 030556, CT. 05 E of Badlesmere, 023549, CT. 05 Chalky roadbanks, Old Wives Lees to Stone Stile Fm, 1943, DHK. Mulberry Hall, Chilham, DHK.


9) (Ramsgate, Herb. Lamb, 1861 MNE.)

10) Scords Wood, on top of Ragstone bank, 1959, RAC.


12) SW of Digges Court 973475, ES. Westwell Springs 990475, ES.

13) Tunbridge Wells.


Lilium L.

L. martagon L. 15, [16]

Martagon Lily, Turk’s Cap Lily

628 Written as Blean in error.
Possibly native. In woods on clay over the chalk: very rare, but known today in four natural-looking localities, and similarly recorded elsewhere in the past. On the Continent it comes no nearer than E. France; this is against it being a native of Britain.


Fritillaria L.  
[F. meleagris L.] Fritillary, Snakeshead [15, 16]  
Possibly native formerly in alluvial meadows of the Thames and Medway Valleys; but now extinct: modern records probably refer to escapes or planted colonies.

1) Near Bromley, Curtis, c.1782: Fl.K.
6) Highfield, Shoreham, R. den Halher.
7) Above Detling, H. Elgar, 1896 MNE.
11) nr. Trottiscliffe, W. Bridge, 1921 MNE.

Formerly native, now extinct, by the Thames in Surrey (Mortlake); in N France, in the Somme Valley nr. Abbeville.

Tulipa L.  
† T. sylvestris L.  
Alien, long naturalised.

1) Chislehurst, Wollaston; Fl.K.  
11) Ightham Court. Asylum Grounds, W. Malling, H. Lamb, Fl.K.; E. Bartlett 1882 MNE; 1944-51! MNE.

T. gesneriana (Garden Tulip) occurs as an escape at 1) Ruxley pits, S&S.

Gagea Salisb.  
G. lutea (L.) Ker-Gawl.  
It is doubtful if this species has ever occurred as a native in Kent, within historical times at least. The two records are without confirmation and the habitats seem very improbable.

1) West Coombe Park (Greenwich) C. Finch: Fl.Met.  
“Dartford”, Masters.

Not known as an indigenous species nearer than N. Hants (Preston Candover), though many examples of woodland on calcareous loam apparently suitable for it exist in Kent.)

Ornithogallum L.  
O. umbellatum L. 15, 16 17/51 Star of Bethlehem  
Alien, well naturalised in sandy fields and heathland in several places: rare. It occurs as an alien in all the adjacent counties, but may be native in the Suffolk Breckland: it is regarded as native in Pas de Calais, though rare.

1) 46 Hayes, field behind church, 1946 MNE.  
3) 96 Bysing Wood, 1959 MNE. Trenley Park Wood by cotts, Rew.
4) 35 Dunes N of Deal, 1963, Miss I. Moore. Sandwich Bay; Stodmarsh MEM.
5) Cudham Ch[urch] Y[ar]d, DPY.

8) Copse E of Bridge Hill, RGW.
10) 45. 55 Ivy Hatch, D.McC. 55 Seal, copse E of Godden Green Road, Miss Booker, 1947. BSS 40 yrs at copse at Stone Street, Blakes Green Hill, 1948 Mrs D. Warret, 1949!

11) 65 Piney Toll, West Malling, in sandy field, 1942-56 MNE. Addington, P. Grattan. 75 E. Farleigh, A. Golding, 1905, MNE. Penenden Heath, copse edge, 773 578, 1956, O.D.


(O.pyrenaicum L. is native in woods in the Pas de Calais but in England no nearer than Hants and Berks, though it occurs as a probable introduction in W. Sussex and also as a garden esape at 8) Pickersden, Wye, 1951, CNP.)

Scilla L.

[S. autumnalis L.  [16]

Former native, now apparently extinct. Dry gravelly pastures and commons; very rare. Still in Surrey, Essex and Middlesex, but very rare; unrecorded in Pas de Calais.


6E) Gravel pits, Chalk, Pocock. Shorne Warren, 1829, NBG. Not recorded since.]

Endymion Dumort.

E. non-scriptus (L.) Garcke 15,16 Bluebell 48/51 Atlantic

Native. Woodlands, or in shady hedge banks and road-cuttings, particularly on well-drained soils: extremely abundant throughout Kent wherever there is woodland, or remains of it. It is rare in beechwoods on shallow dry chalk soils, in ashwoods on shallow ragstone soils, but frequent on the deeper calcareous soils which prevail in valley bottoms on chalk and ragstone. It becomes scarce, though usually still present, on stiff gleyed clay soils with high water-table and poor drainage. It is most abundant on sands and gravels, except where highly acid and podsolised, and on the clay-with-flints and sandier drifts of the chalk plateau. It is absent from the alluvial sandier drifts of the chalk plateau. It is absent from the alluvial marings of 2), 4) and 15), and from 9): but occurs as far as east as Fenn Street in the Hoo Peninsula and in one oakwood at Brambledown in Sheppey on London Clay. Very common throughout SE England and Pas de Calais: fades out in NE France.


629 The Chelsfield Gravel Formation may be intended here.


var. *lacaillei* Senay.

6) Shoreham, 1926 W.B. Turrill, J. Bot (1930) 68, p112 (fl[ower]s white, perianth long & narrow, new to Britain.)

† *E. hispanicus* (Mill.) Chouard

Alien, naturalised at:

13) Lamberhurst churchyard, 1961, CAS; Tun[bridge} Wells, 1960, CAS; High Brooms, 1960, CAS.

*Muscari* Mill.

† *M. atlanticum* Boiss. & Reut. *M. racemosum* auct.

Alien in Kent, occasionally escaping and becoming naturalised. Native in East Anglia, but not in any adjacent county, nor in Pas de Calais.

4) Grove Ferry, REW.

6) abundantly naturalised on Rly. cutting, Halling, 1943-49 MNE. Stone, well nat[uralised], 1940, PCH.

11) Hadlow, 1871, FWE Shrivell TLS.
16) casual, Brockhill, Saltwood, LJM.

[M. comosum Mill. occurs on the dunes in Pas de Calais.]

Allium L. [631]
† A. ampolus

Alien:
11) Addington, 1947, DMcC.

A. vineale L. 15, 16 Crow Garlic
Native. Fixed dunes, dry grass-heaths, turfed shingle beach, dry banks: locally common to abundant on the coast, rather rare inland. Local in Surrey and Sussex, commone in Essex as a weed of cultivated land. Frequent on dunes in Pas de Calais.
3) Swalecliffe, mouth of brook, RGW. Chestfield, P.R. Bell.
4) Deal links; Sandwich Bay 1945-62 MNE (vars capsuliferum and vineale); St Georges; Princes Links, abundant. W. side Lampen Wall, Stodmarsh, REW. Roadside, Stodmarsh, MEM.
6) Green Street Green 1946; 1963, HAS (vars vineale and compactum). Shorne by Windmill, 1946, MNE. Shorne, R[oa]d verge, S of Kings Fm, 702726, HMP.
16) Folkestone Leas, ‘46.

A. oleraceum L. 15, 16 3/51
Possibly native. Dry hedgebanks and grassland; very rare.
8) Roadside ¾ m N. of Street End, L[owe][r Hardres, 1959, BJ.

A. roseum L.
Alien, naturalised in one place, formerly in another.
4) Beach opposite Walmer Castle, 1950 MEM; 1951, 1953, Miss D.A.C. Long, MNE.

† A. scordoprasum
2) Landward side of ditch behind sea wall, 2m. E of Gravesend.

† A. triquetrum L.
one clump established in wet patch, Bull’s Hollow, Rusthall, 1950, KEB; large patches, 1952, KEB.

† A. paradoxum (Bieb.) G. Don
13) Claremont Rd., Tunbridge Wells, 1962-63, KEB.

630 This line is placed as in the manuscript, possibly qualifying the M. comosum entry rather than continuing that for M. atlanticum.
631 Rose placed Allium under Amaryllidaceae, following the treatment of that family by J. Hutchinson (The Families of Flowering Plants, 1926-34).
† A. moly L.

11) 1 plant in grassland by railway, W. of Tonbridge, CAS.

A. ursinum L. 15, 16 Ramsons

Native. Damp woodlands on base-rich moisture-retentive, but well-aerated loams or peats, under Alder or Ash coppice, and also on deep calcareous loams on the chalk; local and mostly on spring lines on the Eocene areas of 1) and 3), widespread and locally very abundant on the chalk, unknown in 5), very rare in 6) and 7) but plentiful locally in 8) from Wye to Dover and Adisham; abundant on the Ragstone of 10), 11) and 12), and along the river valleys on the Greensand, and on the Gault into 16;very rare on the Weald clay; abundant in gills in 13) and 14) wherever soils are base-rich; absent in the alluvial marshes of 2), 4) and 15). About 120 localities known. Locally common similarly on the Greensand and High Weald areas of Surrey and Sussex; local in Essex, locally common in Pas de Calais, especially in the Boulonnais.

1) NW part of Petts Wood (spring line) 1954, MNE. Kid Brook SW of Petts Wood. Wood by R[ai][wa]y NE of Kevington, St Mary Cray, 1954 MNE. ...Sundridge Park Avenue, Chislehurst, WCRW. 47 Abbey Wood, R. Burton. Darrick Wood 443652 F & C Swain

2) 76 By Medway NW of Eccles, 1944. [Aylesford, 1880, Hb. Lamb MNE.] 76

3) NE corner Thorden Wood, 1947. Damp copse SW of Hernhill Church, 1958 MNE. SW Chestfield, R.E. Wood. SE of Frogs Island Fm/ SW of Share & Coulter Farm, Thornden Wood Rd/ ½ m S of this, E side Rd/ REW. 06, 16

6) 76 Wingate Wood, Cuxton, very local, 1945 MNE. Meopham, Miss Barnsdale.

7) 75 Copse, Hillfield Grange, Detling, ’55.


Ashford Warren. SE of Charing on Gault (many locations). East Well Lake, E end swamp ES. West Well springs. 05 Thicket by Chilham Hill, ’45 DHK, abundant. 03 Park Wood, Smeeth, 54.


16) Asholt Wood. Mill Leese Shaw nr old Sta[tion], Hythe, LJIM. Oak Banks, Stone Fm, satwood, LJIM. Holywell, Folkestone, 1948, B.W.

†A. cepa L.
1) Escape, Ruxley Pits, S&S.

Tristagma Poepp.632
† T. uniflorum (Lindl.) Traub633
   Alien, occasionally escaping and becoming naturalised.
3) Whitstable Castle, REW.
11) Oaken Wood, near North Pole Inn, Teston.

Leucojum L.
† L. vernum L.
13) Groombridge, Mrs. Robinson, 1952, MNE.
16) Naturalised at Brockhill, LJIM.

L. aestivum L.
   Former native, now extinct, of alluvial marshes by the Thames and Medway. It now exists no nearer than the Thames and Loddon Banks in Berkshire.
2) [½ mile below Orchard House Ferry, Greenwich, on Thames bank, 1821, C. Johnson, Hortus Delineatus.]
11) [Nr Tudeley, 1877, F.W.E.S., TLS.]
16) Naturalised at Brockhill, LJIM. Alien, naturalised in ornamental woodland in a few places.
11) Tinley Lodge, Tonbridge, Mrs D. Warnett.
12) Brook, MEM, in ditch by ...

Galanthus L.
† G. nivalis L. Snowdrop
   Alien, naturalised in a few woods and near churchyards. Possibly native by the Mole in Surrey, but not in Kent.
3) Kenesdale, 1959, Mrs. B.; RGW.
5) Chevening Ch[urch] y[ar]d and copse NE of Rectory RAC.
8) N of Westwood Fm, Upper Hardres 608683, E. Robinson.

632 In the manuscript given as Ipheion Raf.
633 In the manuscript given as I. uniflorum (Grah.) Raf.
10) Wilmott Hill, 1943.
Woodlands S. of Court Lodge, Harrietsham, 1961, B. Dodds. Spinney E. of Rectory, Harrietsham, 1961, B. Dodds.
13) Lamberhurst Churchyard, J.R.W.; 1961, CAS, and on Golf Course and by main road, CAS. [Angley Wood, formerly ASK.]
16) Naturalised at Brockhill LJM.

Narcissus L.
N. pseudonarcissus L. 15, 16 Daffodil 12/52
Native. Dry woodlands on sands and loams, rather rare and local, but locally abundant in a number of scattered localities, particularly in the gills of the High Weald. Formerly it appears to have been much commoner, particularly near London in 1). Locally plentiful in several parts of the Weald of Surrey and Sussex, very local and nearly confined to the N. in Essex: very local in Pas de Calais.

1) 47 [Charlton Wood, 1841, J. Forbes Young, BM.] 47 Abbey Wood, PCH.; 1839, Sansom, BM; 1944, abund[ant] and protected, PCH, 1954; G Matthews, 1950 MNE. [Copse, Poverest, Orpington, PHC 47


[H]N. incomparabilis Mill.

[H]N. majalis Curt. (N. poeticus auct.)
12) Wet g[round]d by Wye Sta[tion], KEB.

[H]N. x biflorus Curt.
6E) Shorne Warren, 1947! 1948! MNE.
14) R[ain]d by Tenterden, Dr. Taylor, teste KEB.

Garden Narcissi occur at Ruxley pits as escapes, S&S.

[H]N. major Curt.
Sisyrinchium L.

*S. bermudiana* (*S. angustifolium* Mill.) 16

Alien; garden escape, v. rare.


2) Swanscombe Marshes, one clump, AG Side, 1965.

13) Naturalised at Bayham, 648366, vc14, Sussex, 1957, CAS.

Iris L.

*I. foetidissima* L. 15, 16 33/51

Gladdon, Stinking Iris, Roast-beef Plant

Native. Woodland, mostly of Beech and Ash, scrubland and hedgebanks, mostly on chalk and ragstone; on sea-cliffs in *Ligustrum-Rubia* scrub association; occasionally in woodlands on clay or loam; widespread, but with its greatest abundance on the chalk and ragstone of S.E. Kent in 8) and 16); common westward particularly on the escarpments of these formations in 5), 6) and 7), and in 10) and 11) more locally; on weald clay near the old coastline and on the gault in 12), and rarely in gills on Wadhurst Clay in the SW part of 14); not rare on the Thanet Sand in 1) and 6E). Unknown native in the Marsh districts 2), 4) and 15), on the Western and Central High Weald in 13) and 14), and on the weald clay in 11) and the west part of 12). It shows a somewhat oceanic distribution.

In Surrey almost confined to the chalk; in Sussex common on the chalk and in the Hastings area on Wealden sands and clays near the coast; rare to mostly on the Boulder clay in Essex; unknown in N. France E. of Normandy.

1) 56 Farningham Wood PCH.

2) Tonge church; ’57 J Moor. Not 06 & 16, not 26


9) 36 – planted in Thanet.

10) Rooks Hill, scarp woods.


---

Suomi, mentioned here and elsewhere, was the address of E. Scott, who contributed records.
12) 04 Nackholt Wood, 065425, ES. 03 NW Park Wood Bilsington 042363, ES. 03 Horns Wood W of Bilsington 032342 ES. 03 Copse by B2070 N of Ham St[reeet], 000341, ES. Chilham Castle nr lake. Sellindge Ch[urch] Y[ar]d RAC.

14) 92 On Wadhurst Clay at top, gill W. of Tophill Fm, Wittersham, 1962. 83 Gill NE of Benenden, 1954 (Wadhurst Clay) MNE. 982 Planted in W Oxney.) 93 —. (82 planted), 92, 83 one location


I. pseudacorus L. 15, 16 Yellow Flag, Fleur-de-lis 48/51 Native. Streambanks, ponds, ditches, and swamps; very common throughout Kent, except in the chalk districts where, however, it occurs in a few ponds in 6) and 8); and in the Sheppey Swale area, where it is very rare. Most plentiful in 2), 4), 15), and on the clay areas of 10), 11) and 12). Very common in the adjacent counties and in N France. Unrecorded 96, 97, and 23.

*Roman; seed, Crossness, Spurrell 1889, Reid 1899.


6) 67 Chalk pit, Swanscombe, HAS.

7) Pond, Garden Wood, Acrise, DACL. Pond, Gate Fm. 24, 34

9) Copse, Durlock, Minster, A.G.S.

10) Westerham, E. Armstrong, stream at 440535, DPY. Rivebank, Otford, PCH. Lullingstone, F. Swain. Darenth Meadows PCH. 45, 55, 56, 57


12) Fordwater, Brabourne, RAC. Gibbons Brook. Wood SW of R[ai][wa]y W. of Sellindge, RAC. East Well lake swamp ES. 65, 75, 85, 66, 44, 54, 64, 74, 84


14) Breeches Pond RAC.

15) Shirley Moor, near B.2080, 1945 MNE. 01, 02, 03, 92, 93

16) Stream NE of Ashtold Wood BW. Newington Moor. 13

H. “germanica L.”

Alien. A favourite garden plant which sometimes becomes naturalised when thrown out of gardens.

1) Ruxley pits, S&S.


Crocus L.

H. vernus (L.) Mill. 635

1) Ruxley pits, S&S.

13) Naturalised in Lamberhurst Churchyard, 1961, CAS.

C. nudiflorus [Sm.]

10) SE of Crockham Hill in copse, 1960, RAC.

Crocosmia Planch.

C. x crocosmiiflora [(Lemoine) N.E. Br.]

3) Dargate → Monument, path through trees, Mrs B.

10) Sevenoaks tip CAS.

635 Here named as in Stace, 2nd edition, but given in the manuscript as C. purpureus, without author citation.
11) Edenbridge tip DPY.  
13) Commonly naturalised around Tunbridge Wells, 1960, CAS.

\[Gladiolus L.\]  
\[Alien, scarcely naturalised.\]  
\[G. communis\]  
9) Naturalised in gardens, Margate, Minster, and Monkton, L.W.W.]

DIOSCOREACEAE

**Tamus L.**

<table>
<thead>
<tr>
<th>T. communis L.</th>
<th>15, 16</th>
<th>Black Bryony</th>
<th>48/51</th>
</tr>
</thead>
</table>

Native. Woodlands, scrub, and hedgebanks’ very common throughout Kent except in the Marsh districts 2) and 4), where it is very rare: seemingly absent from Romney Marsh 15), and in Sheppey only at Warden point.

2) Grain, PCH. Warden point.
6E) Darent Wood, PCH. Mounts Road, PCH. Dunstall Woods, Shoreham, PCH. Romney Street, PCH. Preston Hill, PCH. Wingate Wood, Halling PCH.
10) Westerham Wood 82! Horton Kirby PCH.
11) Hedge, Green Lane E of Headcorn 849437.

The Orchids of Kent\[637\]

**ORCHIDACEAE**

After Hants, Kent is the richest British county in Orchidaceae – 35 species have been recorded, of which 30 still occur. It is even more notable for the relative abundance of a number of species which are rare, or very rare, elsewhere, such as Orchis purpurea, Ophrys specogodes, and Aceras anthropophorum.

“Enough orchids grow in Cobham Park to pleasure all the seamen’s wives in Rochester”. Robert Turner, Botanologia, 1664.\[638\]

**Cephalanthera Rich.**

---

\[636\] No location stated, but the grid reference is near New Addington, barely within the vc16 boundary.

\[637\] A list headed The Orchids of Kent was amongst documents typed out when Francis Rose was embarking on his revision of the Flora c.1999. It is unclear whether it was intended for the Flora and what was its relationship with the general check-list of species, whose typing up was incomplete, but its sequence and naming of species has been followed here, rather than as given in the MS. There was also a list of orchid-rich sites with their constituent orchids headed ‘Flora of Kent Orchid-rich downlands’.

\[638\] Actual quotation, as applied to Satyrion, or orchids generally, is ‘... in Cobham Park in Kent it grows so abundantly, that it may serve to please Seamen’s wives in Rochester, for there they may be sure to find it in great plenty...’.
**C. damasonium** (Miller) Druce 15,16 24/52 Common White Helleborine

Native. Beechwoods, on chalk, very constant and often abundant: coppice and scrub on chalk, frequent but not abundant: very rarely in other soils – in one wood on ragstone and two on Gault clay. [Districts] 5-8, 10, 11 and 12.


10) Broadhoath Wood, S. of Stone Street on ragstone escarpment, 1950 MNE.


12) Cadmans Wood, Brook, on gault, 1946, C.N. Pope.

**C. longifolia** (L) Fritsch [15,16] Sword-leaved Helleborine

Beech woods on chalk and in Oakwood on Hythe Beds. Very rare. It has become very rare in Surrey, but still exists in West Sussex very locally, and more plentifully in Hants. Not in Essex. In Pas de Calais (very rare, Hesclin, Le Touquet): less rare in Sonme.

5) above Dunton Green, Mrs Tristram, BEC Rep. 1920; seen by her in 1927, not in 1929.]


7) [Boxley Warren, F. Forsyth c. 1930.]

---

639 This grid reference is neither very legible nor (apparently) accurate.

640 Inaccurate gridreference.

(C. rubra (L.) Rich.)

Of very doubtful occurrence in Kent.

5) High Elms, several plants. A.D. Webster in *British Orchids* 1899.

7) Beechwood ¼ m W. of Wormshill, F. Forsyth etc., c.1930. Not seen since, 1942-62, though many searches of this spot have been made.


I doubt if any of these records were correct, except perhaps the Wormshill one. No specimens are known to exist to settle the matter.]

**Epipactis** Sw.

**E. palustris** (L.) Crantz

Native. Calcareous Dune slacks, fens, and a damp disused chalk pit: very rare, but locally still abundant in 4) and 6). This beautiful delicately-tinted plant with its frilled cravat-like labellum, is now probably extinct in Surrey and Essex, and exists probably in only one Sussex locality (Balcombe): in the Pas de Calais it is however still abundant in the dunce slacks and in certain fens to their near [sic].

[1] old records for the Cray Valley between St Mary Cray and Bexley (Fl. K.).


26, 35, 36, 37


[8] Formerly on the undercliff N of St Margarets Fl. K.


**E. purpurata** Smith

Native. Dark Woodlands and shaded roadside verges and Banks: widespread and locally frequent on clay-with-flints in 5)-8), also scattered in many places in 11) on weald clay and in 13) and 14) on Hastings sands and clays: rare in 1) and 3): unrecorded in 2), 40, 15) and 16). Not uncommon on clay with flints in Surrey and in the Weald of Surrey and Sussex; very rare in Essex: so far unrecorded in Pas de Calais.

1) Roundabout Wood, Crofton Heath, P.C. & J. Hall.

3) 05 Perry Wood, Selling, DHK, 1945. 15 Bigberry Wood, Harbledown, 1954 MNE.


---

641 At this point in the MS there is an abbreviated list of orchid taxa, which looks just to be an aide memoire.
94 Fritten Field, Westwell ES. 200 pl., 1954, D.L. 
76 Chalkpit W. of Borstal, 725665, 1954, D.L. 
8) 04 Wye Down, field border, 083440, 1956, DL. 
Wood nr. St Radigunds Abbey, BJ, KDR. 24 Lit[t]ie London, Lydmen, KDR. 
Larkey Valley Wood, 1951, REV. 
Rdsde, Park Wood E of Six Mile Cotts, BJ: DACL. 
14 Beech Hanger NW of Westwell, ES. 
94 Fritten Field, Westwell ES. 04 Soakham down, ψ HPS (Bilting). 
85 Bicknor Rectory, 1895; Bredhurst, 1898: Rev. G. Waterman MNE. 
Queendown Warren, formerly, F.F. 
Top of Torry Hill, Newnham on c[lay] w[ith] fl[lints], 1955, OD. 
94 Beech Hanger NW of Westwell, ES. 

E. purpurata x E. helleborine = E. x schulzei P. Fourn. 

E. helleborine (L.) Crantz 15, 16 Broad-leaved Helleborine 34/52 
Native. Woodlands and shady road banks, on a variety of well drained soils; frequent: commonest by far on the chalk in 5)-8), but widely distributed over the Weald in 10)-14), and present but rare in 1) and 3): unrecorded in 2), 4) and 15). Frequent in Surrey and Sussex, rarer in Essex, frequent in Pas de Calais. 
1) Wet Wood by R. Cray, N. Cray, PCH. 
3) Oldridge Wood, 1949. Copse, St Stephens Hill, Canterbury, RGW. 
Perry Wood, Selling, 1945, DHK. 
Hospital Wood, Fordwich, REW. 
Dargate, 1955, RGW. 
5) The Larches Wood W. of Farnborough, PCH. 
Darwin’s Bank, Cudham. 
Hazel Wood, Cudham. 
Beech hangers by A.21, Polhill. 
Westerham Hill, 440560. 
12, Lattice Coppice, Knockholt, 473612, 1962, DL. 
Copse S. of Cudham, 40 pl., 445594, 1962, DL. 
Betsoms Hill, 430559. 

Wrotham Water Downs. 
Ryarsh Downs, Hb. Lamb 1881 MNE. 
E. of Pennis Wood, DVS Woods. 
Greenhill Wood, Otford. 
Crookhorn Wood, Snodland. 
Upper Halling Hangers, 1960 MNE. 
Wingate Wood, Haling! 697657, DL. 
Horseholders Wood, 696642, HMP. 
7) Burham Downs. 
Pilgrim House, Bluebell Hill 62. 
Boxley Warren MNE. 
Wigmore. 745607 Kits Coty. 
Rainham Park Wood, 1962, CA Lister. 
Coombe W. of Detling. 
Bredhurst Hurst. 
Purple Hill. 
Queendown Warren. 
Hill Wood, Stockbury, 1958 MNE. 
Hollingbourne Hill, 162. 
Lords Wood: Ridgeway: Monkdown Wood: Monk Wood, BC. 
Wormshill. 
Filmer Wood. 023547 S. of Lees Park, C.T. 
030558 Wood S. of Lees Park, C.T. 
Park Wood, Molash. 
Soakham Downs. 
Godmersham Downs ES. 
94 Hangers NW of Westwell ’62. 
Whitehill, E.S. 
Soakham Downs, by Pathway[?], N. of Bilting, ES, BJH. 

\(^{642}\) Corrected from 127653. This is likely to be a mound in Shoulder of Mutton Shaw. 
\(^{643}\) An entry follows referring to ‘also lane to W...1953, D.L.’, in which several grid references are deleted. One not clearly deleted reads 498605, but this must have been intended to be 605498.


E. leptochila (Godfery) Godfery  15 Narrow-lipped Helleborine

Native. In two woods on the chalk in 8) in hornbeam-ash coppice: extremely rare. The Kent form has a wider epichile to the lip than the Surrey plant. Very rare, in 3 localities on the chalk in Surrey, and in one locality in W. Sussex; unrecorded for Essex and for Pas de Calais, but now known in seine-Maritime (Forêt d’Eu) so it may be found in N. France. 8) 25 Ileden Wood, Kingston F. Hyland: J. Jacob: BJB & FR, 1939! (then described as a species distinct from leptochila): 13 plants, 1946 MNE; 1 pl. 1954, DACL. 8 spikes, 1955, Mrs B. & J. Gurr.

E. phyllanthes G.E. Smith  E. vectensis (Godfery) Brooke & Rose  15, 16 3/52


8) Rubery Down, Womenswold, J. Jacob (as E. leptochila Godfr. in BEC ’33 Rep, 543.): BJB & F.R., 1939! (then described as a species distinct from leptochila): 13 plants, 1946 MNE; 1 pl. 1954, DACL. 8 spikes, 1955, Mrs B. & J. Gurr.

[E. atrorubens (Hoffm.) Schult. This species has been reported for Kent, certainly in error; but it exists on hot S. facing open chalk slopes in Pas de Calais (Hesdin) and, more plentifully, in the Somme Valley. Our northern British plants may be a different ecotype.]

[E. müllerii Godfr. Occurs in Pas de Calais (Desvres) and in Somme (Abbeville) in Woods on chalk, so may be found in Kent sometime.]

Neottia Ludw.

N. nidus-avis (L.) Rich.  15, 16 31/52

644 An entry which apparently post-dates the chart of 10k square records.
Native. A saprophyte of humus in woodlands, mostly beechwoods on chalk: locally common in 5)-8), rather rare off the chalk but widespread, and in all parts of Kent except the marsh districts 2), 4) and 15) and Thanet 9).

Frequent on the North Downs in Surrey, and in the South Downs beech woods in W Sussex and Hants: rarer in E. Sussex, very rare in Essex. Frequent on chalk in N. France.


3) 05 Wood at Upper Ensinge, DHK 1945.


10) Wilderness, Seal, under Castanea, 1956, B. Smith.


14) 93 Cole Wood Woodchurch ES.

16) Sandling Park, 1961, Major Hardy. Thorn Wood (Gault) Postling Wents, L.J.M.

Listera R. Br.

L. ovata (L.) R.Br. 15, 16 44/52

Native. Woodlands of all types on all more or less base-rich soils, from Alder carr to beechwoods on chalk: grassland, scrub, and old orchards: very common except in the Marsh districts of 2) and 15), which are almost devoid of shade: certainly our commonest orchid, frequently common in Surrey and Sussex, more local in Essex (mostly on Boulder Clay in N.W.): common in Pas de Calais.

2) 87 Copse, E of Fenn Street, 1955 MNE. 07 Warden copse.


15) Postling Wents. Coombe Wood, Etchinghill BW.

Spiranthes Rich.
**S. spiralis** (L.) Chevall.  
15, 16  32/52
Native. Dry short grassland, frequent locally on the chalk, rare and scattered elsewhere, but often abundant in its localities. It sometimes appears suddenly in quantity on garden lawns. Frequent in Surrey and Sussex on the downs and in the weald, very rare in Essex, frequent in Pas de Calais.

2) 07 Warden Cliffs.
4) 35 [nr. Sandown Castle, 1833, Miss Harvey, Hb. FJH.] Fixed beach opp. Walmer Castle, 1957, B.N.

10) golf links, Bearested, 1910, J. Ramsay MNE, 1912, H. Elgar. [Staplehurst, WHP senior.]
13) 83 Benenden, Mrs A.G. Side. S. of Mount le Loe[?], 826385, Miss D.E.C. Williams. 83 Lawn, Rolvenden village, 1960, Miss E. Davies. [Swattenden 1893 AW Hudson.] 93 Small quarry NW of Brook Street, Woodchurch, 920343, Skinner; 1955!
14) 01 Dungeness, by Long Ballast Pit. 02 Romney Warren, on Golf Links.
15) Sandling Park, Major Hardy, 1961. 53, 54, 73, 83, 93, 01, 02

**S. aestivalis** (Poir.) Rich. occurred formerly in the Pas de Calais.

647 (Goodyera repens (L.) Br. 
This was discovered in a pine plantation on the le Touquet dunes, Pas de Calais, on a BSBI Expedition in 1959: otherwise it is known no nearer than Norfolk.)

**Liparis** Rich.

**L. loeselii** (L.) Rich. 
Extinct. Formerly in a calcareous fen: extremely rare. In Britain the type is only found now in Norfolk and Suffolk, where it is rare and local, the var. *ovata* occurs plentifully locally in the dune slacks of S Wales. Still in 3 localities in Pas de Calais, abundant in 2 of them (Dune slacks at Beach Fen E. of Cucq), rare in one (Ambleteuse dune slack).

4) Boggy ground about Ham Ponds, O.B.G. 1802. (In Fl. K. It is reported that Duthie saw a specimen in Herb. Univ. Edinburgh labelled "Kent"). Ham Fen was formerly a very wet calcareous mossy fen, and ponds remained in this state as late as 1947; but a general improvement of drainage of the area by lowering the level of the

---

646 The manuscript is difficult to interpret at this point, and the entry may be tied in with one referring to meadow on Wad[hurst] Clay, Schoolham, Miss A. Graseman 1947.

647 This entry was placed after *Neottia nidus-avis* in the manuscript.
North Stream has rendered it very unlikely that *Liparis* will reappear now in the area, although much of the fen has never been disturbed by cultivation of any kind.

**Hammarbya** Kuntze

[H. paludosa (L.) Kuntze] [16]

Long extinct in Kent: formerly in acid bogs, extremely rare.

13) Nr. Rifle Butts, Frizley Bog, 2m. N. of Cranbrook, E.W. Bowell, per A.W. Hudson; Fl. K. Frizley Bog still exists in part, but probably owing to the enclosure and cultivation of the former acid heathland of Cranbrook Common, it is now poor fen with rank vegetation and quite unsuitable for *Hammarbya*. An Ancient record also exists for Tunbridge Wells (*Ray Syn ed.3*, p385 and *“Tun Wells Kent”*, E. Jenner, Hb. FJH). It may have been widespread in the Weald and on the bogs of the Folkestone Sand in ancient times, but we have no direct evidence. It existed in a valley bog in Ashdown Forest, E. Sussex until at least 1952, and my still reappear there. Apparently extinct in Essex: unrecorded from Essex and N. France: but still locally abundant in the New Forest.]

**Herminium** R. Br.

H. monorchis (L.) R.Br. 15, 16 9/52 Musk Orchid

Native. Chalk grassland in short turf: well distributed and locally abundant, but not common, except very locally. 23 localities. In several places on chalk in Surrey, and frequent along the Sussex Downs: unknown in Essex: very locally frequent in Pas de Calais.

5) 439613 Down N. of Darwin’s Bank, Downe, 1945-50: to 1955, JEL. Not seen since, but it may reappear now that the turf is kept raked. 505603 Downs above Tunnel mouth and to SW, Polhill, 1946-62 MNE. 488587 Chevening Park, NW Coombe, 1951-55 MNE, FR, DL. 411603 Down SW of Saltbox, Biggin Hill, R.A. Clarke. 45, 46, 56


7) [Bluebell Hill, H. Lamb, 1899 MNE: not recently observed.] W side A.229, abund[ant], till 1991 when destroyed in roadworks. Down above Allington E.P. 85


**Platanthera** Rich.

P. chlorantha (Custer) Reichb. 15,16 36/52 Greater Butterfly Orchid

---

648 This entry was placed before *Liparis* in the manuscript.
Native. Woodlands and scrub on chalk and on base-rich clays and loams: widespread and fairly frequent, and locally in abundance. Unrecorded in the marsh districts 2), 4) and 15), and rare in 1), 13), and 14).

Fairly frequent in Surrey and Sussex and locally so in Essex: common in Pas de Calais, where it often occurs in open chalk grassland.


3) 16 Calcott Hill Wood, 1955, Jane Hyde. Old Gravel pit S of Herne c.179654, 1951, REW (& SP) 06, 16


P. bifolia (L.) Rich. 15, 16 15/52 Lesser Butterfly Orchid
Native. Woodlands, mostly coppice, but also of beech, on chalk or on overlying loam, also on the Gault. Very rare in W. Kent in two localities in 6): fairly frequent in E. Kent in 7) and 8). Very rare in 11) on Gault. Formerly in the acid bog at Keston, as the ovate-leaved form. Our normal Kent plant has elliptical-lanceolate leaves. Now very rare in Surrey, occasional in Sussex, extinct in Essex, rare in Pas de Calais.

1) [Keston Bog, to c.1930, C. West.]
11) 75 Horish Wood – on Gault, 1943 MNE.


A. pyramidalis (L.) Rich. 15, 16 Pyramidal Orchid. 25/52

Native. Chalk grassland and scrub, extremely common and locally abundant in 5)-8); also locally plentiful on fixed dunes in 4), and rarely in 15: occasional in old ragstone pits in 10, 11, and 12): as a rare casual in 13), and in 1). Common on the chalk in Surrey and Sussex, rare in Essex: it is, strangely, extremely rare in Pas de Calais (one locality on dunes) and in Somme (a few localities on chalk). In France, it only becomes common much further south.

1) Ruxley pits, S.&S.
4) St. Georges Links, Sandwich Bay, 361576-362581, on fixed dune grassland (pH 7.0), 1905 Elgar: 1945-62, abundant! MNE. Ebbsfleet.

649 This entry is placed last amongst the orchids in the manuscript.
650 The gridreference given is east of the pit, not west.


10) 45 Dry Hill Ragstone Pit Chevening 496549 DL.

11) 65 Grassy Bank in garden, S. side A.20, Ditton, 1946-48 (Folkstone) sand. 65 Ragstone pits Borough Green (S. of), Miss Nisbet. 65 Ragstone pits w of Offham, 1954.

12) 04 Mersham Ragstone Quarry, by A.20, 1946.

13) 53, 1 plant among Aegopodium, Broadwater Lane, T[unbridge] Wells, 1957, KEB. 53

15) 02 fixed dunes, Greatstone, 1947. 02

(Pseudorchis albida A.Löve & D.Löve) [15] Possibly native, but if so long extinct.

8) Lyminge; gone by 1873, Wollaston: Fl.K. This could have been an error for Herminium, though Wollaston was a good botanist. It was known in Ashdown Forest and neighbouring localities in both E. and W. Sussex until at least 1935, but has not been seen since World War II. The nearest modern localities are in Wales, the Pennines, and central France.

Gymnadenia Hartm.

G. conopsea (L.) R.Br. 15, 16

Native. Old chalk grasslands, very common and fairly constant, and sometimes in very great abundance. Not recorded off the chalk in Kent. Not now in Dartford-Gravesend area, nor in Thanet. Common on the chalk in Surrey and Sussex: in Essex now extremely rare (Thurrock). V. common in Pas de Calais. Mr. M. Chalmers-Hunt reports Plusia gamma (Silver y moth) and Ochlodes venata (Large Skipper) visiting the flowers of this species at

---

This entry is placed before Platanthera in the manuscript and is there treated as Leuchorchis albida (L.) E. May ex Schur.

This entry follows Coeloglossum in the manuscript and is there treated as G. conopsea subsp. conopsea.
Downe in 1958, but it is not known if pollination was effected.


653 G. densiflora (Wahlenb.) Camus, Bergon & A. Camus
Fens and calcareous marshes: very rare and probably now extinct.
It occurs in a chalk pit at Offham E.Sussex (C.A. Lister), and in a calcareous bog at Balcombe, E. Sussex, and on chalk grassland (N aspect) at Heyshott, W Sussex (1976), Ditchling Beacon; and formerly occurred in fen at Westbourne, W. Sussex; not recorded for Surrey nor Essex, but in fens in Hants.. On chalk in Pas de Calais, and in fen in Somme.

1) [North Cray Brooks, Hb: Sim: Fl.K.] [Keston Common A.G. Davis MNE 1916]
4) [Little Britton, Wingham, FGEK.] Ham Fens, c.1920, G.L. Davidson, the exact site is now completely altered.
N end wds, SE of Ham Road (61/3)
6) Bogs...between Northfleet & Thames, Merrett, 1666.

654 Coeloglossum Hartm.
**C. viride** (L.) Hartm.  
Native. Chalk grassland: formerly in at least 12 localities, now confined to Crabble near Dover, where however it is abundant. Extremely rare and erratic in its appearance in Surrey (3 localities known in the last 20 years): rather common on the Sussex Downs: apparently extinct in Essex: very rare now in Pas de Calais, but still in Nord (Ardenois).

6) [Downs NW of Crookhorn Wood, 1926, F. Forsyth; not observed recently.]
[Downs NW of Birling, M. Atkins, c.1932; not observed recently.]
Formerly nr. Canterbury (Oxenden 1873)] Ospringe (Blackstone, Pl. Fav.) Folkestone Warren, Ulyett: Sellinge: Horton FGEK: Stowting FGEK: Brook, ESM: Wye, W.R. Jeffrey its disappearance may be due to ploughing and the spread of *Brachypodium pinnatum*.

**Dactylorhiza** (Klinge) Vermeul.

**D. fuchsii** (Druce) Soó 655 subsp. *fuchsii* 15, 16 Common Spotted Orchid 47/52
Native. Woodlands, scrub and grassland on base rich soils, particularly on chalk, clay and ragstone; disused claypits, chalk and ragstone quarries; marshes, fens, meadows, and dune slacks: very common and often abundant. Common in the adjacent counties and in N. France.

1) Holwood Park, 1954 MNE. Ruxley gravel pits, F. Holroyd: SBS. 56 Farningham Road, PCH.
2) 97 Landslips on cliffs East End, E. of Minster in Sheppey, 970734, 990732, 1954 MNE. 87 Copse E of Fenn St., St Mary Hoo, 1955. 07 Warden Point cliffs, Sheppey, 020726, 1955 MNE. 87, 97, 07


655 Authority cited as in check-list; Flora manuscript gives (Druce) Vermeul.

Folkestone Warren, chalk. 301426 Crabble Down, Dover, 1949 MNE. 14, 24, 34, 15


D. fuchsii x incarnata
4) Plucks Gutter

D. fuchsii x praetemissa

Common where the parents occur together, forming hybrid swarms, in fen-meadows and damp disused chalkpits.

3) 15 N. side Canterbury Golf Course, RGN.
4) 35 Ham Fen, JEL, 1925: 1949-60! 35 Sandwich Bay, Mrs Dodds, 1959 MNE. 25 fen SE of Wingham.

76 CR pit, Woodlands Lane Gillingham, 1955, OD.
10) 55 Meadow W. of Otford Rd, Sevenoaks, 1950 MNE.

D. maculata (L.) Soó
15, 16 Heath Spotted Orchid 17/51

Native. Wet-heaths, valley-bogs, and moist heathy rides in woods on acid soils: only locally frequent. Frequent in 12) and 13), rare to very rare in 1), 3); 10) and 11): unrecorded elsewhere. Widespread locally common on the heathlands of Surrey and Sussex, rare in Essex and in Pas de Calais, where heaths are scarce.

1) 46 Keston Bog, 417642; 1917 AGD MNE; plentif ul, 1944, 1945. 1958, HMP.
3) 15 Heathy area, Church Wood, Harbledown, RGW. 16 Heathy ride, Minching Wood, Blean N.R., 1957. 06 Old Sandpit, Forstal, / Hernhill, H.M. Wilks. 05 Small colony nr. stream, Rhode Common, 1962, Mrs Brickenden & J. Gur. 15 abundant in acid marsh E. of Canterbury, Scotland Hills, 166587, 1963, R. Gorer. 05, 15, 06, 16
4) Hacklinge, 1952, JB.
8) Westwood, B. Nash.
13) 54 a[bundant], Valley bog, Moorden, N. of Penshurst, 1943-1948 MNE. 53 Hawkenbury Bog, JRW: 1944.

657 Hawkenbury Bog was not in vc16 West Kent.
D. *maculata* subsp. *ericetorum* x *praetermissa* (Orchis *hallii* Druce)

12) Hothfield Heath, in northern valley bog, 1942, MNE.

D. *incarnata* (L.) Soó

Native. Fens and calcareous fen-meadows: rare and local. It appears to be now confined to 2), 4), 11) and 12), and to have become extinct through ploughing in 10). The Kent colonies are all of plants with flesh-coloured flowers except some of those at Chilham which have purple flowers. It occurs rarely in Surrey, mainly as the subsp. *pulchella* in mildly acid flush bogs; and rarely too in Sussex and Essex as the type. It is frequent in the coastal duneslacks and fens of the Pas de Calais in several colour forms.

2) Holborough Marshes, 1980→

4) 26 Plucks Gutter, BJB, etc.; 1951-62, several observers! MNE. 35 Hacklinge Fen, BJB etc.; 1945-54! MNE. 35 Ham Ponds, 1925 J.E.L. N. end of Ham Fen, 1957, KDR. Preston Marshes, Mrs. B. Dodds. 35, 26

10) [Water meadow N. of Shoreham, G.M.B., 1954! MNE since ploughed up.]


D. *praetermissa* (Druce) Soó

Native. Fens, fresh-water-mashes, duneslacks, alluvial meadows, and disused chalk pits: widespread in the N. and NE parts of Kent; far commoner than *D. incarnata* and less restricted in habitats, but unrecorded from most of the Weald Clay and the whole of 13), 14) and 15); not noted either for 1). Scattered in 11) and 12) but hardly common in Surrey and Sussex: Rare in Essex: common in Pas de Calais near the coast in dune slacks and fens, and rare also in chalk grassland inland.

2) 65 Marshes N of Lunsford. 76 Burham, 1911, K. Peters, MNE. 97 Landslips on clay cliffs, E. end, Minster in Sheppey, 1954. 65 S. Snodland Marshes. 76, 97


6) 57 Chalk pit N. of Craylands Lane, Swanscombe, 1946-50 MNE, 596750. 77 Wet Chalk pit SW of Cliffe, 1963, HAS & A. Ruck. 66 Great pit, Holborough, a few pl[ants], G.L. Davidson 1961.

---

658 Name as in check-list, in manuscript given as *D. incarnata* (L.) Vermeul.

659 Brackets of original drafting indicate that species was gone from West Kent; but the addition of Holborough Marshes from 1980 is not reflected in this.

660 Name as in check-list, in manuscript given as *D. praetermissa* (Druce) Vermeul.
7) 86 Chalk pit, Berengrave Lane, Rainham, Jolly, '76. Ch[alk] pit, Woodlands Lane, Gillingham, 1955, OD. 96 Highead pits, Tunsall, 1958, DMcC. 76 Chalk pits, Eccles, E end, 1953, REW.

8) 35 chalk pit N. of Hacklinge, 1960-67 MNE.

9) 55 Waste g[round] by garage, Dunton Green, 514566, '54, DL. 57 Meadows at Darenth, St J.M. 56 Meadow N. of Shoreham, 1954, MNE. 55 Meadow W. of Otford Road, Sevenoaks, N of Bat & Ball, 1950, MNE. 55 Marsh W. of Sevenoaks Station, 1949, F.S.E.F. 45 Marsh at Brasted nr Church, G.M.B.; RAC. 45, 55, 56

10) 35 chalk pit N. of Hacklinge, 1960-67 MNE.

11) 55 Waste g[round] by garage, Dunton Green, 514566, '54, DL. 57 Meadows at Darenth, St J.M. 56 Meadow N. of Shoreham, 1954, MNE. 55 Meadow W. of Otford Road, Sevenoaks, N of Bat & Ball, 1950, MNE. 55 Marsh W. of Sevenoaks Station, 1949, F.S.E.F. 45 Marsh at Brasted nr Church, G.M.B.; RAC. 45, 55, 56


13) 23 Darnley Vale, Cheriton, 1955 MNE.

D. praetermissa ssp. jungalow

This distinct looking plant, as I understand it, is not the hybrid D. praetermissa x fuchsii, but a ring-spotted-leaved variety of praetermissa.


It occurs in Pas de Calais.

(D. purpurella (T. & T.A. Stephenson) Vermeul. occurs in Hants. as a remote outlier from its northern area of distribution, so could occur in Kent.)

(D. traunsteineri (Sauter) Vermeul. occurs in Suffolk and Berkshire, but this "Continental" marsh orchid occurs in no adjacent county nor in Pas de Calais.)

Dactylorchis x Gymnadenia

D. fuchsii x G. conopsea (Orchigymnadenia heinzeliana (Reichardt) Camus)

5 or 6) nr. Sevenoaks, H. Pierson, 1898: J. Bot. (1898) p.288; J. Bot. (1907) p.278.

8) Pett Street Down, 1946 MNE.

Orchis L.

O. mascula (L.) L. 563 15, 16 Early purple Orchid 44/52

Native. Woodlands, scrub, and occasionally grassland on more base-rich loams, clays and sands; very common and frequently abundant locally in all wooded areas of Kent: unrecorded recently for te Marsh districts 4) and 15), for Thanet 9) and very rare (on the Tertiaries only) in 2): now very rare in 1) due to suburban developments. Common in all adjacent counties and in N. France. After Listera ovate, this is our commonest orchid, occurring in hundreds of localities and it is still a normal feature of our acid woodlands everywhere, but its tom-cat-like odour at night should discourage pickers.


2) 56 Farningham Wood, 1949: PCH. Joydens Wood Miss M Wythes, ’57. 86 Hawes Wood, Newington, 1954. 87 Copse N.E. of Fenn Street, St Mary Hoo; 1955 MNE. 07 Warden, Sheppey, 1918, AG Davis MNE: 1956!

87, 07

661 Name as in check-list, in manuscript given as O. pardalina "Pugsl." and var. Junialis Verm.

662 Sic, although Dactylorchis has been changed to Dactylorhiza elsewhere.

663 In the manuscript, O. mascula follows O. mario, preceded by O. ustulata, before which is O. simia.

4) (not 26, 36)


11) 12) Copse on Gault S. of E. Lenham. Cadmans Wood, Brook, 082429, DL. 03, 94, 04


O. morio (L.) 15, 16 Green-winged Orchid 33/52

Native. Grasslands on clay, loam and chalk: formerly common, and abundant in many old permanent pastures throughout Kent; now far rarer, due to the conversion of such pastures to leys or arable, and becoming more confined to the chalk, where it is less vigorous in growth, though still widespread and found in all districts except 9) and 16), and locally abundant on London Clay in Sheppey 2) and 3). In Surrey, Sussex, Essex, and N. France, but becoming rarer as in Kent through the same factors.


2) 07 W of Warden Point, AG Davis; Mrs. B. Welch, 1947; 1955 MNE. 07 S. of Warden Point, 1918 MNE, 1959. 97 Brambledown, W. of Eastchurch! [locally] a[bundant] in scrub, 1955, OD. 97, 07


4) 35 Damp pasture behind dunes, St Georges Links, Sandwich (behind Princes clubhouse, LWW), 1998. Preston Marshes, Mrs B. Dodds.  NE of Stodmarsh, REW.  S. of Shellness Church REW.

5) 46 Down S of Saltbox, 409604, 1 pl[ant], 1961, D.L.  1 pl[ant] SW of Biggin Hill, 1948, B.W.


(O. palustris Jacq.  This species, closely allied to O. laxiflora Lam., occurs in the fens near the coast in Pas de Calais (Merlimont, Cucq!) but is unknown in the British Isles.)

O. ustulata L.  15, [16].  Dwarf Orchid 6/52

Native.  In short grassland on chalk: rare, and now only in 7) and 8), though in some local abundance in some localities in 8) in some seasons: only recorded in seven localities since 1947, and apparently long extinct in V.C. 16.  This charming species appears to have diminished everywhere in England this century due to ploughing up, and lack of grazing, of chalk grasslands.  It has not been seen in Surrey very recently though probably still exists there: it is still abundant in a few Sussex localities; extinct in Essex; and confined to one locality (Blanc Nez) in Pas de Calais.  This species requires about 14 years for development of a flower spike from a seed, and each plant apparently flowers once only, so it should not be picked.


7) 86 Queen Down Warren 829629/ 1880, Fawcett Osborne MNE: 1905, MNE.  1923 MNE.

1939, c.24 infl.  1949  1956
1942 nil  3 - 1950  1957
O. purpurea

Native. Scrubland, woodland (both beech forest and coppice), and, more rarely, grassland on chalk: widespread in 5) - 8) from near Knockholt in the west to Betteshanger, Waldershare and Dover in the east, and locally frequent and locally abundant in the east part of 6), the west half of 7), and throughout much of 8). Also in one wood on the Gault in 12).

This magnificent orchid still occurs in some 130 localities in Kent, and in abundance in about 25 of them, with from 100-400 spikes flowering in “good” seasons. It is however now very rare from Meopham westwards, and absent from much of 7) between Frinsted and Milstead on the west and Challock on the east. It is almost confined in Britain to Kent today: it exists in Surrey as a single locality and in Sussex and Oxford only as single plants within the last 25 years. In Essex it is long extinct: in Pas de Calais and N. France generally, however, it is common and locally abundant on the chalk at Betteshanger, Waldershare and Dover. It is however now very rare from Kent today: it exists in Surrey as a single locality and in Sussex and Oxford only as single plants within the last 25 years. In Essex it is long extinct: in Pas de Calais and N. France generally, however, it is common and locally abundant on the chalk at Betteshanger, Waldershare and Dover.

The wasp Ancistrocerus parietum (L.) is a known pollinator.
O. purpurea × Aceras anthropophorum = X. melsheimi Rouy

[No account is given in the manuscript, but the discovery of this hybrid in private woodland in vc15 was written up by Francis Rose as: A new orchid hybrid for Britain – X Orchia ceras melsheimeri (Aceras anthropophora × Orchis purpurea), BSBI News (1998) 79: 19-20.]

(O. militaris L.)
This species has been reported from Kent on a number of occasions, but there is no convincing evidence that it has ever really been found: all the specimens appear to be of *O. purpurea*. Apparently correctly recorded, though long extinct, in Surrey; only known today in Britain in Bucks, Oxford (2 localities), and Suffolk (one locality); apparently extinct in Pas de Calais, but locally abundant in Somme in several places.

“nr. Deal, 1908” GW Harris. “Near Deal, Kent”, 1910, Hb. Druce, det. G.C. Druce, RAG & VS examined these two specimens in 1958 and concluded that they were abnormal forms of *O. purpurea*. “Kent”, Hb. Merrell ex Hb. Backhouse junior K. “Kent”, 1846 K.

[Cobham, 1836, Joseph Woods, Herb. Bolton Museum (determined by FR; has oval-lanceolate sepals 19mm long, labellum c.8mm long, narrow side lobes).]

**O. simia** Lam. 15, 16 Monkey Orchid 1/52: [2/52]

Native. Continental – southern. Chalk grassland and chalk coppice: extremely rare: at present confined to two localities, one in East Kent, where 33 spikes appeared in 1963 and c.240 in 1965; and one in W. Kent, where the solitary plant was moved from Otford to a safer place nearby in 1956, but has not been observed since 1957. There are several old records from the districts 6), 7) and 8). Otherwise confined now in Britain to one locality in Oxfordshire and one in E Yorkshire (Spurn). Recorded in Pas de Calais a a single plant on the dunes at Dannés, 195[ ] but very rare in Northern France, commoner in central and southern France.

*1777, E. Jacob.*

6) Otford, Rev. E. Elder, 1952; V.S. 1952; 1954 1 spike; 1955 1 spike; 1956 1 spike MNE 6st. Moved, Nov. 1956, to Dunstall Woods, where there developed 1 fine spike, 1957, not since to 1963.

“‘macra’ type with broad labellum resembling Otford plant”. V.S. 666


[“Downs nr Winchcombe, Crundale, 1920, R.J. Deacock, “Kentish Express”, 1.1.1921.”]

**O. simia x Aceras anthropophorum = X O. bergonii** (Nanteuil)

Aceras R. Br.

**A. anthropophorum** (L.) W.T. Alton667

Native. Chalk grassland, wood borders, banks, scrub and coppices on the chalk, widespread on the North Downs, and quite common from the Surrey border to a line from Wingham to Denton, Elmsted and Wye, rare east of this; very common locally most abundant from the Darent valley to the Wye downs towards the coast: also on calcareous fixed dunes at Sandwich, in a disused ragstone pit at Sundridge, and in a railway cutting on Gault at Leeds: 5)-8), 4), 10) and 11). Over 100 localities [142 localities] exist on the Kent chalk. The headquarters in Britain are the North Downs of Kent and Surrey, though in W. Surrey it becomes rarer. Very rare in Sussex on the South

---

665 Thus the original manuscript. But Francis Rose became subsequently persuaded that there was good evidence for the occurrence of *O. militaris*. By 1998 he had authenticated an 1836 specimen as indicated by the note which he added at the end of this species account.

666 This seems to be a quotation set down here without working into a context within the Flora. Var. ‘macra’ is a term which has been used for Oxfordshire *O. simia* specimens in distinguishing them from Continental plants (*macra* being Lindley’s specific name for the British plant).

667 Cited as (L.) Ait. f. in manuscript.
Downs, where only 4 or 5 localities are now known: in Essex, only in one chalkpit near the Thames at Thurrock [1997, only 2]; in Pas de Calais very rare, and known only on dunes at Le Touquet and Étaples and on chalk at Wavrains. Hence its abundance with us is not a direct continuation of any similar abundance in N. France.

2) Tower Hill Upnor, on chalk outcrop, D.Mcc et al., **MNE** 1959.


10) 45 Old Ragstone quarry, Dry Hill, Chevening, FSEF: 1961! **MNE**.

Himantoglossum Spreng.

668H. hircinum (L.) Sprengel

Native. Chalk grassland and calcareous fixed dunes: very rare, and usually occurring as sporadic single plants, but long established in quantity in 4). Very rare and sporadic only in Surrey, Sussex, and Essex: rare but persistent in several places on chalk downs in Pas de Calais.

4) Fixed dune grassland, St. Georges Links, Sandwich Bay, 360578 etc. 1924, C.G. Field-Marsham in Hb. FJH. 1944 reported; 1949, Mrs. Moore-Brabazon; 1949 DACL: 1949-62! MNE BM; 70 pl. ‘49, >200, ‘50; >400, ‘51 (372 FR); ‘52; 12, ‘53; 10, ‘54; 25, ‘55; 3 infl[orescences], ‘56; 3 only, ‘57; 50 to 60, ‘58; ‘59; ‘60; ‘61; 42, ‘62; - ‘63; ‘64; ‘65. Beach opposite Walmer Castle, Miss Long. By ... S. of Guilford Hotel, 1958, Mrs. K.D.R.

6) [Dartford, 1921, AC Tagg.] 1 pl. nr. water tower, above Trosley 635612, D.V. Woods, c.1950. ...field (Longfield?) Hb. Druce. Foxendown, Meopham, formerly, Baker.

[Inserted in the MS Flora at this point is a sheet headed ‘Himantoglossum in Kent – all records traced to 1933: compiled by P.M. Hall & W.H. Pearsall sen. on behalf of the B.E.C.” This had been copied out (not quite verbatim) by Francis Rose from a typescript in his Flora of Kent related papers, to which he had added the number of the botanical district into which the relevant record fell, as well as some further records.]

9) Manston Wood Thanet before 1776 (Fl.K.).
7) bet. Chatham & Maidstone before 1820 (Fl.K.).
9) nr Margate before 1839 (Fl.K.).
8) Broome Park, Barham, 1859, Oxenden (Hb. E. Kent NHS (where is this?)
7) nr Maidstone 1875, Tempere (Hb. K).
8) Sibertswold, 1885, J. Jacob, Fl.K.: 1908, JB.
8) Adisham Rly bank 1908-1933. Discovered by A. Fox (ganger of platelayers) in 1908: in 1917 Fox cut a fruiting spike and scattered the seeds; in 1921, 27 plants appeared. J. Jacob saw it annually from 1908 to 1933; numbers varied from 2 to 27.
7) Boxley, 1909, Groom.
8) Lyminge, 1910, 1924, 1925, C. Clark.
8) Bifrons Park, Bridge, 1911, teste W.H.P.
11) nr. Great Chart, 1912, White (Hb. Mus. Brit.).
8) nr Folkestone, 1915; 1923; 1924; C’ Clark & Andrews: 1930, Walker, in BEC (1930).
8) Waldershare, 1921, Scutt.
8) Dover 1924, 1927, 1930, teste W.H.P.
8) Betteshanger, 1924, James.
7) Harrietsham, 1924, SE Gazette, 15.7.24.
8) Petham, 1925, 3 pl, teste J. Jacob.
..) Otterden, nr Faversham, 1925, Maryon & Page, BM.
7) Eastling, 1926, Kentish Express
8) Brabourne, 1926, Bentley.
8) Bishopsbourne (Charlton Park) 1926, 32, 33, J. Jacob.
15) Brenzett Sims 1926.
8) St Margarets at Cliffe, 1928, 1933, J. Jacob.
8) Alkham 1933, J. Jacob.
8) Postling, c.1938 or 9, J. Jacob.
8) Crundale, c.1938, reported to FR (“many plants”(?)).

In the manuscript, this follows Ophrys.
Mistranscribed as 1959.
The source gives 1928.
4) St George’s Links, Sandwich: Hb FJH; 1949 Miss Long (1949!); 1950; 1951 (572 seen by FR, 425 D. Harle); 1952; 1953; 1954; 1955; 1956; 1957; 1958; 1959; c.1000 each year to 1998.
6) Gravesend (1760-1830) Hb. BM.
6) Greenhithe 1878-9 Fl.K., 1878 Glenny (Hb. ...Wales).
6) Dartford, v many records.
6) Eynsford 1921 Hodgson (Photo, CGE).
6) Sevenoaks 1933, Knight, “The Times”.
6) Dartford Wood Hb Turner 1775-1858 K.
1) Crayford →Dartford, Johnson 1641, Fl.K.
1) Puddledock K, 6) Lobfield = Longfield? (Hb. Druce).
1) Sutton at Hone, c.1800, Pocock.
6) Dartford, Hb. Banks, 1847-9, BM.
6) Dartford Wood Hb Turner 1775-1858 K.
1) W[ilmington] Hackstable 1842 CGE.
6) Darenth 1831 Peete CGE.
6) Green St Green (Trulling Down) 1840 Peete (Fl.K.); 1840, Salmon, CGE.
6) Dartford 1841 Ansell (Hb. Druce); 1847, Potter BM; 1847-9, Woods in Hb. Borrer.
1) Bexley 1851, Wollaston CGE. Darenth Wood, 1843, Wollaston DVR.
5) Shoreham →Farningham before 1846 (Fl.K.)
5) Knockholt, before 1845 BM.
5) Chevening K after 1845.
6) Ash 1850 Potter BM.


11) nr. Leeds Castle, L. Smith 1914 MNE.
12) nr. Ashford, 1922, M Corden, MNE. Gt Chart, 1912, AE White.
15) Roadside, Brookland to Brenzett, J. Ridley, 1909 MNE.

O. insectifera L. 15, 16 21/52

Native. Woodlands, scrub and grassland on chalk, widely distributed and common, often in abundance, in 5)-8); woodlands on ragstone and gault, very rare, in 11) and 21). Much less common, though locally frequent, on the chalk of Surrey and Sussex; apparently extinct in Essex; common on chalk in Pas de Calais.


672 In the manuscript, the sequence is O. apifera, O. fuciflora, O. sphegodes, O. insectifera.

671 Mistranscribed as 1454.
O. insectifera x sphegodes = O. x hybrida Pokorny

Sepals of sphegodes: petals like insectifera: lip brown, almost as narrow as insectifera.


O. sphegodes Miller 15, [16] 7/52 Early Spider Orchid

Native. Chalk grassland; rare, but locally very abundant in 7) at Queendown Warren; and in 8) near Wye, and in many places near the coast between Etchinghill and Deal. Apparently extinct in W. Kent. Extinct as a native in Surrey; still locally abundant in a few localities in E. Sussex, and rare in one locality in W. Sussex: extinct in

A monstrosity has been reported nr. Canterbury with extra anthers: E. Ogden, BEC Rep. 1920, p.49.
Essex: extremely rare in Pas de Calais (Boffles!). The Queendown Warren plants flower always three weeks earlier than those of eastern Kent.


4) Sandwich, St Georges Golf Links, 1880; 1882, Fawcett Osborne MNE; 1877, H.L. MNE; 1903, JB Green, MNE; 1905, Mrs Sil.... MNE; 1920, H. Elgar MNE; 1939 a[bundant]; 1942 v[ery] a[bundant]; 1944 r[are]; 1945 a[bundant]; 1996, KWT. Kingsdown Beach. P. Gay, 1998.


O. apifera Hudson 15, 16 25/52 Bee Orchid

Native. Chalk grassland and chalk pits, very widespread and general, but only locally in abundance:


2) Stone marshes, on chalk rubble GMB.


4) 35 Beach opp. Walmer Castle, 1950, M.E.M.; 1957 BN.

Badgers Mount 504623, DL. W side Timberden Bottom in copse, 507619 DL & 504623.


9) Behind Broadstairs, L.W.W.

10) Ragstone pit, Dry Hill, Chevening 596459, F.S.E. Fawkes 1953 MNE. Igham Mote, Miss V.E. Buxton.


12) Hothfield Heath, one plant on clay patch, 1944 MNE. Mersham, in Ragstone Quarry, 1907, Miss D. Hancock MNE: 1946, C.N. Pope.


O. apifera x fuciflora = O. x albertiana Camus


O. apifera x sphegodes = O. x pseudapifera Caldesi

8) a plant which may be this at Brook Hilllock 1942-58. Folkestone Downs. Cheriton Downs.

(O. trollii does not occur in Kent.)

O. fuciflora (Crantz) Moench 15 4/52 Late Spider Orchid

Native. Chalk grassland: rare, and now confined to about 16 localities in 8) between Wye and Folkestone: formerly in 7). This species occurs nowhere else in the British Isles. It appears to have become extinct in Pas de Calais (at Blanc Nez till 1939), but it is still plentiful in the Somme above Amiens.

(6) Trosley 666618 Mrs. DVS Woods, 1 pl.) [Ospringe, extinct]

is an error.


O. fuciflora x sphegodes = O. obscura G. Beck

[Given in Francis Rose’s The Orchids of Kent List, but no account in manuscript.]

O. scolopax Cav.

[Given in Francis Rose’s The Orchids of Kent List, but no account in manuscript.]

Serapis cordigera L.

[Given in Francis Rose’s The Orchids of Kent List, but no account in manuscript.]
List of abbreviations in Francis Rose’s manuscript Flora of Kent.

Recorders’ names are generally given as initials, and abbreviations are also used for the standard county flora and some other things. No list was given in the manuscript by which these references may be interpreted, so the following list has been pieced together by surmise and with reference to Francis Rose’s correspondence, to labels on herbarium specimens, to the list given in Rose (1960) and those occasional cases in the manuscript where a name has been expanded.

- AA Anna Atkins
- AB
- ABS
- SBJ A.B. Jackson
- AGS Trudy Side
- AHB
- AHE
- AHWD A.H. Wolley Dod
- APB A.P. Brown
- ASK
- ATT
- BB Bab. Man. C.C. Babington, Manual of British Plants
- BC
- BD Mrs Barbara Dodds
- BENA British Empire Naturalists’ Association
- BJB B. Jocelyn Brooke
- BM Natural History Museum Herbarium
- BN Miss B. Nash
- BRIST University of Bristol (Herbarium)
- BTL
- BW B. Welch
- CAL C.A. Lister
- CAS Clive Stace
- CAW
- CC
- CCT Clifford Charles Townsend
- CEB Charles Edward Britton
- CEH Charles Edward Hubbard
- CES C.E. Salmon
- CNP Colin Pope
- CPSK
- CS
- CT C. Turner
- CW Dr. Cyril West
- DACL Mr D.A.C. Long
- DBG Dillwyn’s Botanical Guide
- DG D. Gattlin
- DHK Douglas H. Kent
- Dill. Dillenius
- DL David Lang
- DMcc David McClintock
- DPY D.P. Young
- DR Mrs. D. Rowlands
- DS David Streeter
- DVW D.V. Woods
- EBB E.B. Bishop
- EBBa E.B. Bangerter
- ECG E.C. Green
- ECW E.C. Wallace
- ED E. Drabble
- E de C Eyre de Crespiny
- EGP or
- EP Eric Philp
- EMH
- EN Ernest Nelmes
- ER E. Robinson
- ES Dr. E. Scott
- ESS E.S. Salmon
- ESM E.S. Marshall
- E.W. Woods
- FF Fred Forsyth
- FGS
- FJH Frederick J. Hanbury
- FHB Frank Brightman
- FHP Franklyn Perring
- FHW
- FJE F.J. Epps
- Fl Met Daniel Cooper (1836) Flora Metropolitana
- Fl. Kent Hanbury & Marshall (1899) Flora of Kent
- Fl. Lond. W.J. Hooker (1821) Flora Londinensis v4
- Fl. Ton. T.F. Forster (1816) Flora Tonbrigensis
- Fl. T.W. E. Jenner (1845) Flora of Tunbridge Wells
- FMW F.M. Webb
- FOH
- FR Francis Rose
- FRB F.R. Browning
- FSEF Mr F.S.E. Fawkes
- FWES F.W.E. Shrivell
- GAM G.A. Matthews
- GB Mr G. Brown
- GBS G.B. Shaw
- GCD George Claridge Druce
- GES Gerard Edward Smith [NB, G.E. Shaw was also a contributor]
- GHM or
- GM George Morgan
- GMA Gerald M. Ash
- GL
- GMB G.M. Brown
- GOP
- H&JG Henry & James Groves
- M.H. Cowell (1839) A Floral Guide for East Kent etc.
- M. H. Cowell (1839) A Floral Guide for East Kent etc.
H&M  Hanbury, F.J. & Marshall, E.S. (1899) Flora of Kent
Hanbr  F.J. Hanbury
HAS  H.A. Sandford
Hb.  Herbarium
HCW  Hewett Cottrell Watson
HFP
HKAS  Herbert Kenneth Airy Shaw
HL  Henry Lamb
HMP  H.M. Pratt
HNC  H.N. Crampton

HMW or
HW  Hector Wilks
HT  Henry Trimen
HWA  H.W. Adams
HWP  H.W. Pugsley
JBM  J. Braybrooke Marshall
JEL  J.E. Lousley
JED  J.E. Dandy
JFD  J.F. Duthie
JFPD
JFY  J.F. Young
JGL

JH?  J. Hibbard? J. Hepworth?
JHL
JHPS  Mr J.H.P. Sankey
JM  John Moor
JMS  J.M. Sherwood [Sherwell?]
JO
JPM
JPMB  J.P.M. Brenan
JRW  John Richard Wallis
JSM  John Stuart Mill
KDR  K.D. Rowlands
KEB  Kenneth E. Bull
KFC  Kent Field Club
L  (in Hb L): Louseley’s herbarium
LMJ  Len Margetts
LNHS  London Natural History Society
LRAG  L.R.A. Grove
LWW  Leonard. W. Wilson
Lady D  Lady Davy
M&G  Milne & Gordon
Martyn  Thomas Martyn (1763) Plantae Cantabrigienses
MEM  Miss M.E. Milward
MM  M. MacFarlane
MNHS  Maidstone Natural History Society
Mrs. B  Mrs. Brickedden
NBG  H.C. Watson (1835–7) New Botanist’s Guide
NHS  Natural History Society
NT
NYS  Noel Ivri Sandwith

OD  Owen Davis
P & JH  Mr & Mrs P. Hall
PCH  Peter Charles Hall or P.C. Holland
PHC  P.H. Cooke
Phil. Trans.  Philosophical Transactions
P le B
Pl. Fav.  E. Jacob (1777) Plantae Favershamienses
PMR  P.M. Roberts
PRB  P.R. Bell
PT  Miss P. Topham
PWR  P.W. Richards
PWW  Peter W. Wilberforce
RAB  R.A. Boniface
RC  Ray Clarke
R.E. Sh.  R.E. Shorrocks
REW  R.E. Wood
RG  Mr R. Gorer
RGW  Mr. R.G. Williams
RMP  R.M. Payne
RoF  Rosemary FitzGerald
RP  Robert Pocock
RSRF  Mr R.S.R. Fitter
RTA  R. Theobald
RWB  R.W. Butcher
SAS
S&S  N.I. & C.I. Sandwith?
SEC  S.E. Chandler
SMW  Dr. S. Max Walters
St J M  St John Marriott
Syn  John Ray (1724) Synopsis methodica stirpium Britannicarum
TDVS  Dr. T.D.V. Swinscow
TEL
TGT  T.G. Tutin
TJF  Thomas Jackson Foggitt
TLS  Tunbridge Wells Museum & Art Gallery
herbarium (various abbreviations have been converted to this in editing)
UR  unrecorded
VFPD  Vera Day
WAS  W.A. Sandford
WFS Mag  Wild Flower Society Magazine
WILS
WMR  Rev. William Moyle Rogers?
WOH  W.O. Howarth
WWN  Rev. W.W. Newbould
WWR  W.W. Reeves

681  See R.G. Williams.
682  Not all records may be accurately assigned between REW and RGW in the course of transcription: Francis Rose’s “E” is sometimes identical to “G”.

680  Text also gives a Miss H.M. Crampton.
Acknowledgements

Assistance is gratefully acknowledged from Joyce Pitt and Rosemary FitzGerald, who provided photocopies of parts of the original manuscript; from Owen Mountford, who produced notes from his consultation of the manuscript in the 1980s; from Phyllis Davis, who kindly gave access to typescripts prepared by the late Owen Davis in collaboration with Francis Rose, with related material; from David Pearman, who encouraged the pursuit of traces of the missing Flora; and from David Streeter, Anna Rose and Andrew Rose, who brought to light the greater part of the original manuscript.

Geoffrey Kitchener, 2016-2023