

KENT BOTANICAL RECORDING GROUP
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Front cover: *Lamiastrum galeobdolon* subsp. *montanum* (Yellow Archangel)
at Steps Hill Wood, photo by David Steere, 23 May 2023

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Daphne Mills 23.11.1954 – 28.03.2023

In March this year, the Kent Botanical Recording Group lost member Daphne Mills, a much loved and highly respected Kent naturalist who will be remembered fondly by all who were fortunate to have spent time in her company.

When the Kent Botanical Recording Group formed thirteen years ago, straightaway Daphne became a great supporter, attending just about every field meeting and while she worked on improving her already considerable knowledge of wild plants, she brought along her remarkable skill for spotting and identifying anything else that might be about on the day from bugs to birds, plants to fungi, even snails and slugs. Daphne took much pleasure in sharing her discoveries and incredible wealth of knowledge and she did it always with enthusiasm and a great sense of fun.

Over the years Daphne has contributed thousands of botanical records for the county, some quite outstanding and, being a skilful photographer, provided many photographs to illustrate the Group's publications.

In 2012 Daphne discovered *Fumaria vaillantii* (Few-flowered Fumitory), one of the rarest fumitories in the British Isles, by Maidstone football stadium but for sure, her greatest botanical discovery will be that of *Serapias vomeracea*, (Long-lipped Tongue-orchid) in 2020, a first for Britain.

Daphne learnt early in 2022 that she had aggressive cancer in her head, lungs, and hip. This meant that immediately she had to give up her car and was often in pain but in spite of all this, she kept her passion for natural history at the forefront, submitting nearly 3,000 plant records that spring and summer by walking out from home in her local area. Not wanting to elicit sympathy Daphne told only a handful of friends of her illness and travelled with them to Kent Field Club and KBRG meetings or visits to various bird, plant and insect venues. To her great credit she remained her 'old self' so that people had no idea at all that she wasn't well and that was what she wanted.

Daphne lived alone in the house in Burham that she grew up in and where she had so recently given up much of her time to look after her old Dad until he passed away just a few years earlier. She cared for her small garden where she grew plants that attract bees, birds, butterflies and moths and put a moth trap out regularly and for many years sent moth records both from the garden and the wider countryside.





Her very wide-ranging natural history interests meant that Daphne had many friends across the county and elsewhere. On the day of her funeral, the chapel at Vinters Park crematorium was full to bursting and in spite of the sadness, very many happy memories were shared of Daphne, a very special person who will be so sorely missed.

A full obituary for Daphne will be prepared for the Kent Field Club's newest bulletin, 'Kent Naturalist'.

Sue Buckingham

2023 field meeting reports

HIGH HALSTOW, Thursday 4 May

The weather was dry and sunny for our first field meeting of 2023 and nine of us stood in the area of the old brickworks listening to a couple of nightingales singing. The purpose of the meeting was to identify the host of tiny seedlings that appeared in the brickworks on our last meeting in October 2022. So I expected to be greeted by a nice carpet of flowering spring ephemerals but I hadn't given a thought to the rabbits which had nibbled them all down to maximum height of a centimetre! *Stellaria pallida* (Lesser Chickweed) which has no petals was easy enough to identify but not everyone knew it; in fact I think it gets overlooked. *Cerastium diffusum* (Sea Mouse-ear) with glandular hairs, four cleft petals and no chaffy margins was fairly obvious, but it isn't helpful to identify a plant by virtue of its not having a characteristic, that is until you can see the plant that does have it. So it was *Cerastium semidecandrum* (Little Mouse-ear) that we wanted next and it took a while on hands and knees to pick



out the silvery margins to the bracts with the plants all being so very tiny and not very numerous. *Myosotis discolor* (Changing Forget-me-not) was a welcome find, with some plants in the scrubby areas out of reach of rabbits attaining as much as 20 cms!

Identifying *Cerastium* species. Photo by Owen Leyshon

The latest (April 2023) edition of *BSBI News* had an article on the two subspecies of *Myosotis discolor* and I took it along hoping we might be able to differentiate if we found any. We started by looking at corolla colour which begins primrose to golden-yellow in subsp. *discolor* and first white then pale blue in ssp. *dubia*. Ours began white and were turning blue so best for subsp. *dubia*. We had seven cauline leaves which fits best with subsp. *discolor* (said to have less than eight). Topmost two leaves were alternate (best for subsp. *dubia*). Our inflorescence (though immature) was less than half the height of the plant so best for subsp. *dubia*. Stems 1.5mm in diameter – best for subsp. *dubia*. Dense patent hairs on leafy part of stem,

some more than 1mm in length: yes, ours were all clearly longer, so once more indicative of subsp. *dubia*. Calyx teeth convergent in fruit – subsp. *dubia*. So it looked like we might have ssp. *dubia*, except that the article uses as an important character the relative length of calyx lobes and ours were consistently more than 50% of the

calyx length which unfortunately takes us back to ssp. *discolor*. I can appreciate why we don't have any Kent records for either of the two subspecies!

We found some *Poa infirma* (Early Meadow-grass) and plentiful *Aphanes* which looked like *A. australis* (Slender Parsley-piert) but again was very tiny. I took some home to look at with a microscope and am happy to confirm that from long stipule teeth and incurved sepals – it was actually fruiting! At last, we moved on to the sea wall and made progress along the Saxon Shoreway. I chose to record only early flowering species which we wouldn't have seen last October. They included *Ranunculus bulbosus* (Bulbous Buttercup), *Ranunculus baudotii* (Brackish Water-crowfoot) and *Ranunculus sceleratus* (Celery-leaved Buttercup), also *Ficaria verna* subsp. *verna* (Lesser Celandine). It was great to see a big spread of *Cochlearia anglica* (English Scurvy-grass) flowering on the saltmarsh and some of us climbed down for photos and noticed the stems of *Puccinellia maritima* (Common Saltmarsh-grass), at first hard to recognise on such an early date.

We had lunch in an orchard out of the way of a chilly wind off the sea and shortly afterwards turned inland looking out for a Storks-bill that we hadn't been sure of last year. In spite of having been mown it was easy enough to identify as *Erodium moschatum* (Musk Stork's-bill), being both sticky-hairy and having the necessary glands in pits on the mericarps. *Fumaria muralis* (Common Ramping Fumitory) was also flowering well along the pathway. The same orchard where last year we turned up a lot of *Solanum physalifolium* (Green Nightshade) this time had a quantity of another rather special plant, *Trifolium subterraneum* (Subterranean Clover) flowering in the grass. We certainly didn't record a lot of species during the day, but it was useful to have a return visit in a different season and we filled in a number of gaps with this early meeting. We arrived back at Lapwing Drive in good time for tea and Welsh cakes, thanks as ever to Owen.

Sue Buckingham

DENGE WOOD, near WYE, Friday 19 May

With 2023 being the last official year of a Lady Orchid survey, this meeting was intended to showcase Denge Wood and its large population of *Orchis purpurea* (Lady Orchid) and other spring species. Twenty-two botanists made up of KBRG and Wild Flower Society members (with several belonging to both) met up in a car park in Pennypot Lane on a dry and sunny day, though in accordance with the general weather pattern this month it was chilly to begin with. There were a lot of cars around as both The Royal Photographic Society and Butterfly Conservation had also chosen the day to visit the woods and, by a miracle, we all found a parking space. In the melee a couple of butterfly enthusiasts joined our group by mistake but realised when Sue reminded everyone to carry lunch – they were only out for the morning!

We set out on a recently re-profiled ride with clay at the surface and typical glade species such as *Ajuga reptans* (Bugle), *Lamium galeobdolon* (Yellow Archangel) and *Silene dioica* (Red Campion) flowering along its margin. Rather surprisingly we came across a couple of plants of *Filago germanica* (Common Cudweed), probably brought in as seed on vehicle tyres. Denge is a working wood, most of which is owned by the Forestry Commission. The flora changed on the next couple of grassy paths indicating a more acidic clay at the surface with *Calluna vulgaris* (Heather), *Potentilla erecta* (Tormentil) and *Polygala serpyllifolia* (Heath Milkwort). We identified *Carex pilulifera* (Pill Sedge) and *Carex pallescens* (Pale Sedge) before diving into woodland on a path which dropped steeply down through the last of the flowering bluebells to a valley. The valley is one of several in Denge Wood which cut into the underlying chalk and there the flora changes so that our next ride had chalk lovers *Poterium sanguisorba* (Salad Burnet), *Briza media* (Quaking-grass), *Primula veris* (Cowslip); and we spotted *Dactylorhiza fuchsii* (Common Spotted-orchid), *Neottia ovalis* (Common Twayblade) and - to the delight of everyone - our first *Orchis purpurea* (Lady Orchid).



Lady Orchid. Photo by Owen Leyshon

This part of the wood holds the reserve known as Bonsai Bank, named after the unsuccessful crop of conifers that was planted there, and it currently bears the largest population of Lady Orchids in Kent, or anywhere in the UK. Rather than trailing around the little paths together we took the opportunity of splitting up and spending the next hour or so wandering at will and taking time to enjoy the orchids before re-convening for lunch at the far end of the reserve.



Photo by Owen Leyshon

As well as the Lady Orchids there were many flowering (and sometimes very tall) *Orchis mascula* (Early Purple Orchid), scattered flowering plants of *Ophrys insectifera* (Fly Orchid), *Cephalanthera damasonium* (White Helleborine) and *Platanthera chlorantha* (Greater Butterfly-orchid), the latter tantalisingly not quite in flower. A single *Orchis anthropophora* (Man Orchid) was spotted by an eagle-eyed botanist and everyone enjoyed the tiny Duke of Burgundy butterflies for which the reserve is managed by Butterfly Conservation. The caterpillar food-plants

are Primrose and Cowslip and there was an abundance of both.

Herb Paris. Photo by Owen Leyshon

After lunch we headed further into Denge Wood adding *Paris quadrifolia* (Herb Paris) to the list and many plants of *Ranunculus auricomus* (Goldilocks). A large open area, this time managed by the Woodland Trust, also had a number of fine Lady Orchids and others plus a large, disturbed area where we stopped to study plants of a *Barbarea* (Winter-cress) and they with their long persistent style turned out to be *Barbarea vulgaris* (Common Winter-cress). They were probably introduced on machinery used to keep the area free of scrub.

Sue Buckingham



MONKTON NATURE RESERVE, THANET, Wednesday 7 June

KBRG member Clive Nuttman, who has recently taken over the running of Monkton, met us in the reserve car park prior to leading us around for an update of the botanical records of this 16-hectare chalk pit reserve. The warden is Andrew Wilkinson and he and a team of 50 volunteers look after it.

Our party of twelve was joined by two of Clive's volunteers who kept us informed about the reserve. Monkton is in an old chalk quarry, last excavated in 1958, after which it was rescued from becoming a county council rubbish tip in 1985 on the condition that it became a nature reserve and study centre. This year Monkton had hosted over 4,600 visitors including trips by 15 schools and numerous other organised groups. The reserve is open to the public on four days a week - Tuesdays, Thursdays and weekends - with a small entrance fee, and all income is ploughed back into the maintenance and management of the reserve on a not-for-profit basis. Clive had arranged our visit on a closed day so that we could enjoy having it all to ourselves.

Photo by Sue Buckingham

It took a long time to walk down to the visitor centre because we were recording everything, and Monkton is well known for having many established introductions as well as a very large and varied native flora. We noted *Menyanthes trifoliata* (Bogbean) and *Caltha palustris* (Marsh-marigold) in a pond just before the Centre and beside it the neophyte,



Symphytum x grandiflorum (Creeping Comfrey) and not far away another comfrey, *S. orientale* (White Comfrey). At the foot of a cliff by the centre we admired a huge specimen of *Carduus crispus* (Wetted Thistle), and a new plant to many was *Amsinckia micrantha* (Common Fiddleneck) which is reminiscent of a bristly, yellow-flowered forget-me-not. It's a neophyte from western N. America and although now quite common on the light soils of East Anglia, in Kent it has been recorded in only a dozen or so places.

As we emerged out onto the quarry grassland proper, we were treated to a wealth of colourful native chalk species such as *Rhinanthus minor* (Yellow-rattle), *Linum catharticum* (Fairy Flax), *Blackstonia perfoliata* (Yellowwort), *Origanum vulgare* (Marjoram) and the first of Monkton's many orchids - *Orchis anthropophora* (Man Orchid). Clive led us around, pointing out flowering *Dactylorhiza praetermissa* (Southern Marsh-orchid) and *D. fuchsii* (Common Spotted-orchid) and then a cluster of *Gymnadenia conopsea* (Chalk Fragrant-orchids). The water level in Monkton's lake was quite low but on the margins we found *Lysimachia nummularia* (Creeping-Jenny) and *Lythrum salicaria* (Purple Loosestrife) and, rather surprisingly, a single tuft of *Carex distans* (Distant Sedge), a species generally associated with sea-cliffs, rocky shores, coastal grasslands etc. It is well recorded here however, and we were to find a lot more later in the day.

We stopped to admire a large patch of *Erica vagans* (Cornish Heath) which now has a few outlying tufts. Close-by were some interesting non-flowering stems which had us guessing for a while before we came up with *Digitalis lutea* (Straw Foxglove) which I like having in my garden, but it wasn't long before it was clear from its spread in the chalk pit that this is a plant that can become quite invasive. *Erysimum cheiri* (Wallflower) was in flower on the quarry cliffs high above us and just before our lunch stop Clive showed us a small colony of *Himantoglossum hircinum* (Lizard Orchid) which are not believed to have reached the site naturally. Four had developed flower spikes for the first time this year. Nearby was yet another small cluster of flowering Chalk Fragrant-orchids.

After lunch we admired some *Ophioglossum vulgatum* (Adder's-tongue), a fern which was being kept safe from the rabbits by a wire enclosure. We then moved on up to the top of the quarry where the bulk of the Man Orchids flower. Clive had counted 670 plants on the Reserve this year but believed there were probably more, and he intended to do a re-count. *Orchis mascula* (Early Purple-orchid) was a surprise to me in this habitat but Clive showed us more in a typical woodland site close to a single plant of *Platanthera chlorantha* (Greater Butterfly-orchid). We recorded more woodland species including *Allium ursinum* (Ramsons), *Galium odoratum* (Woodruff), *Ruscus aculeatus* (Butcher's-broom) and lastly *Viscum album* (Mistletoe). The latter is scarce in Kent east of Canterbury, so this brought about some discussion. José Gibbs was able to end the speculation by informing us that she had been involved in the early days of the Monkton reserve and remembers the mistletoe being introduced to the apple that it was growing on.

The day with its total of nearly 200 species recorded was a good reminder of what a very interesting place Monkton chalk pit is. Our thanks go to Clive for leading us around and keeping us well informed and for providing very welcome tea and biscuits in the lovely visitor centre.

After our meeting Clive sent this update regarding the numbers of flowering orchid spikes on the Reserve:

- Man Orchid – 527
- Common Spotted-orchid – 97
- Lizard orchid – 4
- Southern Marsh-orchid – 214
- Chalk Fragrant-orchid – 9
- Pyramidal Orchid – 81 and
- Bee Orchids, which we missed on the day, –13.

Sue Buckingham

CHIDDINGSTONE RESERVE and POLEBROOK MEADOWS SSSI, Saturday 17 June

Good weather accompanied the attendees at this joint meeting of the Kent Botanical Recording Group and the Kent Field Club. The morning session was spent at the nature reserve west of Chiddingstone Causeway, which occupies the same area designated as Chiddingstone Old Clay Pits Local Wildlife Site. Annual management at this site takes place through the autumn and winter months to maintain biodiversity in the meadows, ponds, scrub and marshland habitats, greatly assisted following a programme of felling larger trees between 2009 and 2014 which increased the light levels.

Impatiens parviflora (Small Balsam) was noted on the wooded boundary of the old brickyard, one of a few introduced garden plants which grow in the yard but don't grow in the reserve. The group passed through the winter-flooded 'hack ground' where bricks were once dried in the sun but which has now developed into shady oak woodland. In the main area of open meadow and ponds, a wide variety of plants were seen including *Alisma lanceolata* (Narrow-leaved Water-plantain), *Betonica officinalis* (Betony) and the hybrid sedge *Carex x pseudoaxillaris*. Although considered a sterile hybrid, *C. x pseudoaxillaris* is much more common on the reserve now compared to the single plant that was discovered at a KFC meeting 10 years ago, with our group noting multiple plants in two areas. Dry grassland is not as common on the reserve as damp grassland, but one area, formerly scrubbed, held *Cytisus scoparius* (Broom), Sedge *Carex divulsa* subsp. *divulsa* (Grey Sedge) and *Rhinanthus minor* (Yellow-rattle). A smaller dry grassy bank in a different area cleared of scrub over 10 years ago has developed a dense turf including *Carex caryophyllea* (Spring Sedge), *Danthonia decumbens* (Heath-grass) and *Veronica officinalis* (Heath Speedwell).

Photo by Geoffrey Kitchener

In the corner of one pit *Carex panicea* (Carnation Sedge) was seen where flushing occurs during the winter, growing with *Pulicaria dysenterica*, (Common Fleabane), *Carex demissa* (Common Yellow-sedge) and *Carex flacca* (Glaucous Sedge). Nearby on a bank was *Rosa x toddiae*, the hybrid between *Rosa canina* (Dog-rose) and *Rosa micrantha* (Small-flowered Sweet-briar), here growing in the absence of the *R. micrantha* parent. All the Dog Roses checked during the meeting were found to be true *Rosa canina* (Group Lutetianae). A short section of hawthorn and birch hedge along the public footpath had been laid the previous winter and was being nibbled by Roe Deer which breed on the reserve. The brambles growing along the hedge included *Rubus laciniatus* with its strongly divided leaflets. On the margins of some peaty ponds were a few plants of the county-rare *Epilobium palustre* (Marsh Willowherb). Nearby the county-rare moss *Hylocomium splendens* was still present on the peat where Jan Hendey found it during the last KFC meeting in 2013. Lunch was eaten on the bank



above the pond in the plantation where *Lemna triscula* (Ivy-leaved Duckweed) and non-flowering *Utricularia australis* (Bladderwort) were both seen floating in the water. A variety of sedges were noted here including *Carex strigosa* (Thin-spiked Wood-sedge).

Following lunch we moved on to nearby Polebrook Meadows, designated as a Site of Special Scientific Interest based on its unimproved neutral hay meadows and its original medieval field layout bordered by wide shaws. The fields were in fine form with thousands of *Dactylorhiza fuchsii* (Common Spotted-orchids) in a wide variety of colour forms. In the dampest meadow at the north-west end of the site the group searched for *Dactylorhiza praetermissa* (Southern Marsh-orchid), but those present were in seed and best assigned to its hybrid *Dactylorhiza x grandis*. A new sedge for the day was also seen here, *Carex pallescens* (Pale Sedge), which the group subsequently noted in other fields across the site and considered more common than previously. This field had not received a hay cut last year due to a damaged bridge preventing machinery access, but its flora had not obviously suffered as it had been sheep-grazed over the winter. *Ulmus glabra* (Wych Elm) was seen near the entrance gate, an uncommon species on the Weald Clay. The group entered the largest field where *Anacamptis morio* (Green-winged Orchid) was still just flowering and *Genista tinctoria* (Dyer's Greenweed) was just coming into flower; both of them have increased at the site in recent years. Huge numbers of grasshoppers were jumping at each footfall as we made our way across this field. The shaws contained the usual woodland species for the area, including a fine specimen of *Sorbus torminalis* (Wild Service tree) in the north-eastern corner.

Stephen Lemon

GIBBINS BROOK, Sellinge, Wednesday 28 June

Gibbins Brook comprises 16 ha of valley mire, acid grassland and wet woodland located at the source of a tributary stream of the East Stour. It is a site that has attracted Kentish botanists since the 19th century and the peat mire is perhaps second only to Hothfield Common as an example of this habitat in the county. Like Hothfield, Gibbins Brook lies at the boundary of the Folkestone Formation (predominantly sands) and the Sandgate Formation (sandy clays), and it is the influence of these rocks that has led to the formation of its special habitats. As with many areas of common land, grazing at Gibbins Brook ceased during the 20th century and consequently much of the mire and acid grassland was lost to the encroachment of willow and alder. *Drosera rotundifolia* (Round-leaved Sundew) was last recorded in 1945 (by Francis Rose) and *Carex pulicaris* (Flea Sedge) and *Carex rostrata* (Bottle Sedge) were last seen in 1954 (by G. Walton).

Today, approximately 1.4 ha of mire habitat survives, and this holds notable colonies of *Dactylorhiza maculata* (Heath Spotted-orchid), *Eriophorum angustifolium* (Common Cotton-grass) and *Valeriana dioica* (Marsh Valerian) amongst many other interesting plants. This meeting was KBRG's second visit to Gibbins Brook, having previously visited on 30th June 2013. Unfortunately, the site fell into neglect shortly after our 2013 visit, but in 2020 funding was secured to allow White Cliffs Countryside Partnership (WCCP) to manage the site for wildlife once again. This meeting was organised to contribute to a new management plan for Gibbins Brook and to compile a new species list with which to assess past and future change in the flora.

Botanising in the southern part of the mire. Photo by Alfie Gay

A large group of 21 botanists met at the parking area at Brook Lane. Our number included seven rangers from WCCP as well as a small team from Natural England who were undertaking a SSSI assessment. After a brief introductory talk, we walked onto the southern part of the mire and immediately found plenty of interesting plants. *Scutellaria minor* (Lesser Skullcap), a species not recorded on the 2013 meeting, was frequent in an area of damp



peat that had been cleared of willow trees the preceding winter. Close by were several large clumps of *Carex paniculata* (Greater Tussock-sedge) and the first of many *Dactylorhiza praetermissa* (Southern Marsh-orchid). Gibbins Brook is an excellent site for sedges, and we found *Carex panicea* (Carnation Sedge), *C. laevigata* (Smooth-stalked Sedge), *C. nigra* (Common Sedge), *C. echinata* (Star Sedge) and *C. leporina* (Oval Sedge). A special search was made for *Dactylorhiza maculata* and a handful of plants were found in two places on the mire. Rather more frequent was its hybrid with *D. praetermissa* (*D. x hallii*) and we also felt confident in identifying a single plant of *D. x transiens*, the hybrid between *D. maculata* and *D. fuchsii* (Common Spotted-orchid). However, we did not find any pure *D. fuchsii*.

In 2013, two small colonies of *Lysimachia tenella* (Bog Pimpernel) were present on the mire, but willow and birch have since encroached upon both locations. White Cliffs Countryside Partnership intend to clear the willow and birch in the coming years, and it will be fascinating to see if the pimpernel returns. I had feared that Common cotton-grass had been lost from Gibbins Brook as the spot where we found this species in 2013 now lay under a dense area of young birch. It was therefore very exciting when Jacques and Martha found a small clump in a new location in the centre of the mire – this was certainly the find of the day. Other notable species that we recorded included *Galium uliginosum* (Fen Bedstraw), *Epilobium palustre* (Marsh Willowherb), *Veronica scutellata* (Marsh Speedwell), *Menyanthes trifoliata* (Bogbean), *Dryopteris carthusiana* (Narrow-leaved Buckler-fern) and *Isolepis setacea* (Bristle Club-rush). *Valeriana dioica* had finished flowering, but its leaves were still easily identifiable. Curiously, this is one species that seems to have increased across the southern part of the mire in the last ten years.

We took our lunch on the more solid ground of the acid grassland. This allowed us an opportunity to look for *Ornithopus perpusillus* (Bird's-foot), but unfortunately without success. *Galium saxatile* (Heath Bedstraw), *Rumex acetosella* (Sheep's Sorrel) and *Cerastium semidecandrum* (Little Mouse-ear) were our best finds here. Whilst the acid grassland at Gibbins Brook has never been as interesting as the mire, plants such as *Nardus stricta* (Mat-grass), *Danthonia decumbens* (Heath-grass), *Viola canina* (Heath Dog-violet) and *Polygala serpyllifolia* (Heath Milkwort) were known to Francis Rose in the 1940s and 50s. Incidentally, on a return visit the day after the meeting, I located a few plants of *Ornithopus perpusillus* in disturbed sandy ground that had recently

been cleared of *Pteridium aquilinum* (Bracken).



Botanising in the northern part of the mire. Photo by Alfie Gay

After lunch we headed onto the northern part of the mire. This is quite different to the southern part; the flora is generally less species-rich and *Equisetum fluviatile* (Water Horsetail) is particularly abundant. Unfortunately, *Impatiens glandulifera* (Himalayan Balsam) has spread across much of this part of the site in the last ten years and it will take

considerable commitment to eradicate. However, *Dactylorhiza praetermissa* remains frequent and we also found a patch of *Oenanthe fistulosa* (Tubular Water-dropwort).

We battled our way through willows back to the roadside and had a look at the large pond located in the centre of Gibbins Brook. This supported *Alopecurus aequalis* (Orange Foxtail) and *Ranunculus peltatus* (Pond Water-crowfoot) in the 2000s but became completely shaded by the surrounding trees after 2013. We could not find any sign of the foxtail or crowfoot but we did add *Myosotis laxa* (Tufted Forget-Me-Not) and *Potamogeton natans* (Broad-leaved Pondweed) to our list for the day.

In total we recorded 134 taxa (thank you to Sue for keeping a list of all the plants recorded during the day). The most notable absences from the 2013 list were *Triglochin palustris* (Marsh Arrowgrass), *Lysimachia tenella* and *Ranunculus peltatus*. However, it was heartening to find that so many of the site's rarities are still present, and there must be a good chance that careful management of the site may stimulate the reappearance of species that survive as seeds buried within the peat. Gibbins Brook remains a very rewarding site for Kentish botanists to visit.

Alfie Gay

SOAKHAM DOWNS, near Wye, Thursday 6 July

Soakham Downs are just south of Kings Wood and have a fine chalk flora which is temptingly visible from behind a wire fence as you climb up or down the North Downs Way. Natural England's wildlife and countryside advisor, Dan Tuson had arranged both access to the area and parking at nearby Bilting Grange Farm. Nine of us met up in the yard and were joined by Dan himself who very kindly gave up half the day to show us around. Unfortunately we learnt from Dan that the slopes that we really wanted to visit were being grazed today by some very frisky cattle, which was a disappointment to us all, but only for a moment.

We set off along the farm's arable margins which had been sown with an Emorsgate wild flower seed mix and were very colourful indeed in the sunshine, particularly with a rayed form of *Centuarea nigra* (Common Knapweed), *Knautia arvensis* (Field Scabious) and *Galium verum* (Lady's Bedstraw). Together they were attracting a very large number of butterflies and other insects into an area that was otherwise a sterile sea of cultivation. Generally it was easy enough to decide which plants originated from the sowing but some, and particularly the grasses, can be trickier to decide on. We opted to list everything and to produce both a list of plants and a list of butterflies for the farmer.

A single plant of *Plantago media* (Hoary Plantain) was flowering on the chalky path and there could be little doubt that it had arrived naturally; also a large tuft of flowering and fruiting *Carex spicata* (Spiked Sedge). We wondered how long the introduced plants might last and Dan showed us a strip which had been sown at an earlier time with a cheaper seed mix than the Emorsgate one and this had lost most of its perennial insect-attracting species. Just a little *Lotus corniculatus* (Bird's-foot Trefoil) remained with some *Trifolium hybridum* (Alsike Clover) and of course it wasn't attracting so many butterflies and bees.

Photo by Sue Buckingham

Dan led us through a gate and onto a steeply sloping field which was very colourful, and which Dan explained was an arable reversion field (just two years of no cultivation) that had received some green hay from Fanscombe Bank SSSI near Crundale, plus sown seed of *Primula veris* (Cowslip) and *Rhinanthus minor* (Yellow Rattle). The dominant colours were yellow from *Galium verum* (Lady's Bedstraw) and pink from thousands of *Anacamptis pyramidalis* (Pyramidal Orchids). I heard someone say the combination was a bit garish, but you couldn't help but enjoy it and most importantly we were clearly



seeing a chalk flora returning unaided, particularly from the margins which wouldn't have been ploughed. This from the scattered presence of plants such as *Blackstonia perfoliata* (Yellow-wort), *Carlina vulgaris* (Carlina Thistle), *Cirsium acaule* (Dwarf Thistle), *Lathyrus nissolia* (Grass Vetchling) and *Ophrys apifera* (Bee Orchid). *Thymus drucei* (Wild Thyme) was spreading on the margin of the field with *Polygala vulgaris* (Common Milkwort) and at the top of the slope *Helianthemum nummularium* (Common Rock-rose), *Carex flacca* (Glaucous Sedge),

and *Campanula trachelium* (Nettle-leaved Bellflower). Dan and Alfie had been here a few weeks earlier and found a milkwort which had unusually small and consistently white flowers. Alfie was keen to come up with a name for it, possibilities being *Polygala serpyllifolia* (Heath Milkwort), *P. calcarea* (Chalk Milkwort) or the subspecies of *P. vulgaris* (Common Milkwort) known as subspecies *collina*. Reading from the pages of Rich and Jermy's Plant Crib we seemed to be matching up characters for the latter and Sue took a few scraps home along with some material from a 'normal' blue-flowered plant that was growing further down the slope, in order to compare.

Lunch was taken close by with a spectacular view out across the Stour valley. Afterwards we left the arable reversion and headed across a meadow and into some woodland also owned by the farmer. *Carduus nutans* (Nodding Thistle) looked good amongst the grasses with *Atropa belladonna* (Deadly Nightshade). Much more of the latter was seen along the sunlit wide rides in the wood along with *Cynoglossum officinale* (Hound's-tongue), *Mentha arvensis* (Corn Mint) and, rather surprisingly for a path side on dry chalk, a little *Hypericum tetrapterum* (Square-stalked St John's-wort). An abundance of flowering bramble was bringing the butterflies into the wood, and we added more species – 16 in all for the day's list.

Our thanks go to Dan and the farmer to whom we were able to pass on a list of 149 plant species highlighting the six that are on the Kent Rare Plant Register and additional 19 axiophytes.

Polygala vulgaris subsp. *collina*. Photo by Sue Buckingham

Polygala vulgaris subsp. *collina* was agreed later, from carefully taken measurements and comparison with subsp. *vulgaris*.

Sue Buckingham



TUNBRIDGE WELLS, Thursday 6 July

Our Tunbridge Wells meeting was a joint one with Sussex Botanical Recording Society designed as a figure-of-eight route which highlighted the variation between administrative and botanical counties. We – thirteen botanists – convened at Broadwater Down, a road which adjoins the Kent/Sussex administrative county boundary with Hargate Forest and all set off into Tunbridge Wells, postally Kent, but to begin with, in botanical East Sussex. Elaine Boot led for Sussex and Nevil Hutchinson, the East Sussex vice county recorder, recorded.

St. Mark's churchyard. Photo by Geoffrey Kitchener

It was not long before *Epilobium x aggregatum* attracted attention on the roadside, a hybrid growing with its parents, *E. montanum* (Broad-leaved Willowherb) and *E. obscurum* (Short-fruited Willowherb). We then dipped into St. Mark's churchyard, where our earlier recce had shown much *Danthonia decumbens* (Heath-grass). With the benefit of



some eagle eyes in the group, however, we found that the close-mown lawns were much more interesting than

this, and were apparently relic grassheath from the 1860s when the church was built, with *Calluna vulgaris* (Heather), *Polygala serpyllifolia* (Heath Milkwort), *Potentilla erecta* (Tormentil) and *Salix repens* (Creeping Willow) present.



Patch with Heath-grass, Heather, Heath Milkwort and Creeping Willow. Photo by Geoffrey Kitchener

Following a footpath down into town, we found this lined with masses of *Epilobium roseum* (Pale Willowherb) and *Epilobium ciliatum* (American Willowherb), the latter often white-flowered and so readily capable of being confused. The abandoned forecourt of some industrial/commercial premises enabled us to find three weedy fleabanes in concrete cracks: *Erigeron canadensis* (Canadian Fleabane), *Erigeron floribundus* (Bilbao's Fleabane) and

Erigeron sumatrensis (Guernsey Fleabane).

Just beyond the Spa Valley Railway's bridge we passed the invisible vice county boundary to bring us into West Kent, the boundary line presumably being represented by an underground conduit carrying a brook evident in maps of the early 1800s which becomes the River Grom. The task of recording then passed to me.

Crossing over the Brighton Road we reached Tunbridge Wells Common which has an interesting flora on acid ground over Tunbridge Wells Sand Formation. It has undergone much invasion by trees with the cessation of grazing, evident at least since the 1930s, although where the Commons Conservators have cut back tree cover, this has enabled some recovery of heathland plants such as *Calluna vulgaris* (Heather) and *Molinia caerulea* (Purple Moor-grass). So far as concerns trees, there was some dense *Ilex aquifolium* (Holly) with very little understorey; and where we looked at oaks, these tended to be *Quercus x rosacea*, the cross between Sessile and Pedunculate Oaks. A seasonal pond, near dry, had RPR species *Ranunculus flammula* (Lesser Spearwort), and both *Juncus articulatus* (Jointed Rush) and *Juncus acutiflorus* (Sharp-flowered Rush) were present with what had been identified last autumn as the hybrid, *Juncus x surrejanus*. We were too early to see sterile fruits, but could tell that there were intermediate-looking plants, including as regards the frequency of the 'joints' (septa) in the leaves. The first edition of John Poland's *The Vegetative Key to the British Flora* neatly divides the species up, with *acutiflorus* having 1(2) septa per 5cm of leaf; *articulatus* having 5-10. The latest edition recognises potential for overlap, however.

Lunch by Brighton Lake.
Photo by David Newman

We worked our way up to the junction of Hungershall Park and Major York's Road, paying attention to *Agrostis* (Bent-grass) species en route (*A. capillaris*, *A. vinealis*, *A. gigantea*), to see the colony of *Hypericum maculatum* (Imperforate St John's-wort) found here in 2021. It seems to have been not uncommon in the Tunbridge Wells area, from records by Clive Stace in the early 1960s. This colony provoked a lively discussion as



regards the level of variation shown across the patch, which might point to the cross with *Hypericum perforatum*

(Perforate St John's-wort), viz. *Hypericum x desetangsi*. Some of that variation suggested *H. maculatum*, but some was questionable, and this injected a degree of uncertainty into earlier identification and, indeed, whether the patch was wholly clonal. At this point we encountered commons ranger Dan Colborne, who had learned that we were botanising the common, and we agreed to share records to assist with the preparation of a five-year ecological management plan.



By this time, lunch was well overdue and we turned southwards, passing *Betonica officinalis* (Betony) and a single plant of *Rumex x dufftii*, the hybrid between Broad-leaved and Wood Docks. Lunch was consumed by spring-fed Brighton Lake, named after the neighbouring road to Brighton, and constructed under an 1858 scheme to tackle local unemployment. For a while, we too were unemployed after a full recording session. But in addition to Small Red-eyed and Common Damselflies, the lake had its botanical interest as well, filled with *Lagarosiphon major* (Curly Waterweed) – ever so much more curly than the *Elodea* species normally found in such places – and having on its banks *Carex pseudocyperus* (Cyperus Sedge) and *Hydrocotyle vulgaris* (Marsh Pennywort).

Cyperus Sedge. Photo by Geoffrey Kitchener

Crossing the A26, we again came back into botanical East Sussex, working along the pavements of Showfields Road which carried an abundance of *Echinochloa crus-galli* (Cockspur) and some Finger-grass, *Digitaria* sp. There were garden escapes such as *Cyperus eragrostis* (Pale Galingale) and *Geranium x oxonianum* f. *thurstonianum* (a narrow-petalled form of Druce's Crane's-bill). One garden was growing very little other than *Epilobium* spp. (Willowherbs), cascading onto the pavement below, where we saw two plants of *Epilobium x vicinum*, the cross between Short-fruited and American Willowherbs. Arriving back at the start point, and so having completed the first half of the intended figure-of-eight circuit, we found that we had already achieved a fairly full day's botanising and decided to reserve the Hargate Forest for some other occasion. Equally, we had not seen anything like all that Tunbridge Wells Common has to offer, the display of *Chamaemelum nobile* (Chamomile) on the Lower Cricket Ground that day being remarkable.

Geoffrey Kitchener

DARLAND BANKS, KWT reserve, Gillingham, Friday 21 July

A surprisingly small turn-out for this the first ever KBRG meeting in Medway, just five of us, and we met alongside Kingsway midway between Darland west and east banks. The purpose was to update records, particularly for *Centaurea calcitrapa* (Red Star-thistle). On a reconnoitre trip a week or so earlier Sue was unable to spot any and so was pleased when Heather Furse, a local resident, arrived with news that she knew it was still around and could take us there. Heather is a KBRG member who clearly knows her plants well but admitted to being put off joining meetings by our use of scientific names. I wonder if any more of you feel the same and would come along if we made a point of using the common names as well? **Please do let me know – we want you at meetings** and we're happy to use both and also to help out with identification if you ask.

Photo by Sue Buckingham

Darland Banks is a 29-hectare Local Nature Reserve on the southern outskirts of Gillingham and its sweeping panoramic



views and fine chalk grassland flora aren't what you might expect to find in the heart of the Medway towns. Owned by Medway Council and managed by Kent Wildlife Trust, it has a diverse fauna and flora including the largest population of Man Orchids in Britain. We had a lovely sunny day with a pleasant temperature to enjoy our visit.

Clinopodium acinos (Basil-thyme) was our first notable plant and Kent Rare Plant register species. It was a real pleasure to see such an abundance of it in each of the four one-kilometre squares which the banks stretch across. We discussed the differences between the two species of thyme, *Thymus pulegioides* (Large Thyme) which was the most widespread and also the scarcer *Thymus drucei* (Wild Thyme), and by the end of the day I think everyone was fairly happy with the differences as we sampled their various features including aroma, stem hairs and arrangement and shapes of inflorescence. We spotted some seeding *Orchis anthropophora* (Man Orchid) and flowering *Carlina vulgaris* (Carlina Thistle), both Kent RPR species, as we headed for the far northwestern point of the banks via a narrow path through a number of grazing paddocks.

The many axiophytes included *Scabiosa columbaria* (Small Scabious), *Blackstonia perfoliata* (Yellow-wort), *Anacamptis pyramidata* (Pyramidal Orchid), *Ononis repens* (Restharrow), *Euphrasia nemorosa* (Eyebright), and *Linum catharticum* (Fairy Flax). Kent Rare plants *Plantago media* (Hoary Plantain) and *Briza media* (Quaking-grass) were also noted, and it was

interesting to see that their relative abundance differed from one enclosure to another. There were patches of *Anthyllis vulneraria* (Kidney Vetch) and we were lucky enough to see some Small Blue butterflies (*Cupido minimus*), whose caterpillars feed solely on that species.



Red Star-thistle. Photo by Sue Buckingham

Heather led us unerringly to a dozen plants of flowering Red Star-thistle that were hidden to most visitors by a large bramble patch. She explained that plants were believed to have arrived in Medway via the horse-drawn wagons of travellers; the plants established and maintained a presence at Darland on the dry slope that was kept clear of scrub even after the horses and the people left. For years, seed from Darland plants has been collected, grown on by a

local gentleman and then planted out in the same area by local volunteers. The last planting took place in 2022 and these were the plants that we were admiring in flower. Heather told us that usually there would have been some clearing of vegetation in the area to encourage self-seeding of this biennial species but that hadn't happened recently and no plants had been planted in 2023 but she hoped that the process of growing-on and planting would continue along with maintaining a cleared area. Red Star-thistle is a statutorily designated priority species for biodiversity, as documented in the online Kent RPR accounts. By way of demonstrating the warm dry nature of this spot, an Adder (*Vipera berus*) slid out from between the plants as we stood admiring them and John Puckett noted a Common carder bee (*Bombus pascuorum*) pollinating the flowers.

Heather left us at that point, and we wandered on a little before selecting a comfy spot towards the foot of the banks for lunch. We added *Knautia arvensis* (Field Scabious), *Inula conyzae* (Ploughman's-spikenard), *Erigeron acris* (Blue Fleabane) and *Viola hirta* (Hairy Violet) to the list. *Chenopodium vulvaria* (Stinking Goosefoot) had been seen in 2015 and, although the spot still had a good covering of rabbit droppings and so appeared to

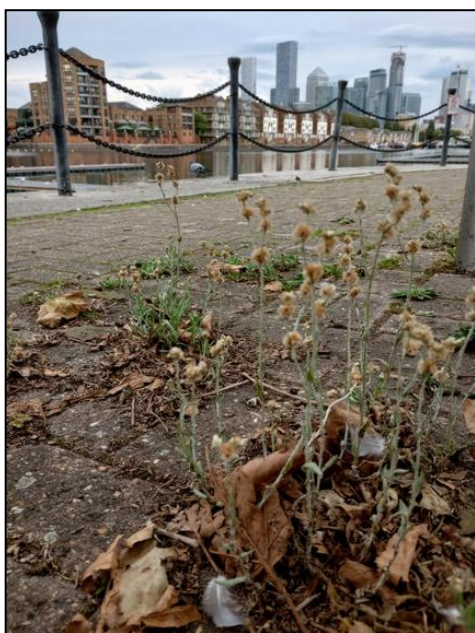
remain suitable, there was no sign (or smell) of this very rare plant. To access the east bank, a path took us through some ivy-covered woodland with a sizeable population of *Orobanche hederæ* (Ivy Broomrape).

Just two of us remained for the last hour or so to explore the east bank and to locate the colony of *Euphorbia cyparissius* (Cypress spurge). It was interesting to see *Helianthemum nummularium* (Common Rock-rose) and *Galium verum* (Lady's Bedstraw), neither of which we noticed on the west bank. This was a lovely day enjoyed among the chalk flowers and butterflies. Our thanks go to Heather and to Darland's team of volunteers for keeping the Banks in such great shape.

Sue Buckingham

GREENLAND DOCK, ROTHERHITHE / NORTH DEPTFORD, Wednesday 27 September

Fifteen botanists, including half a dozen KBRG members, assembled outside Surrey Quays station on a bright warm morning for a joint meeting with Surrey Botanical Society in what was north easternmost botanical Surrey and (later on in the day) north westernmost botanical Kent. Caroline Bateman led us off towards Greenland Dock, a vast expanse of water which in the 18th century saw Greenland whalers off-loading whale blubber for boiling into oil alongside. Now it is surrounded by housing and ubiquitous block paving in the cracks of which we saw a flora dominated by *Laphangium luteoalbum* (Jersey Cudweed) in hundreds of thousands and *Erigeron sumatrensis* (Guernsey Fleabane). Other frequent plants were *Polypogon viridis* (Water Bent), *Polycarpon tetraphyllum* (Four-leaved Allseed) and *Senecio inaequidens* (Narrow-leaved Ragwort). All these are species which have shown rapid expansion in recent years, especially in urban contexts.



Jersey Cudweed at Greenland Dock. Photo by Geoffrey Kitchener

Turning into a side street, we spotted another species of similar character hugging the paving, *Euphorbia maculata* (Spotted Spurge). A passer-by, seeing us milling around the plants, enquired whether we were a crime initiative. I'm not sure whether we were taken for vigilantes or criminals; maybe our eccentricity looked suspicious. This may have been compounded by our careful study of a garden wall with *Persicaria capitata* (Pink-headed Persicaria). The side streets also produced our first sighting of what we believed to be *Geranium purpureum* (Little-Robin), followed up by further encounters, but it looks as though we were too optimistic and, although it may be present, later visits were unable to confirm the presence of anything other than *Geranium robertianum* (Herb-Robert) here and elsewhere.

Photo by Geoffrey Kitchener

The north side of Greenland Dock also produced *Erigeron bonariensis* (Argentine Fleabane) and a few tufts of *Asplenium ceterach* (Rustyback), restored to vigour by rain since an earlier recce, when they appeared completely dried out. The dock walls had further pteridological interest, with alien *Cyrtomium fortunei* (Fortune's Holly-fern) growing on the edge of the Greenland Cut as well as at South Dock, to which it connected. Three plants of east Asian *Pteris multifida* (Ribbon Fern) had escaped onto the South Dock margins, where known since 2008 and which were the only Surrey locations. Also present, but unfortunately inaccessible, was a sedge growing just above water level, which has resisted identification.



Crossing over South Lock, we reached Plough Way, the middle of which was taken to be the transition from historic Surrey (i.e. before the creation of Greater London in 1965) to historic Kent. Caroline then handed over the recording task to me and we quickly recorded along St George's Square towards the attractions of our (belated) lunch spot by the Thames. In the square was a large colony of what we hoped to be *Solanum chenopodioides* (Tall Nightshade) growing in an amenity bed, but it subsequently transpired that this was just



very tall *Solanum nigrum* (Black Nightshade). We had seen the real thing earlier on, in vc17, but our confidence was not great regarding a number of nightshades growing along the Thames wall in vc16. Nevertheless, a subsequent visit made it clearer that most of these were indeed *Solanum chenopodioides*. Later on, pigeons were observed gorging themselves on nightshade berries, so this is probably how the plant gets around.

Tall Nightshade at Deptford Wharf. Photo by Geoffrey Kitchener

We then followed the Thames path southwards to Drake's Steps, supposedly the location where Sir Walter Raleigh spread his cloak over a puddle to enable Elizabeth I to pass dry-shod to Drake's galleon to bestow a knighthood on Drake, thereafter Sir Francis Drake. However, there appeared to be nothing on site to commemorate this, and our attention was distracted by possible *Sisymbrium irio* (London-rocket), which transpired to be the somewhat less exciting *Sisymbrium orientale* (Eastern Rocket).

At Pepys Park we turned inland. There is a supposed wildflower meadow here, so any records had to be qualified as likely to have been planted, e.g. *Trifolium arvense* (Hare's-foot Clover). Ironically, the most interesting record was non-native, Chinese *Berberis gagnepainii* (Gagnepain's Barberry), a small plant of which looked as though it had been bird-sown in a much older hedge. Our subsequent route encountered the disappointment of traversing areas which had been weeded and trimmed since seen on recce, and passed via the Colonnade, one of the few survivors of the 18th century victualling yard which preceded the area's current developed state, where a vegetative *Campanula* sp. provoked much debate. On estates west of Grove Street, *Setaria pumila* (Yellow Bristle-grass) and *Echinochloa crus-galli* (Cockspur) on paved areas suggested bird-seed origins, amplified by the presence of a garden covered with various grasses of similar nature. Another garden contained probable *Phyllostachys aurea* (Fishpole Bamboo) which had reached distances outside as far as 4.5m and 3m in different directions, not recorded by us as the spread was no more than rhizomes questing under the paving, still connected to the original garden planting.

Near Deptford Park primary school we encountered several plants of a radiate groundsel which appeared to have at least partial fertility and so we concluded that this was not a first generation cross between ordinary *Senecio vulgaris* (Groundsel) and *Senecio squalidus* (Oxford Ragwort), both of which were in the neighbourhood, and it was listed as *Senecio vulgaris* subsp. *vulgaris* var. *hibernicus*; this probably carries introgression from *S. squalidus*. A few metres after crossing the vice county boundary back into Surrey we passed an unusual-looking grass, tentatively identified as *Eragrostis* sp. Other Surrey plants on the way back to the station included singletons of *Ambrosia artemisiifolia* (Ragweed) and, some 2m high, *Paulownia tomentosa* (Foxglove-tree). Metropolitan botanising, with the challenges for plants of surviving and spreading in the built environment, but the benefits of a warmer microclimate, certainly encounters a flora which would have been out of the ordinary elsewhere a decade or so ago, but which is already expanding with climate change.

Geoffrey Kitchener

Kent biodiversity strategy species reports

This series of reports continues, although their context is now one under the Local Nature Recovery Strategies mandated under the Environment Act 2021 and which take over from Biodiversity Strategies. The species which we have been targeting under the Kent Biodiversity Strategy are likely to be of continued relevance. Kent Nature Partnership's website says: "At a time of ecological crisis, the Kent Biodiversity Strategy aims to help steer the collaborative work of conservationists, government, business and individuals to work in partnership so that the county's natural landscape can be restored and threatened species can be saved. It may be that the Kent Biodiversity Strategy objectives will be migrated into the forthcoming Local Nature Recovery Strategy, where they may have most impact." So we are assuming some continuity by continuing these species reports, at least to this point. *Orchis purpurea* (Lady Orchid) and *Polygala amarella* (Dwarf or Kentish Milkwort) are covered; we do not have new data for *Carex vulpina* (True Fox-sedge) for a report on that species.

Orchis purpurea Lady Orchid in Kent, 2023

The number of flowering Lady Orchids was down this year at most sites and at some was as little as a half or less than half of last year's totals. Alfie Gay suggests this could be down to the cold spring and very dry February which is when Lady Orchid rosettes start to appear above ground. April, however, was very wet and May very cold with a persistent northeasterly wind. The 2022 summer drought may have had an effect and limited the amount of stored food available from fast-withering leaves but how can we know? Certainly proportionately more non-flowering plants and seedlings were noticed this year, so maybe after a bit of a rest the Lady Orchids will produce more flower spikes in 2024.

In the far west of the county Geoffrey Kitchener continued with checking out known locations that hadn't had a visit during the present survey. He found a single plant at a North Halling site but none under the pylons at Luddesdown or at a location by Heron Lane, Harvel. At the latter site he noted a potentially damaging development in progress which involved ripping out trees and altering ground levels. A total of 75 plants were seen at a site above Upper Halling with 15 flowering and the remainder either blind or seedlings. The high proportion of non-flowering rosettes was to become a feature at several sites this year.

Frances Rose thought that there were two geographic types of Lady Orchid, divided by the Stour Valley (not the Medway) into a west Kent and an east Kent type. Those to the west were supposed to be less tall with a stouter and denser inflorescence,



and denser inflorescence, a shorter ovary ($\leq 1.9\text{cm}$), the red labellum spots more prominent and anthocyanin pigments rose to purple (rather than salmon to brownish-red).

Upper Halling, dense-flowered and pale slender Ladies. Photos by Sue Buckingham

With this in mind, one plant at the Upper Halling location seemed to agree with the west Kent description, being fairly short, as well as having an

exceptionally dense inflorescence and exhibiting a great deal of purple anthocyanin pigment. Its ovary measured 1.6cm. Other plants in the colony showed the usual variations in height, shape and colour. The possibility that genetic traces of *Orchis militaris* (Military Orchid), which was formerly present in Kent, and *O. simia* (Monkey Orchid) may be involved in the supposed east/west variations has been suggested, but for that you would need to look out for a much 'slimmer lady' than the rather stocky one in my photo (see RPR accounts *O. purpurea*).

At Ranscombe the total number of plants overall at 148 was a little up on the 2022 total whilst the total flowering was a little down. Once again Richard and Kathy returned later to assess seed-set. At the Mill Hill colony south of the railway line using a sample of 10 plants with a total of 560 flowers the mean percentage of flowers setting seed was calculated at a mere 2.3%. The Clay Pond colony fared a little better with 8.6% setting seed. Most interestingly the single tall plant north of the railway line showed virtually every flower apparently ripening fruit, but as the season progressed it became apparent that none of the fruits was ripening normally. Richard suggests this could be because it had self-pollinated, leading to poor-quality seed.

Ospringe Down had a similar number of plants to last year but only five of them flowered compared with nine in 2022, whilst at Cutlers Wood, which in 2016 had an estimated 300 flowering, just one single inflorescence was spotted this year, laying on the ground where it had been bitten off, probably by deer! Around it were at least 100 blind rosettes or seedling plants. Less than half the 2022 total of flowers was counted on Yocketts Bank reserve and few rosettes were spotted there in the places where many have been seen previously. Light levels under the beech plantation at Covet Wood are not good, but nonetheless last year 213 flowering Lady Orchids were counted there whilst this year it was a mere 64 with a similar number of non-flowering plants.

Upper Halling, non-flowering plants.
Photo by Sue Buckingham

At Wye Downs Alfie Gay recorded a total of 30 flowering plants and 28 blind rosettes. Eight of the flowering plants were at Pickersdane, nine at the Kneading Trough and 13 at Giddy Horn. None of the 19 Lady Orchid plants managed to flower this year at Jumping Down. At Cannon and Lyoak Woods, which Alfie and a team of White Cliffs Country Park volunteers manage for Affinity Water, 38 plants flowered and 110 were blind. So a few more plants this year but instead of half of them flowering as happened in 2022, just a quarter flowered this year.



We invited Wild Flower Society to join us this spring on a meeting at Bonsai Bank particularly to show off our largest Kent population of Lady Orchids. A few weeks beforehand it was apparent that many of the rosettes were not going to flower, and they looked like being late as well, all very worrying for a meeting leader! But it's all relative of course and although the 1322 flowering was down on last year's count of over 2,000, the Lady Orchids flowered right on time and were their usual splendid selves on the day, delighting everyone.

With an invitation from the owners a visit was made to a privately owned site near Gorsley Wood in order to assess a dynamic Lady Orchid population in a 'garden' situation and to learn about its management. Some 930 flowering spikes were counted; no planting or seed scattering has taken place - just management over a 20-year period of what was initially a small colony, by removing garden conifers initially and then undertaking annual scrub clearance and mowing. The prevailing wind has caused the plants to spread by seed both up and along the valley slope which has light woodland, scrub, and open grassy areas. One particular group of 84 flowering plants and as many non-flowering ones had, according to the owners, first appeared as a single flowering plant just five years previously.

The report of 70 flowering and 17 blind plants in Knowle Wood is from Colin Osborne and is actually a different colony from that reported for the wood in 2021. The two colonies are just a few hundred yards distant but were unknown to both recorders. I began in 2020 by numbering each known Kent colony separately, but as we visit more sites it becomes difficult to assess whether some of these should be regarded separately or as one and the same. Certainly there is evidence that over time individual colonies in woodland have 'moved' within the wood as conditions change for them for worse or for better. Similarly In areas which are clearly ideal for Lady Orchids

such as the deep valley slopes around Palmstead, the Crundale Downs and the Denge Wood complex, small, isolated populations of maybe one, two or more plants can be found fairly easily and are probably best regarded as part of larger populations. Such a single Lady was recorded by Dan Tuson from Towns Wood in the Crundale Downs whilst Steve Coates and Mel Lloyd came across a singleton much further east near Shepherdswell and from a tetrad which has no known previous records.

Jack Lowe's totals from Adisham Woods further confirm this year's pattern of fewer plants flowering. He reports 191 plants of which 32 were flowering and 159 were blind. Last year 124 flowered and 81 were blind. Later in the year Jack reported on seed production with only eight flower heads remaining intact and of these just three plants bore four ripe capsules between them. They were found only on plants from the main colony where a group of plants would seem to stand a better chance of attracting pollinators than isolated individuals.



Eastling Wood is the furthest east recorded Kent location for Lady Orchid but unfortunately requests to the owner for entry have been denied and the wood is heavily fenced. However this year Clive Nuttman was able to confirm its presence there from a flowering spike spotted just inside the wood from the road that runs alongside.

Eastling Wood. Photo by Sue Buckingham

Thanks to all who have counted Lady Orchids this year and to those who look after them. I would like to continue the

survey for at least one more year and I could definitely use some help with counting and reporting on plants from any of the sites.

Sue Buckingham

<i>Orchis purpurea</i> counts						
Tetrad	Site	Number of plants 2020	Number of plants 2021	Number of plants 2022	Number of plants 2023	recorded highest counts since 1970
TQ46Q	Rushmore Hill	0				Last records 1991 & 1987-99
TQ55R	Bitchet Common-One Tree Hill			0		single plant 2012
TQ56F	Otford-Greenhill Wood			12 flowering + 3 blind		10 plants in 2016
TQ66L	Culverstone Green/Harvel				0	10 plants in 2020
TQ66T	Henley Street-Cobhambury Wood			0		2 plants 2015
TQ66W	Upper Halling				15 flowering + 60 blind	15 flowering, 10 blind in 2020
TQ66X	Upper Halling				0 but site suitable	1 by footpath in 2013
TQ66X	North Halling				1 flowering, query if site suitable	1 by footpath in 2010
TQ66Y	Luddesdown				0	3 under pylons (2015)
TQ66Y	Red Wood west			6 flowering + 1 blind		new site
TQ66Y	Red Wood east			0		1 plant 2010 - habitat changed
TQ76D	Ranscombe west	38 flowering + 21 blind	58 flowering + 67 blind	60 flowering + 49 blind	56 flowering + 58 blind	71 flowering in 2013
TQ76E	Great Wood	11 flowering	8 flowering + 7 blind	11 + 3 blind	6 flowering + 16 blind	17 in 2016

TQ76E	Clay Pond Wood		7 flowering + 10 blind	9 + 1 blind	7 flowering + 5 blind	13 flowering (2013)
TQ76G	Burham Downs	168 flowering + 139 blind	late visit: 5 swollen capsules		36 plants	285 (2013)
TQ77A	Great Crabbles Wood			0		first record Merrett (1666), last 1997
TQ85Y	Frinsted, Stock Wood			1 flowering + 3 blind		2 plants in 2004
TQ86A	Bredhurst Woods		1 flowering, at 2 locations			50 spikes recorded in 2011
TQ86F	Stockbury Hill		105 flowering + 16 blind			299 in 2019
TQ86G	Queendown Warren		2 flowering + 1 blind			few records
TQ96V	Ospringe		10 flowering + 24 blind	19 flowering + 32 blind	5 flowering + 50 blind	35 flowering (2013)
TR04	Wye Downs		34 flowering	32 flowering	30 flowering + 28 blind	34 flowering
TR04U	Warren Wood east	18 flowering + 10 blind		36 flowering + 20 blind		Small colony
TR04U	Warren Wood west	4 flowering + 10 blind		9 flowering + 6 blind		Scattered colonies
TR04Y	Towns Wood				1 flowering	New record
TR05K	Cutlers Wood		20 flowering + 300-500 blind or bitten		1 flowering plant, >100 non-flowering	Estimated 300 flowering (KBRG 2016)
TR05L	Park Wood	1 flowering	1 flowering		2 flowering + 2 blind	
TR05V	Down Wood		6 flowering + 7 blind			10 flowering in 2010
TR05V	Eggringe Wood		7 flowering			3 flowering, 2 blind (2014)
TR05V	Thruxted		6 flowering			15 flowering (2011)
TR14H	Spong Wood	7 flowering				
TR14H	Little Profit (private)		90 flowering (estimate)			estimate 90 flowering
TR14I	Yockletts Bank	320 flowering + >100 blind	376 flowering	548 flowering	243 flowering, few blind	505 flowering 2013
TR14N	Fryarne Park & Lynsore Bottom	54 flowering + 9 blind	35 flowering by KWT RNR			similar numbers
TR14T	Parkgate Down		1 flowering	1 flowering		
TR14T	Elhampark Wood		1 flowering			
TR14U	Covet Wood	361 flowering	124 flowering + approx 70 blind	213 flowering + 60 blind	64 flowering and ±60 blind	Up to 3,000 in 1990s
TR14U	Quilters Wood		2 flowering, probably more		10 flowering + >30 blind	
TR14Z	Jumping Down		3 flowering + 5 blind		None flowering, 19 blind	5 plants (2013)
TR14Z	Long Ruffet Wood		40 flowering + 80 blind			24 flowering (2011)
TR15A	Bonsai Bank	1,550 flowering + > 2,000 blind	1,224 flowering + >2,000 blind	2,066 flowering	1,322 flowering	3,481 (2013)
TR15A	Dunstans Wood				2 flowering + 1 blind	4 plants in 2015
TR15B	Denge Wood (Woodland Trust)	34 flowering + >20 blind				
TR15H	Larkey Valley		32 flowering + 3 blind		3 flowering + 5 blind	29 flowering (2013)
TR15Q	Gorsley Wood west			3 flowering + 3 blind		2 in 2018

TR15Q	Gorsley Wood garden population.			at least 300 flowering	930 flowering	known as game-keepers' cottage
TR15Q	Bursted Wood			5 flowering		remains of plants seen 2011
TR15R	Whitehill Wood	4 flowering + 10 blind				8 flowering (2011)
TR15V	Knowle Wood		13 flowering + 20 blind		70 flowering + 17 blind	12 (2011)
TR24F	Reinden Wood				0	A single clump with 3 spikes 2013
TR24L	Sladden Wood		1 flowering and 2 blind	2 flowering + 1 blind		
TR24M	Cannon (& Lyoak) Woods	33 flowering + 17 blind	53 flowering	68 flowering + 66 blind	38 flowering + 110 blind	400 flowering (2003)
TR24R	Gorsehill Wood			0		2 in 2013
TR24U	Golgotha				1	No previously records for tetrad
TR25A	Ileden Wood		3 blind	2 flowering + 1 blind	4 plants	1 in 2013
TR25B	Woodlands, Pitt and Well Woods	33 flowering + 15 blind	36 flowering + 160 blind	124 flowering + 81 blind	32 flowering + 159 blind	133 flowering (2012)
TR24D	Eastling Wood				1 flowering (from road)	
		TOTAL flowering: 2,636	TOTAL flowering - 2,243	TOTAL flowering 3,529	Total flowering 2,879	
		TOTAL non-flowering: 2,351	TOTAL non-flowering - 3,473		Total non-flowering – not known	

Polygala amarella Kentish Milkwort in Kent, 2023

Several sites were visited in 2023, beginning with **Magpie Bottom**, where numbers remain consistently low, this time (26 May) just three plants on their usual chalk grassland valley slope, TQ 54408 61217 and TQ 54402 61211. Tree and shrub seedlings in the vicinity were removed.

Magpie Bottom. Photo by Holly Stanworth

In 2021 the Species Recovery Trust had introduced 18 plants in an arable reversion field below **Fackenden Down**, Otford/Shoreham, as reported in KBRG newsletter no. 14. Only one plant, assumed to be progeny of those introductions, was located, at TQ 53046 60357. The site which had appeared suitable in 2021, now seemed variably so,



with coarse vegetation and scrub springing up, the milkwort being found in a small area remaining semi-open.

Fackenden introduction site. Photo by Holly Stanworth

Choice of an introduction sites is not straightforward, as it involves predicting how the habitat is going to develop, with whatever management is being afforded. The **Polhill** site (last record, 1986), which is operational railway, was viewed from a distance, but continuance seems unlikely and access unfeasible.

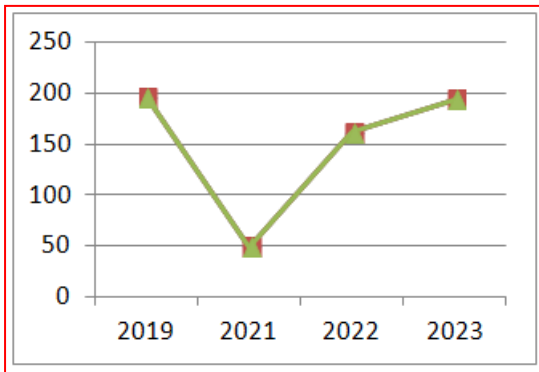
A former site at **Blackbush Shaw** (last record, 1993) was visited by Holly Stanworth in early June, but, without knowledge of the precise location: no plants were seen. On 9 June, I visited **Rumsted**, near Hucking, (last records from 1952-55) where likely terrain was seen at TQ 8449 5971, where the chalk hillside appears to have been opened out a bit from the road, so there is a bowl shape carved into the hill with terracing. The land is now owned by the Woodland Trust, but does not appear to have been grazed this year and conditions were unsuitable. **Purple Hill** was visited by Holly Stanworth and Rob Pennington on 7 June, without success. The last record was in 2020, but there still seems to be scope for presence in suitable terrain around the old chalk pit here, especially if encroaching scrub could be further cleared (work having been carried out in late 2021 and early 2022).

The principal Kentish Milkwort colony, at **Godmersham**, was surveyed on 31 May, with a total of 194 plants, the details being given below.



Godmersham survey. Photo by Holly Stanworth

Grid reference	No. of plants	Grid reference	No. of plants
TR 05899 50247	1	TR 05873 50169	5
TR 05891 50238	31	TR 05883 50162	3
TR 05896 50230	1	TR 05888 50167	2
TR 05898 50167	10	TR 05889 50164	1
TR 05889 50172	1	TR 05852 50118	2
TR 05888 50177	1	TR 05859 50110	1
TR 05888 50183	1	TR 05861 50108	5
TR 05887 50188	1	TR 05859 50080	14
TR 05885 50187	3	Between TR 05832 50093 & TR 05848 50073	89
TR 05883 50180	4	TR 05853 50085	3
TR 05877 50179	1	Between TR 05810 50062 & TR 05815 50054	14



Recent trends at Godmersham are shown in the accompanying graph showing considerable fluctuation, but with levels restored to those in 2019. The year 2020 is omitted, in the absence of survey then.

Godmersham. Photo by Holly Stanworth



The Kentish Milkwort Steering Group visited possible further introduction sites, with the aim of undertaking introductions in at least one new site per year, over three years. Potential sites at Toms Hill, Crundale Bank and Collier Hill Bank were visited on 17 May, and a field next to Peter's Pit later on. The Species Recovery Trust has good website information on its milkwort activities, at <https://www.speciesrecoverytrust.org.uk/dwarf-milkwort>

Geoffrey Kitchener

Robert Turner's contribution to the botany of 17th century Kent: *Botanologia*

Robert Turner (born 1619/20, supposedly died around 1666) is an intriguing author, with a turn of phrase which enlivens *Botanologia*, *the British Physician*, or, *the nature and vertues of English plants* (1664).

His description of the orchid *Satyrium*¹ (a general name at the time for orchids having paired tubers taken to resemble testicles) gives alternative names of Testiculus Canis, Testiculus Capri, Priests Ballocks, Fools stones, Dogs stones, Cullians and Fox stones and says that 'in Cobham Park in Kent it groweth so abundantly, that it may serve to pleasure Seamens wives in Rochester, for there they may be sure to finde it in great plenty from the beginning of April to the latter end of August'. This is a good deal more risqué than one might expect from a herbal textbook, although contemporaneous with Restoration comedy and the poetry of the second Earl of Rochester. It set me thinking about how to place Turner in the context of English, and particularly Kentish, botany. Also, how one might distinguish personal and second-hand observations in his work.

Portrait used as frontispiece to *Botanologia*
1687 edition²



Not much is known about him. He is not, of course, to be confused with the botanist William Turner (1519/20–1568). Internet searches for *Botanologia* tend to produce William Salmon's worthy herbal of that name (1710-11). Hanbury & Marshall in their *Flora of Kent* (1899) normally provide a first port of call for biographies of Kentish botanists, thanks to the diligent researches of B. Daydon Jackson. However, they seem to have known nothing about him, other than supposing he was still alive in 1689 (which no-one else follows, but is not impossible), but they credit him with the first Kent publication of *Consolida ajacis* (Larkspur) and *Convallaria majalis* (Lily-of-the-valley), amongst 35 (I count them as 37, however) Kentish plants mentioned in *Botanologia*.

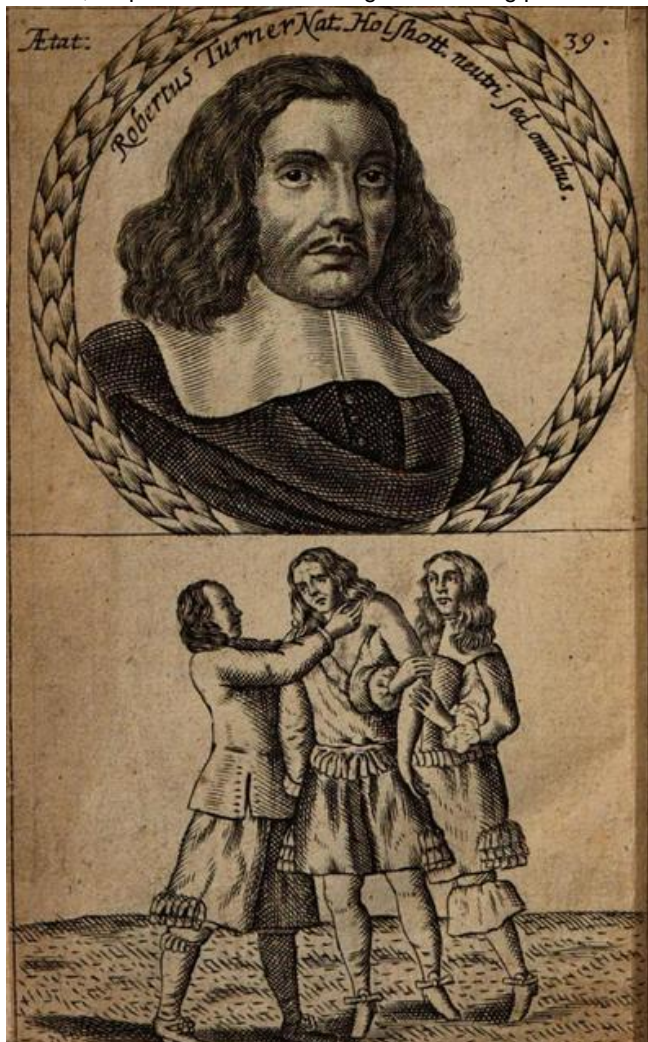
The number of Kent references might suggest an acquaintance with Kent, although his biographical details only enable us to associate him with (a) Holshot in Hampshire, where his father Edmund owned property and Robert was born and lived (*Botanologia* refers to this as in Hampshire, and Turner has many botanical observations from that county; he has been said by some to have been born at Holshot near Saffron Walden in Essex, but this seems wrong, it must surely be the Hampshire Holshot, which was presumably the administrative area of Holdshott, a tything and hundred, near the Berkshire border); (b) Cambridge University, where he matriculated in 1636 and graduated in 1639; (c) 'London', 1654 and Christopher Alley, St. Martin's Le Grand, London, where he was living in 1665; and (d) Wokingham, where *Botanologia* says he once lived.

We will consider further the Kent botanical records, and whether they appear to be original records, or derivative. In the meantime, there is other evidence as regards Turner's interests and activities. In the period 1654-57 he

¹ David Johnson in *Wild Orchids of Kent* (2019) assigns Turner's description of Cobham Park plants to *Orchis mascula* (Early-purple Orchid), whose tubers were reputed to have aphrodisiac qualities.

² Also confusingly used, slightly modified, as a frontispiece to Blagrave's 1677 *Supplement to Culpeper's English Physician* - this has nothing to do with Turner, and it is definitely not a portrait of Culpeper! To add further confusion, the banner shown on the illustration above combines the titles of both Turner's work (*The British Physician*) and Culpeper's (*The English Physitian*).

published several works, both originals and translations, on medical, astrological and occult philosophical subjects. He described himself as a philomath (lover of learning) in his work *Mikrokosmos* and his translation of *The Compleat Bonesetter*, and in this period laboured hard at demonstrating this (his preface to his translation of *Astrological opticks* refers to it being ‘the fruits of some cold Winter-nights which I have painfully [i.e. painstakingly] susteyned’’). His medical interests were endorsed by being licensed in 1661 to practise medicine by the Archbishop of Canterbury, Gilbert Sheldon. It is probably no coincidence that *Botanologia* is dedicated to Sir Richard Chaworth who was vicar-general of the province of Canterbury and chancellor of the diocese of London, responsible for overseeing the licensing process in those jurisdictions.



Portrait, age 39, used as frontispiece to his translation and enlargement of Friar Moulton's *The Compleat Bone-setter* (second edition, 1665). It is placed above an illustration of a broken or dislocated arm being set.³

Turner was very much associated with the Society of Chemical Physicians, which sought to supplant the College of Physicians as a governing body with an emphasis on cure through chemical medicines rather than therapy based on traditional Galenic theory, the use of bloodletting and so on. Distancing from the traditional establishment was also apparent from Turner's translations, making accessible Latin texts to a wider audience, and his endorsement of the availability of medical information to the lay public, which would facilitate self-treatment.

This is of course a feature of herbals, and Turner was working along some of the same lines as Nicholas Culpeper, who attracted concern on the part of both the College of Physicians and the Society of Apothecaries by his translation (1649) of the *Pharmacopeia Londinensis*, followed by his writing *The English Physitian* (1652), which became Culpeper's *Complete Herbal*. Medical knowledge was now by this means cheaply available and doubt was cast on expensive traditional medical practice. The long title of Culpeper's work describes itself as 'containing a compleat Method of Physick, whereby a Man

may preserve his Body in Health, or Cure himself, being Sick, for Three Pence Charge'. Similarly, the long title of *Botanologia* describes itself as providing they 'means whereof People may gather their own Physick under every Hedge, or in their own Gardens, which may be most conducing to their Health, so that observing the direction in this Book, they may become their own Physicians'. The short titles (Culpeper: *The English Physitian*; Turner: *The Brittish Physician*) both indicate that for the lay person the book itself is to be the medical adviser, rather than expensive professionals.

B O T A N O L O G I A .

Botanologia necessarily has a close relationship with earlier herbals, not least in carrying forward previous herbalists' experiences. But from the viewpoint of Kent botany, we have an interest in how far Turner's Kent

³ Presumably the banner inscription 'nat: Holshott' indicates that he was born at (natus apud) Holshott. This is confirmed in the preface to his translation *Paracelsus Of the chymical transmutation, the genealogy and generation of metals & minerals* (1656).

records appear to be original and how far taken from previous herbals, especially Culpeper's. He did, however, view Culpeper's work critically, for example referring to the account under the latter's name of non-native Water Caltrops – '*being an outlandish Plant, I would not have troubled the Reader with a description, but to acquaint him that it is thrust in by the writer of that Book, called Culpeppers English Physician enlarged, amongst the English Plants, as a great many more are, both Outlandish and useless*'. This did not inhibit Turner from including many foreign plants in his book. Throughout *Botanologia*, Turner throws off various squibs in Culpeper's direction. On the subject of Alkanet (which, as he notes, was said by Gerard to be present in the Isle of Thanet, although contradicted by his Reviser [Thomas Johnson]), he mocks: 'Culpepper saith there is one kinde grows commonly in this Nation; which is as true as the story he tells of one of his Disciples, whose horses shooes were pulled off by riding over Moonwort, (as he saith.); and '*But Culpepper teacheth how to kill Serpents with it, which he saith is done, if any one hath newly eaten the root and spits in a Serpents mouth, the Serpent instantly dyes; but this is as ridiculous as Culpepper himself*'.

Hanbury & Marshall's noting of two first Kent records in *Botanologia* would suggest that Turner may have had new sources or made fresh observations on his own account. However, one of these 'firsts', *Delphinium (Consolida) ajacis* (Larkspur) appears to be a misinterpretation by Hanbury & Marshall, the name *Consolida* having been used by Turner as an alternative to Comfrey, which he is clearly describing. The other 'first', *Convallaria majalis* (Lily-of-the-valley), is one of a number of Turner's records relating to Cobham Park, others being *Daphne laureola* (Spurge-laurel), *Potentilla erecta* (Tormentil) and *Succisa pratensis* (Devil's-bit Scabious). I have not been able to trace much in the way of other records for Cobham Park before these⁴. Some of it is now an SSSI, but its plant rarities were first recognised after Turner's publication, e.g. *Salvia pratensis* (Meadow Clary) from 1696 and *Malva setigera* (Rough Marsh-mallow) from 1792. Turner's cluster of previously unpublished records suggests that someone was looking carefully at the local flora in or before the early 1660s. It may or may not have been Robert Turner.

At the end of this account I have provided a table of Turner's Kent records, setting out also information which might suggest that any record is derivative from previous publications (so far as it could readily be ascertained – and this will certainly be incomplete). Where there is, this should not be regarded pejoratively as plagiarism: it would be perfectly in order to represent the then current state of knowledge of a plant's distribution. There is, perhaps, less carrying forward of published information than might have been expected. But as the standard formula regarding a plant is that 'it groweth in' etc., this says nothing as regards whether Turner himself saw it. However, there are two cases which prove that Turner, at least on occasion, actually recorded in Kent. As regards *Sorbus torminalis* (Wild Service-tree), he says 'in Woods and by High way sides I have found them in *Surrey* and *Kent*'. And as regards Cherry trees, he says 'Some of them grow wilde in hedges, as I have seen them in *Hampshire* and *Kent*'. So we can include Robert Turner amongst our Kent botanists, even if just a visitor. The absence of reference otherwise to seeing personally other Kent plants proves nothing, as his numerous records from Holshot in Hampshire are generally not claimed personally, although this was home ground for him.

The table is colour-coded as between records of definite personal observation (2 instances); records of possible personal observation (13 instances); records of generalised references to Kent neither with evidence of personal observation nor obvious derivation from earlier records (4 instances); and records appearing to be derivative from earlier publications (18 instances).

Apart from Cobham Park, the main clustering of records possibly deriving from personal observation, as shown by the table below, is from Gravesend to Rochester. These include *Poterium sanguisorba* (Salad Burnet) and *Euphrasia* agg. (Eyebright) recorded alongside the linking highway. (It is possible that *Verbena officinalis* (Vervain) could have been added, although marked in the table as perhaps derivative from Thomas Johnson's journeying.) Also, personal observation may have applied to Rochester Castle where *Parietaria judaica* (Pellitory-of-the-Wall) and *Erysimum cheiri* (Wallflower) were noted as growing on the walls and *Echium vulgare* (Viper's-bugloss) in the vicinity. This clustering is perhaps representative of personal observation on a journey.

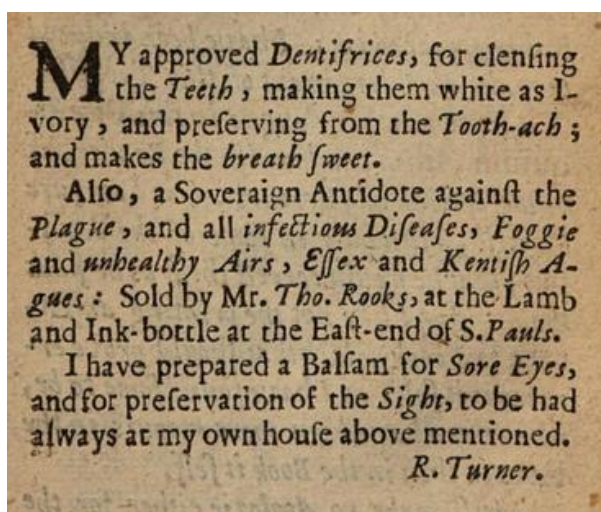
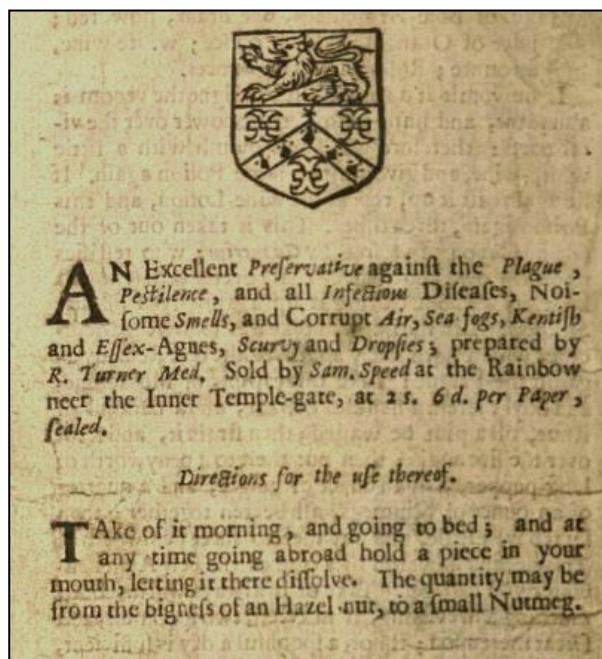
The records deriving from previous publications are much more frequent, but each generation of herbals of course built on the achievements of the last, with Gerard's 1597 *Herball* deriving substantially from the Dutch botanist Dodoens' *Cruydeboeck*, followed by Parkinson's 1640 *Theatrum Botanicum*, itself supplying much

⁴ Gerard's *Herball* (1597), however, has references to *Campanula trachelium* 'especially under Cobham Parke-pale in the way leading from Southfleet to Rochester'; to *Origanum vulgare* 'neere unto Cobham house'; and *Lamiaeum galeobdolon* 'in the woods belonging to the Lord Cobham in Kent'.

information taken up in Culpeper's 1652 *The English Physitian* (which became Culpeper's *Complete Herbal*). Turner's *Botanologia* was based on Pierre Morell's 1645 *Methodus Praescribendi Formulas Remediorum* (translated as *The Expert Doctors Dispensatory*, 1657, purportedly by Culpeper or with his approbation), but this book and its translation were not set out as a herbal with plant descriptions and sites. From the table below, it will be seen that he used Gerard as a source of sites (e.g. the Kentish site for *Iberis amara*, not given by Parkinson or Culpeper); elsewhere Parkinson appears to have been most used, although it is not always easy to tell whether directly or refracted through Culpeper or William Coles (cf. the account for *Gentianella amarella*, where Turner's phrasing is closest to that of Coles).

The relationship with Coles and his publications *The Art of Simpling* (1656) and *Adam in Eden* (1657) is interesting. There are numerous references in *Botanologia* to Coles (said to be more than 50, although I count 39), generally directions to see one or other of his works for more detail (e.g. *Adam in Eden* for *Sambucus ebulus*, which does not give the plant locations mentioned by Turner). Sometimes it looks as though Turner may have taken phrasing from Coles, e.g. as regards *Botrychium lunaria*, *Cochlearia anglica* and *Gentianella amarella*, but the cross-referencing to Coles's works has an air of perhaps having been interpolated by the publisher. Nathaniel Brook was Turner's publisher for *Botanologia* and also Coles's works, and so would presumably not be averse to inserting a bit of advertising. There was some publishers' rivalry with a different Cole, Peter Cole, who published Culpeper's *The English Physitian* and this gave an edge to Turner's criticisms of Culpeper⁵.

New publications by Turner seem to have ceased after 1665, and the assumption is often made that he may have died of the Great Plague of London, 1665-66. This would have been particularly ironic, in that in 1665 he was living in London and providing a plague antidote to be purchased at Samuel Speed's bookshop at the Rainbow (a coffee house at 15 Fleet Street) according to Richard Kephale's *Medela pestilentiae: Wherein is contained several Theological Queries concerning the PLAGUE, With approved Antidotes, Signes and Symptoms: also, An exact Method for curing that Epidemical Distemper* (1665). The 2s 6d which the remedy then cost would now (2023) be equivalent to £22.50.



He was also advertising the antidote as available from the Lamb and Ink-bottle (printers and book-sellers) in his 1665 translation of *The Compleat Bone-setter*, together with toothpaste and eye balm. This establishment also advertised 'An excellent powder, to

procure easie delivery in Childe-bearing women, being a secret of the Authors".

However, there is some evidence of his survival. In June 1666 he was involved in the provision of testimonials for the grant of an Episcopal licence for medical practice. Also, the fourth edition of his work *De Morbis Foemineis, the Womans Counsellour: or, The Feminine Physitian* contains a new preface under Turner's name; this book was licensed in 1685 and printed in 1686. Here he (assuming that the preface was not written by the

⁵ Cf. Sanderson, J. (1999). *Nicholas Culpeper and The Book Trade: Print and the Promotion of Vernacular Medical Knowledge, 1649-65*. PhD thesis, University of Leeds.

publisher in the guise of Turner) refers to the favourable reception of the preceding impressions as having justified the issue of a new enlarged version. This included a supplement touching on agues, and his preface describes an encounter with a woman believing herself suffering under an ague, for which a gossip standing by recommended sowing up garden snails in a linen cloth, to be worn on a chain or a collar. Turner was appropriately sceptical and considered that her problem was syphilis, whether or not accompanied by an ague. And that is the last we hear of Turner, as he signs off the preface, 'Your Well-wishing Friend'.

<p style="text-align: center;">Table of Kent records in Turner's <i>Botanologia</i></p> <p style="text-align: center;">Colour coding: dark green = definite Kent personal observation by Turner light green = possible Kent personal observation orange = generalised Kent reference without evidence of locational observation yellow = apparently derivative, so far as concerns Kent</p>				
	Turner's plant name	Modern equivalent	Turner's location	Similar records in earlier sources [see end of table]
1	Agrimony, Eupatoria	<i>Agrimonia eupatoria</i> (Agrimony)	It grows frequently in Hedge-rows of Corn Fields, and by high-way sides, and in Woods and Copses; in the fields and Woods near <i>Rochester</i> , and towards <i>Dulwich</i> in <i>Surry</i> , you may gather loads of it	No earlier Kent record noted in herbals; Johnson's (1629 & 1632) Kent records are not near Rochester.
2	Bishops-weed, Ammi	<i>Ammi majus</i> (Bullwort), but probably mis-identified.	It grows in divers places of <i>England</i> and <i>Wales</i> , and namely by the Hedges sides between <i>Green-hythe</i> and <i>Gravesend</i>	Parkinson (1640) refers to <i>Ammi vulgatus</i> as 'by the hedge-side of the next field beyond <i>Greene hithe</i> on the way as you go to <i>Gravesend</i> '. Culpeper (1652) and Coles (1657) follow this.
3	Burnet, Pimpinella	<i>Poterium sanguisorba</i> (Salad Burnet)	It groweth wilde in most dry hilly grounds, as all along the way almost between <i>Gravesend</i> and <i>Rochester</i> , and is also nourished in Gardens	No earlier Kent record noted in herbals; Johnson's (1629) Kent record is not near <i>Gravesend-Rochester</i> .
4	Cherry Tree, Cerasus	<i>Prunus avium</i> (Wild Cherry)	Some of them grow wilde in hedges, as I have seen them in <i>Hampshire</i> and <i>Kent</i> , which Countrey is the most plentiful place for Cherry Gardens.	No earlier Kent record noted in herbals other than Coles (1657): 'The ordinary <i>Cherries</i> grow most familiarly in <i>Kent</i> . But Turner's reference is expressly based on personal observation.
5	Chesnut Tree. Castanea.	<i>Castanea sativa</i> (Sweet Chestnut)	They grow wilde in the Woods in Kent, and in the hedges in the Road to <i>Canterbury</i> ; yet in other Counties of this Land are planted in Orchards and Gardens	The earlier Kent records noted in herbals do not appear to be related to <i>Canterbury</i> , although Johnson (1632) includes <i>Castanea</i> in a list which could relate to anywhere between <i>Canterbury</i> and <i>Gravesend</i> . Gerard (1597) says 'there be sundrie woods of Chestnuts in England, as a mile and a halfe from <i>Feversham</i> in Kent', and Coles (1657) follows this.
6	Comfrey, Consolida.	<i>Symphytum officinale</i> (Common Comfrey)	It grows in Meadows by rivers sides, and ditches in fruitful grounds, as near <i>Debtford</i> in <i>Kent</i> it grows in abundance; it is also planted in Gardens	No earlier Kent record noted in herbals; Johnson's (1632) record is not near <i>Deptford</i> .
7	Sciatica Cresses, Iberis	<i>Iberis amara</i> (Wild Candytuft)	It grows upon old walls, rough and untilled places, by high way sides, and in Corn fields near <i>Gravesend</i>	Gerard (1597): 'It groweth upon olde wals and rough places by high waies sides, and such like; I have founde it in corne fields about <i>Southfleete neere</i> to <i>Gravesend</i> in <i>Kent</i> '.
8	Devils Bit, Morsus Diaboli	<i>Succisa pratensis</i> (Devil's-bit Scabious)	It delights in dry Meadows, Woods, and wayes sides, grows plentifully in <i>Danemoor</i> Wood in <i>Hampshire</i> , in <i>Cobham</i> Park in <i>Kent</i> , and sundry other places	Parkinson (1640), followed by Coles (1657), has a record for <i>Appledore</i> ; no herbal examined has anything for <i>Cobham</i> Park.
9	Dwarf Elder or Dane Wort, Ebulus	<i>Sambucus ebulus</i> (Dwarf Elder)	Dwarf Elder grows by common High wayes, and in untilled	No earlier Kent record noted in herbals near <i>Sittingbourne</i> and

			Fields, it grows plentifully in the road between <i>Sittingburn</i> and <i>Canterbury</i> , and in the Lane near <i>Hyedsor [Hedsor] Wharf</i> in Buckinghamshire, and in the grounds of Mr. <i>Hinde</i> there	Canterbury, but <i>Britannia Baconica</i> (1661) by J. Childrey (born at Rochester and associated with Faversham) mentions it as growing 'in the high way between <i>Babchild</i> and <i>Greenstreet</i> , at a place called <i>Radfield</i> , near <i>Sittingburn</i> in <i>Kent</i> .
10	Dittander, or Pepperwort, Lepidium	<i>Lepidium latifolium</i> (Dittander)	It groweth naturally in many places of this Land, in low grounds, as in the Marshes by <i>Rochester</i> in <i>Kent</i>	Parkinson (1640) ('naturally growing in many places of this Land, as... upon <i>Rochester</i> Common in <i>Kent</i> '), echoed by Culpeper (1652).
11	Eye-bright, Ocularia	<i>Euphrasia</i> agg. (Eyebright)	It grows plentifully in many places of this Land, by Hedge rows, and on Hills sides: it groweth in the High way between <i>Gravesend</i> and <i>Rochester</i> , and in the Fields about <i>Gravesend</i> .	Parkinson (1640) referred to it as 'in many places of Kent, in the barren fields and waste grounds, both about <i>Gravesend</i> , and the tracts thereabouts', followed by Coles (1657) in very similar terms. Turner's account, however, is a little more circumstantial than both.
12	Sow-Fennel, or Hogs-Fennel, Peucedanum	<i>Peucedanum officinale</i> (Hog's Fennel)	It grows in salt low Marshes, as by <i>Whitstable</i> and <i>Feaversham</i> in <i>Kent</i> , and many other places	Gerard (1597): 'at <i>Whitstable</i> in Kent in a meadow neere to the sea side...aso in great plenty at <i>Feversham</i> in Kent, neere unto the haven upon the bankes thereof and the medowes adjoining'. Followed by Parkinson (1640), Culpeper (1652) and Coles (1657), all of whom use the expression 'salt low marshes'. Johnson's (1632) record does not seem to have contributed to Turner's account, although the others, or at least some of them, apparently did.
13	Gentian, or Felwort, Gentiana	<i>Gentianella amarella</i> (Autumn Gentian)	The first grows in divers places of Kent, as about <i>Southfleet</i> , and <i>Long Field</i> near <i>Gravesend</i>	These locations are cited earlier: Longfielde by Gerard (1597); Southfleete and Long-field by Parkinson (1640); Southfleet and Longfield by Culpeper (1652); and Coles (1657) uses virtually the same phrasing subsequently adopted by Turner – 'in divers places of <i>Kent</i> , as about <i>South-fleet</i> , and <i>Long-field</i> .
14	Golden Rod.,Auria virga	<i>Solidago virgaurea</i> (Goldenrod)	It grows both in moist and dry grounds in many places of this Land, in Woods and Copses... near <i>Gravesend</i> in <i>Swanscomb Wood</i> , and <i>Southfleet</i>	Gerard (1597) refers to it 'in Southfleete, and in Swanscombe wood also neere unto <i>Gravesend</i> ', followed by Coles (1657).
15	Ground-pine,Chamaepitie	<i>Ajuga chamaepitys</i> (Ground-pine)	It groweth plentifully in <i>Kent</i> , about <i>Gravesend</i> , <i>Cobham</i> , <i>Southfleet</i> , <i>Dartford</i> , and other places	Gerard (1597) refers to it growing 'verie plentifully in Kent, especially about <i>Graves end</i> , <i>Cobham</i> , <i>Southfleete</i> , <i>Horton</i> , <i>Dartforde</i> , and <i>Sutton</i> '. More circumstantial accounts are given by Parkinson (1640), followed by Culpeper (1652), but Turner appears to have taken nothing from them additional to what he borrowed from Gerard.
16	Glasswort or Saltwort. Kali Geniculatum, Sive [or] Salicornia	<i>Salicornia</i> agg. (Glasswort)	Glass-wort is found in most salt Marshes about the Sea coast; great store of it grows about the Sea Coast near <i>Dover</i>	No earlier Kent record noted in herbals; Johnson's (1629 & 1632) records are not near Dover. The coast near Dover has little current suitability for <i>Salicornia</i> .
17	Hops, Lupulus	<i>Humulus lupulus</i> (Hop)	It groweth in <i>England</i> both wilde and manured; <i>Kent</i> flourishes by them	Coles (1657) refers to hops growing 'especially in Kent and Essex, where there be men of good worth, whose estates consist in Hop-grounds'. Both this and Turner's account were matters of general knowledge, and do not require personal observation.
18	Juniper, Juniperus	<i>Juniperus communis</i> (Juniper)	It grows much upon the Hills and woody grounds in <i>Barkshire</i> , <i>Oxfordshire</i> , and <i>Buckinghamshire</i> , and likewise in <i>Hampshire</i> and <i>Kent</i> .	Parkinson (1640) says that it 'groweth especially in Woods in <i>Kent</i> and sundry other places in the Land'.
19	Ladies Mantle, Alchimilla	<i>Alchemilla vulgaris</i> agg.	It grows in Pastures and Woods in <i>Kent</i> , and divers other places	Parkinson (1640) says that it 'groweth naturally in many pastures and wood

			of this Land	sides, both in <i>Hereford</i> and <i>Wiltshire</i> , and in <i>Kent</i> also, as in <i>Kingwood neere Feversham</i> ' This was followed by Coles (1657) and (more vaguely) Culpeper (1652).
20	Spurge Laurel. Laurcola	<i>Daphne laureola</i> (Spurge-laurel)	There grows abundance of it in <i>Cobham Park</i> in <i>Kent</i> ; some set it in Gardens	No earlier Kent record noted in herbals; Johnson's (1632) Kent record is not near Cobham.
21	Lilly Convally, Lilium Convallium.	<i>Convallaria majalis</i> (Lily-of-the-valley)	It groweth upon <i>Hamsted Heath</i> , in <i>Cobham Park</i> in <i>Kent</i> , and many other places of this Land	No earlier Kent record noted in herbals.
22	Dogs Mercury, Cynocrambe	<i>Mercurialis perennis</i> (Dog's Mercury)	It grows about <i>Green Hithe</i> and <i>Gravesend</i> in <i>Kent</i> , and about Hamsted near London, and in many Woods, Copses, and Borders of Fields	Gerard (1597) says: 'in many places about Greene-Hith, Swanes-combe village, Graves-ende, and Southfleete in Kent; in Hampesteede woode...'
23	Marsh-Mallows, Althaea	<i>Althaea officinalis</i> (Marsh-mallow)	It groweth in Marshes, and Moors; as in the salt Marshes from <i>Woolwich</i> to the Sea, both on the Essex and Kentish Shores	A very similar account is given by Gerard (1597), Parkinson (1640), Culpeper (1652) and Coles (1657), e.g. Parkinson (1640): 'marsh Mallows groweth in most of the Salt marshes, from <i>Wolwich</i> downe to the sea, both on the <i>Kentish</i> and <i>Essex</i> shore'.
24	French and Dogs Mercury, Mercurialis	<i>Mercurialis annua</i> (Annual Mercury) and <i>Mercurialis perennis</i> (Dog's Mercury)	The French Mercury grows in <i>Kent</i> , and divers other places of this Land. The Dogs Mercury grows by hedges sides in many places	Gerard (1597), Johnson (1632), Parkinson (1640), Culpeper (1652) and Coles (1657) all refer to French (Annual) Mercury in Kent, but with circumstantial detail, lacking from Turner.
25	Moonwort, Lunaria	<i>Botrychium lunaria</i> (Moonwort)	It delights to grow upon Hills, and Heaths amongst grass and dry mossy places, and in divers places of <i>Kent</i> , as near <i>Maidstone</i>	Gerard (1597) says that it is to be found 'upon drie and barren mountaines and heathes. I have founde it ...on Cockes heath between Lowse and Linton, three miles from <i>Maidstone</i> in Kent. It also groweth... upon the side of blacke Heath neere unto the stile that leadeth unto Eltham house, about an hundred paces from the stile'. Coles's (1657) phrasing, however, is close what was subsequently adopted by to Turner - 'in divers parts of Kent, as about <i>Maidstone</i> '.
26	One Berry, Herb Paris, or True Love, Herba Paris	<i>Paris quadrifolia</i> (Herb-paris)	It groweth in Woods and Copses in <i>Kent</i> , and divers other places	Parkinson (1640) and Culpeper (1652) provide accounts with Kentish locations. Coles (1657) has a general reference to Kent, but with phrasing close to Turner's: it 'groweth in divers places of this Land, in the Woods and Copses of Kent'.
27	Pellitory of the Wall, Herba muralis	<i>Parietaria judaica</i> (Pellitory-of-the-Wall)	It grows upon old stone Walls, as upon the Walls of <i>Rochester</i> Castle in <i>Kent</i> , and amongst rubbish, and such like places	No earlier Kent record noted in herbals; Johnson's (1629 & 1632) records are from Gillingham and Margate, so that, although there are habitat references to old walls, stone and rubbish in Gerard (1597), Parkinson (1640) and Culpeper (1652), Turner's Rochester record looks new.
28	Rupture-wort, Herniaria	<i>Herniaria glabra</i> (Smooth Rupturewort)? [There are ID issues as regards the plant under consideration]	It delights to grow in barren, sandy, and rocky grounds, as upon the dry chalky and sandy grounds in <i>Kent</i> , and elsewhere	Parkinson (1640) refers to <i>Herniaria minor</i> (<i>Millegrana minima</i>) as 'in the drie chalke or stony grounds of <i>Kent</i> , and other counties'.
29	Satyriion, or Orchis Testiculus Canis	<i>Orchis mascula</i> (Early-purple Orchid) [But N.B.'Satyrion' is a generic orchid name]	in <i>Cobham Park</i> in Kent it groweth so abundantly, that it may serve to pleasure Seamens wives in <i>Rochester</i>	No herbal examined has any orchids recorded for Cobham Park.
30	The Service Tree, Sorbus	<i>Sorbus torminalis</i> (Wild Service-tree)	This grows to be a great Tree, delighting in Woods and Groves, and are also planted in Orchards; there doth grow of	Turner's record is more generalised than Gerard's (1597) ('in Kent it groweth in great abundance, especially about Southfleete and

			them in the Woods of Mr. <i>Hinde</i> at <i>Hedsor</i> , and in Woods and by High way sides I have found them in <i>Surrey</i> and <i>Kent</i>	Graves end'), but is expressly based on personal observation.
31	Solomons Seal, Sagillum Solomonis	<i>Polygonatum multiflorum</i> (Solomon's-seal)	It grows in divers places of this Land, as about <i>Odiham</i> in <i>Hampshire</i> , in a Wood within two miles of <i>Canterbury</i> , by <i>Fishpool Hill</i> , and between <i>Newington</i> and <i>Sittingbourn</i> in <i>Kent</i> , and divers other places	Parkinson (1640) says that 'as beside those [places] that <i>Gerard</i> hath named, it groweth in a wood two miles from <i>Canterbury</i> by <i>Fishpoole hill</i> ...and ..betweene <i>Newington</i> and <i>Sittingburne</i> in <i>Kent</i> '. This was followed by <i>Culpeper</i> (1652) and <i>Coles</i> (1657).
32	Scurvy-grass, Cochlearia	<i>Cochlearia anglica</i> (English Scurvygrass)	The Sea Scurvy-grass groweth about the Sea Coasts, and both on the <i>Essex</i> and <i>Kentish</i> shores in the River of <i>Thames</i> , so far as the salt water cometh	<i>Gerard</i> (1597) says that it 'groweth in divers places upon the brims of the famous river <i>Thames</i> , as at <i>Woolwich</i> , <i>Erith</i> , <i>Greenhithe</i> , <i>Gravesend</i> ; as well as on the <i>Essex</i> shore'. This is followed by <i>Parkinson</i> (1640), <i>Culpeper</i> (1652) and <i>Coles</i> (1652), with <i>Turner</i> following <i>Coles</i> 's phrasing quite closely ('groweth along by the <i>Thames</i> , both on the <i>Essex</i> and <i>Kentish</i> shores, so far as the brackish Sea-water commeth...').
33	Spleenwort, or Ceterach, Asplenium	<i>Asplenium ceterach</i> (Rustyback)	It groweth upon stone walls and rocks, and in moist and shadowy places, in the West Countrey, on the Church of <i>Beconsfield</i> in <i>Barkshire</i> , and at <i>Strowd</i> in <i>Kent</i> and other places	<i>Parkinson</i> (1640) also gives it at <i>Strowde</i> in <i>Kent</i> , with <i>Culpeper</i> (1652) following.
34	Tormentil, Tormentilla	<i>Potentilla erecta</i> (Tormentil)	Tormentil groweth in Woods and shadowy places, and also in Pastures and Closes; as in <i>Pray Wood</i> near <i>St. Albans</i> , in <i>Cobham Park</i> in <i>Kent</i> , and in the Fields and Common near <i>Horsham</i> in <i>Sussex</i> , and many other places	No herbal examined has anything recorded for <i>Cobham Park</i> . <i>Johnson</i> 's (1632) record is distant, near <i>Canterbury</i> .
35	Vervain, Verbena	<i>Verbena officinalis</i> (Vervain)	It groweth plentifully throughout the Land, by hedges and wayes sides; as in the way between <i>Gravesend</i> and <i>Rochester</i>	No earlier Kent record noted in herbals, but <i>Johnson</i> 's (1629) record was made in travelling from <i>Gravesend</i> to <i>Rochester</i> .
36	Vipers Bugloss, Echium	<i>Echium vulgare</i> (Viper's-bugloss)	It groweth wilde on Hills and dry Grounds almost every where; that with white flowers about the Castle Walls at <i>Lewes</i> in <i>Sussex</i> , and the other about <i>Rochester</i> Castle, and elsewhere.	No earlier Kent record noted in herbals, but <i>Johnson</i> 's (1629) record was made in travelling from <i>Gravesend</i> to <i>Rochester</i> (but evidently not at <i>Rochester</i> Castle).
37	Wall Flowers, or Winter Gillow-Flowers. <i>Viola lutea</i>	<i>Erysimum cheiri</i> (Wallflower)	They grow wilde, as I said, upon old stone Walls, mighty plentiful upon the Castle Walls of <i>Rochester</i> , and the double kindes are planted in Gardens	No earlier Kent record noted in herbals; but <i>Johnson</i> 's (1629) record was made in a <i>Rochester</i> garden, that of the <i>Bull Inn</i> , whose building is within 100m of the outer castle walls. <i>Turner</i> 's account does not appear to be derivative from <i>Johnson</i> 's record.

Earlier sources:

Coles, W. (1657): *Adam in Eden*
Culpeper, N. (1652): *The English Physitian*.
Gerard, J. (1597): *The Herbal*
Johnson, T. (1629): *Iter Plantarum*
Johnson, T. (1632): *Descriptio Itineris Plantarum*
Parkinson, J. (1640): *Theatrum Botanicum*

Geoffrey Kitchener

***X Dactylodenia wintoni* (*Dactylorhiza praetermissa* x *Gymnadenia conopsea*), an intergeneric orchid hybrid new to Kent**

This is both a new and an old find. It's old, in the sense that the plants have been recognised as interesting at least nine years ago. New, in the sense that it was only in 2023 that they were identified as this cross following coincidentally simultaneous and independent approaches to national experts by Alan Blackman and David Blakesely.

The occurrence of this hybrid was not at all to be expected. There are no previous Kent records. (It is not to be confused with *Dactylorhiza* x *wintoni* which does have Kent records, and is a different taxon.) Being a hybrid between two different genera, *Dactylorhiza* and *Gymnadenia*, it should be less likely to occur than crosses between plants within the same genus and which are more nearly related. It is a rare plant nationally, the *Hybrid Flora of the British Isles* (2015) giving it in only seven hectads and the BSBI database having just 42 entries, many of which are duplicates. And the habitat (dry chalk grassland) appears 'wrong' for the *Dactylorhiza praetermissa* (Southern Marsh-orchid) parent, although not for the *Gymnadenia conopsea* (Chalk Fragrant-orchid) parent.

Photo by David Blakesley, 2023



We are indebted to the curiosity and persistence of Alan and David for this remarkable record. David on 21 June found what he thought were hybrid orchids at Bonsai Bank, Denge Wood, south east of Canterbury. There was a cluster of four spikes and another about 30cm away and he sent photos to expert Ian Denholm, who thought that there was a compelling case for identification as *X Dactylodenia wintoni*. In the meantime, Alan, who had found similarly unusual plants here in exactly the same location in 2018 and 2022, visited on 20 June and sent photographs to expert Richard Bateman. Alan had been puzzled because the *Dactylorhiza/Gymnadenia* cross which might have been expected here would have been between *Gymnadenia conopsea* and *Dactylorhiza fuchsii* (Common Spotted-orchid), which he knew well enough to be able to distinguish from these plants and which he has recorded separately in this same area. Richard Bateman confirmed the unusual plants as *X Dactylodenia wintoni*. It is good when experts agree!



Photo by Sue Buckingham, 2023

As for how these plants resemble their parents, Sue Buckingham, who visited on 25 June, writes:

"The colour is very much *D. praetermissa* and that's clear at a glance and with both that and their unspotted leaves one might easily say simply *D. praetermissa*. But these are clearly hybrids and the markings on the lip and the shape of the lip are very much more in line with *D. praetermissa* as one parent than with *D. fuchsii*. Also the spur is chunky unlike *fuchsii* ... and by the way, I smelt them and they are very fragrant indeed, more so than neighbouring *G. conopsea*. The very cylindrical shape to the inflorescence, angle of lateral sepals and rounded lip lobing [are] from *Gymnadenia*".



Photo by Colin Osborne, 2017

There is a history of sightings here, but perhaps not as much as might be expected since, as Alan, points out the area is well visited by orchid enthusiasts but most of them probably go earlier in the season, mid- to late- May, in order to catch Lady Orchid (*Orchis purpurea*) in flower and so are likely to miss *X Dactyloдения wintoni*.

Heather Silk found plants here in 2014 which were credited as the cross between *Gymnadenia conopsea* and *Dactylorhiza fuchsii* in David Johnson's *Wild Orchids of Kent* (2019) but Ian Denholm was prepared to assign them, from the photographs, to *X Dactyloдения wintoni*. Colin Osborne photographed similar plants in 2017 and these ended up being recorded as *Dactylorhiza praetermissa*, but at least one of those photographs was considered by Ian Denholm as probably depicting *X Dactyloдения wintoni*.

We now have no positive identification of *Dactylorhiza praetermissa* here and it would be an odd place for a Marsh-orchid. However, the likelihood that a Marsh-orchid was present at some stage must be much greater than the possibility that hybrid seed drifted here from some unknown distant location where both species were growing together. *Dactylorhiza praetermissa* does occasionally appear in atypical habitats and it seems probable that it arrived here some time ago unobserved and failed to flourish, the habitat being unsuitable, but it left its genes behind.

Photo by Heather Silk, 2014



I'm grateful to the people named in this note as having provided information enabling it to be written.

Geoffrey Kitchener

**Minutes of the Kent Botanical Recording Group
Annual General Meeting
2.00 p.m., Saturday 01 April 2023**



This meeting was held at Tyland Barn, headquarters of the Kent Wildlife Trust, Chatham Road, Sandling, Maidstone ME14 3BD. Thirty-four members of the Group and guests attended including the Chairman and Vice County Recorder for Kent, Geoffrey Kitchener.

1. WELCOME

Geoffrey began by thanking everyone for coming and said he was pleased to be holding our annual get-together once again after the long break since the last one in 2019. We were in a different part of the Barn from the classroom where we had our previous meetings and Geoffrey thanked Sue for making an earlier visit to check up on the new arrangements. He thanked David Steere, Liam Rooney and Sue for use of their photographs in this illustrated AGM.

Then he invited everyone to participate in a minute's silence to remember Daphne Mills who had died a few days previously. Daphne was a regular at field meetings and Geoffrey praised her for her generosity of time and observational skills, adding that she will be greatly missed.

2. APOLOGIES FOR ABSENCE were received from Caroline Ware, Chris Rose, David Johnson, David Steere, Doug Grant, Lesley Mason, Liam Rooney, Rosemary Roberts and Sue Poyser.

Matters arising. The 2019 meeting was minuted and the 2020 meeting was cancelled but reports went into the next newsletter, and it was considered unlikely that any relevant actions remained after such a long period of time.

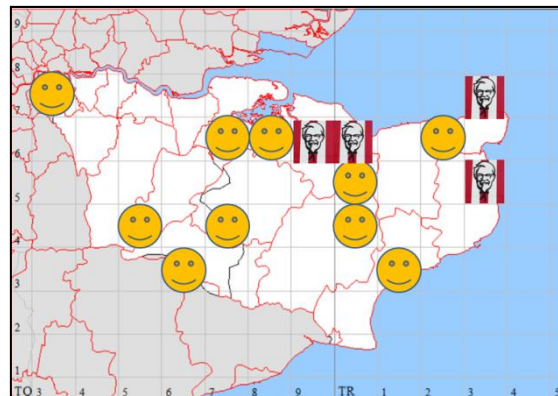
3. REPORTS



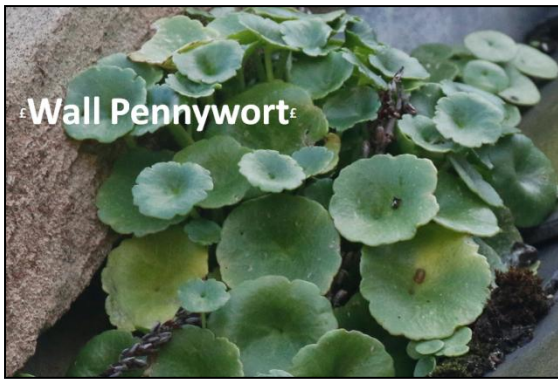
Membership was stable at 135 and although the active core is much smaller, Geoffrey said that there was nothing wrong with being an armchair botanist and he hoped that members were getting what they wanted out of belonging to KBRG.



Meetings. Ten were held in 2022 with sessions shared with BSBI, Kent Field Club, Wild Flower Society, Surrey Botanical Society and Sussex Botanical Recording Society. Venues included some of Kent's top botanical sites and Geoffrey reminded that we should not assume such hotspots do not need records and that they can be an eye-opener for those who haven't visited. Reports from the meetings went into the Newsletter and Geoffrey thanked landowners and meeting leaders, and in the case of Alan Heyes's meeting, the contractors who opened up a working site for our passage.



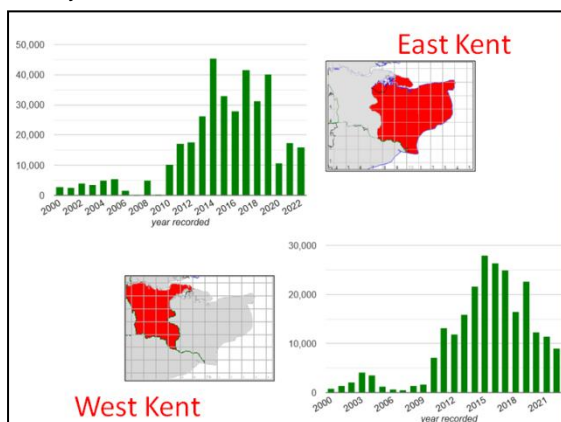
Geoffrey put up a slide showing the spread of this year's ten KBRG meeting locations, along with an additional four organised by Kent Field Club. Kent Field Club have kindly agreed to accept our members to any of their meetings which have a botanical flavour. On being invited to comment on meetings, Sue asked attendees if they might consider suggesting venues or offering to lead meetings in 2024. With both Owen and Sue based in East Kent, ideas for meetings and particularly in West Kent would be most welcome. We have never had a meeting in TQ47 Eltham / Sidcup area, TQ46 Farnborough / Bromley, TQ45 Kemsing / Shipbourne, TQ85 Hollingbourne / Hucking and in TQ 97 Minster / Eastchurch. Sue thought that there were potentially good venues within some of these areas. Geoffrey thanked Owen, Sue, and the meeting leaders for the current programme.



Finances. As ever, we have no bank account or subscriptions so that the position on finances remains the same. We have no finances. However, this year for the first time in a long while we were being charged for room hire and Geoffrey had already asked for contributions from attendees to cover that. Geoffrey proposed that should there be a surplus then we would apply that to any meeting expenses or towards next year's room hire and the outcome would be reported at next year's AGM. He asked for comments and there were none



Recording in 2022. Geoffrey reminded everyone that last year was particularly affected by the hot dry conditions which brought about some devastating fires and sinking reservoirs, as recorded in Kent Botany 2022.



He showed a slide with separate graphs showing overall levels of recording for both East and West Kent. They showed clearly that in recent years we

had not reached the heights of enthusiasm of 2013-19 when we pulled out all the stops for the BSBI Atlas 2020 project. Geoffrey added that in spite of this we were still producing a reasonable number of records and in 2022 four substantial surveys took place.

- Alex Lockton was much involved in a Natural England update on the **Stodmarsh SSSI ditches**. This produced a large number of records of rare species including *Triglochin palustris* (Marsh Arrowgrass) perhaps not seen there since the 1950s.



- Geoffrey made several visits to the **Swanscombe peninsula** in order to reinforce the importance of its SSSI designation in 2021 in the face of proposed development as a giant theme park. This survey also resulted in new discoveries of rare plants.



- Colin Osborne and Sue conducted a botanical survey of **Old Park and Chequers Wood SSSI** which resulted in support by KBRG of a position statement co-ordinated by the Friends of Old Park and Chequers Wood. This has been submitted in connection with Canterbury Council's local plan, with the purpose of seeking a SSSI extension or buffer which

would restrain development on the surveyed land. *Orobanche caryophyllacea* (Bedstraw or Clove-scented Broomrape) and *Crassula tillaea* (Mossy Stonecrop) were both discovered there in 2022.



- At **Betteshanger Country Park** Quinn Associates' ecologists conducted a survey on the area which Quinn wants to dig up and cover with a watersport development and holiday accommodation. Their survey showed this to be the site of Britain's second largest Lizard Orchid colony.



Geoffrey then gave an update on the situation at Betteshanger.

- There was no planning decision yet and KBRG have requested Natural England to declare the site a SSSI but although this doesn't seem to have made any progress, Natural England (NE) have said that the colony is indeed of national importance and the developer's proposals to dig up and replant are unprecedented, and their efficacy is uncertain.
- Quinn's ecologist continues to make claims that contradict NE's expert opinion, whilst BSBI, KWT, CPRE, Buglife, Plantlife, the Hardy Orchid Society, Chris Packham, the Friends of Betteshanger and many others have pointed out how deeply damaging this proposal is to wildlife.
- However, yet more planning documents had been registered in the previous week with the developer's

ecologists trying to wriggle out of further comments by NE which counter their assertions and NE concluding that 'this proposal as currently put forward will not result in the conservation or enhancement of biodiversity'.

Geoffrey added that he deeply regretted the time spent both for himself and for Sue, in providing botanical input for opposition, liaising with others and preparing representations in order to address the hundreds or thousands of pages of documents which have kept coming from the developer.

Geoffrey asked for comments and *Jon Bramley said that young and upcoming students into ecology benefit from the plant information on our website as from KBRG membership and from attending our field meetings.*

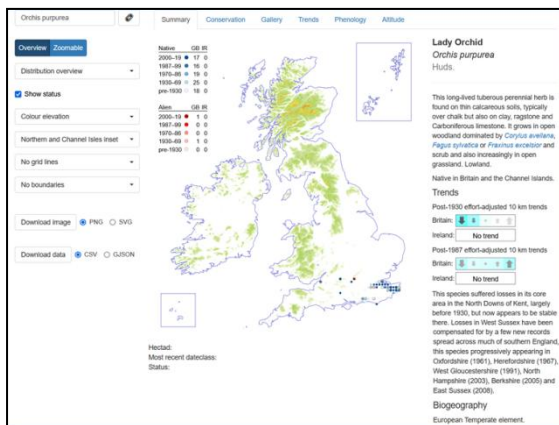
Publications. The Newsletter was circulated to members in November, Kent Botany in January, and the rare plant register accounts at various times. BSBI enabled both Kent Botany and the Newsletter to be put online. Geoffrey said that a year ago in 2022, he wanted to have each of the following publications placed online: the new rare plant register accounts and updates of the old ones, our reports for Biodiversity strategy species, an update of the Francis Rose transcription and various local floras by Alan Heyes and Alex Lockton. However this still hasn't happened and he had expressed his disappointment to BSBI but could do no more. He understood that BSBI had contractors to make the website more compatible to viewing by smartphone and also so that the website might be updated directly by contributors, but this had not come about. A recent offer of help from BSBI sounded promising and Geoffrey was hopeful that this might yet resolve the problem.



Last year the vascular plants chapter of the State of Nature in Kent 2021 came out, largely written by Sue and giving an account of changes in our flora over the preceding ten years and the threats to it. This could not have come about without KBRG records. Also recently published was KFC Transactions which includes a very readable paper by David Johnson entitled *Hector Wilks and the Monkey Orchid in Kent*.

Plant Atlas 2020 had been recently published, giving the distribution and status of the British and Irish flora with the benefit of all of the records which

we had put in for Kent. All and more that is included in the two hefty volumes is available online and Geoffrey showed a slide of the online Lady Orchid entry, pointing out the multitude of additional data that is included with each species.



The distribution map of Lady Orchid prompted Joyce Pitt to ask Sue if she had taken into account in the process of monitoring for this species, the two populations of Lady Orchid from west and east Kent which Frances Rose had studied. Sue replied that she had not.

Rare Plant Register Geoffrey's slide showed how the look of the register had developed from the first issue in 2011/12 to the present. Although he completed the final Part Z earlier in the year, since then he had been very busy updating the plants covered, incorporating the latest records and making the accounts more consistent throughout. Currently the register has 1331 pages, made up of lists of register plants, list of probably extinct plants, an account of how the register was set up, accounts of species that have been withdrawn and the 328 or so accounts of the current register species.



[Slide compares earliest and latest versions of first page]

The Sussex RPR of 2001 with two lines of description per plant plus recent records and grid references but no pictures, had been Geoffrey's guide to begin with. The pattern of Kent RPR is much fuller, and the accounts include every aspect of the plants' status, rarity, first Kent records, trends with maps, habitat, ecology and identification comments and photographs of close up, whole plant and habitat.

Jon Bramley thanked Geoffrey for the RPR and said that he was finding it very useful indeed. This was echoed by a general voice of agreement from the floor.

Joyce Pitt said that the removal of dead ash from KWT's woodland reserves was causing a great deal of damage to the ground and asked if anyone knew why this was happening, but no one offered Joyce a satisfactory answer.

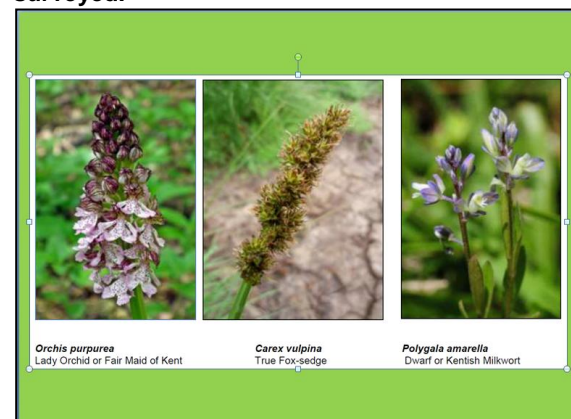
Axiophytes

Sue explained that the Axiophyte list had been recently updated to bring the number of species included in line with those that Alex Lockton uses in his Floras. The list is now longer by some 80 species, most of which are plants that had initially been considered too rare to include.



4. LOOKING AHEAD

Kent biodiversity strategy: plants to be surveyed.



Geoffrey explained that whilst the context of this is due to change shortly along with the statutory arrangements for biodiversity strategies, we still continue with our interest in the three special Kent plants that we have been monitoring i.e., Orchis

purpurea (Lady Orchid) *Polygala amarella* (Kentish Milkwort) and *Carex vulpina* (True Fox-sedge). The Species Recovery Trust will progress this year with surveying for Kentish Milkwort. Sue will be glad of any help with monitoring Lady Orchid and there are still some sites which haven't had a visit since we started. Stephen Lemon also said that he welcomed any revisiting of *Carex vulpina* sites to see if there are population fluctuations.

Recording strategy going forward

Our current recording priority is to establish whether any of our RPR species lacks recent records where it used to be (that is any records after 2019) and can it be refound there. Geoffrey said that this should still be the recording priority in 2023 and while doing this (as well as looking at plants growing with the targeted rarity), one could do some general recording for the relevant square. To assist members with this Geoffrey asked if it might be helpful if he were to include with the occasional general circulation, one of the RPR parts and make suggestions about things that might be followed up. This was met with approval.

Action: GK

Geoffrey reflected on the importance of encouraging members especially the newer and younger ones to increase their skills through providing general records for 1kilometre squares. With some of our key recorders either moved away or no longer able to cover so much ground as

previously, this needs to be part of our strategy and both he and Sue welcome lists and the opportunity to help out with those wanting to build up their recording skills.

5. ANY OTHER BUSINESS OR COMMENTS.

Geoffrey had heard from Tony Witts about Stephen Fuller who had written a book on the Delf Stream at Sandwich and who, having written another on the River Wantsum, was looking for someone to help with authoring the wildlife portion of the book.

Rodney Burton had brought along to the meeting a spare copy of the Flora of Sussex, for anyone who would like it, free of charge.

Off-prints were available of a Francis Rose account of Flora and landscape of North Kent, 1649-1971.

Jenny Gibb thanked Geoffrey and Sue for all that had gone into putting the meeting together.

6. DATE AND PLACE OF NEXT AGM.

The next AGM, subject to availability will be Saturday 6 April 2024 at Tyland Barn

The meeting ended at 3.00p.m., followed by refreshments, thanks to Sarah Kitchener, and then Sue's presentation on 10+ years of KBRG meetings.

Sue Buckingham

Web version 1

Thanks to all contributors to this issue, both authors and photographers, and to those who led meetings, and to Sarah Kitchener for reviewing this newsletter.

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The editor, Geoffrey Kitchener, wishes to draw attention to the fact that neither he, nor the Kent Botanical Recording Group, is answerable for opinions which contributors may express in their articles; each author is alone responsible for the contents and substance of their work.