

KENT BOTANICAL RECORDING GROUP

NEWSLETTER No. 7

October 2014



Kent Botanical Recording Group website: hosted by the Botanical Society of Britain & Ireland at <http://www.bsbi.org.uk/kent.html>

Related website (Facebook)

<http://www.facebook.com/pages/Kent-Botany/223421087698067>

Published by the Kent Botanical Recording Group: Cromlix, Otford Lane, Halstead, Sevenoaks, Kent TN14 7EB

Kent Botanical Recording Group newsletter no. 7

Front cover: Flower cupcakes by Lottie Leyshon (KBRG Dungeness meeting). Photo by Owen Leyshon, 22 June 2016.

In this issue:

2014 field meetings

Rare plant register revisited

Sheppey plants

AGM minutes

County recording

Charophytes in Kent

2014 field meeting reports

MAY 2014						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Thursday 8 May 2014: Crockham Hill

We met with Surrey Botanical Society at Crockham Hill village on a day with an unpromising weather forecast, which unfortunately turned out to be fairly accurate. However, we made a good start with a survey of the churchyard and located on a path there a single plant of *Alchemilla alpina* (Alpine Lady's-mantle), which had been discovered by the joint leaders, Caroline Bateman and Geoffrey Kitchener, a week earlier on a pre-meeting recce. This bizarre find (at an altitude of 125m with no other records for southern Britain!) must have derived from an introduction, but it had clearly not been planted there, nor did we see any in cultivation in the neighbourhood. The presence of a memorial at the other end of the churchyard to a climber who died in an alpine mountaineering accident appears coincidental. *Alchemilla conjuncta* (Silver Lady's-mantle) would have been a far more likely discovery, but with leaflets split to the base, silver-hairy on lower side and less than 6mm wide, it was clearly not that taxon. Apart from a reasonable native flora we also encountered *Geranium versicolor* (Pencilled Crane's-bill) as an introduction, well naturalised, and *Erythronium dens-canis* (Dog's-tooth-violet) which has been spreading of its own accord for some years in the churchyard lawn, albeit going over at the time of our visit.



Can it get any wetter? Photo by Liam Rooney

Walking from the church to Main Road, we spotted (appositely) a spotted-leaf hawkweed on a wall, identified as *Hieracium scotostictum* (Dappled Hawkweed). This species seems to move in and out of cultivation in Kent.

Having crossed over into Smiths Lane, we saw *Tellima grandiflora* (Fringecups) on a roadbank. A side road took us out into open country and we descended a slope, passing *Carex leporina* (Oval Sedge), to a copse with a stream which is either the Kent Brook or a source of it. Maps vary in their interpretation, but although it would have made a good natural boundary, it was not the dividing point of the counties. The copse contained Hybrid Hawthorn, *Crataegus x media* (*C. monogyna x laevigata*) and, on the damp clay of the shaded stream slopes, four fern species, including *Dryopteris borreii* which under the current edition of Stace has been separated out as a species from the Scaly Male-fern complex.

After crossing the stream, we traversed a pasture with little identifiable flora, although containing the hybrid between Broad-leaved and Curled Docks, *Rumex x pratensis*. This took us to a field boundary with a stile against an old tree of *Fraxinus excelsior* (Ash). Here was the county boundary, and indeed this was marked as a boundary tree on the 1896 Ordnance Survey. The Surrey recorders then took over plant listing (both counties recorded the Ash), rain came down harder, and having reached the shelter of a large tree, most of us temporarily lost the will to progress further and broke into lunch instead. After recruiting energy to face the rain we set off again, past walls bearing *Umbilicus rupestris* (Navelwort), up the lower slopes of the Greensand Ridge to the edge of the Hythe Formation. The weather brightened as we then came down again to a Weald Clay landscape of hedges and pastures. Habitat variety was afforded by the remains of a presumably mediaeval moat at fifteenth-century Moat Farm, bisected by the present-day road, and we eventually reached the Kent border again where the Kent Brook passes under Swaynesland Road. Monad TQ4250, otherwise with no Kent access, lay across a field gate and provided 35 new records.

We worked back along lanes and paths through monads TQ4350 and TQ4450, seeing nothing out of the ordinary apart from *Trifolium medium* (Zigzag Clover) and naturalised *Cyclamen hederifolium* (Sowbread). However, we made good account of a Wealden clay flora which otherwise, being out on the county boundary, might not have attracted recording attention (Surrey had had only one botanical visitor in recent years to much of the area covered). In TQ4350, west of Crockham Hill, we recorded 114 different taxa. At Crockham Hill itself, TQ4450, we recorded 136. Sarah Kitchener kindly supplied tea and cakes at the end, so returning some of the hospitality which we have enjoyed from Surrey Botanical Society in previous years.

MAY 2014						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Saturday 24 May 2014: Chequer's Wood and Old Park, Canterbury

Eight KBRG members joined Alfie Gay and Sue Buckingham for this meeting on MOD land adjacent to the Canterbury barracks and Canterbury Golf Course. The site is an SSSI comprising a plateau of unimproved sandy acid grassland, gorse and oak/willow scrub and a valley bottom alder carr bordering a stream which runs alongside the golf course. We were hoping to find some of the species which have been recorded there in the past, including *Scleranthus annuus* (Annual Knawel), *Trifolium glomeratum* (Clustered Clover), *Cardamine amara* (Large Bitter-cress) and both *Chrysosplenium* (Golden-saxifrage) species, as well as acquiring general records for the site. Thundery showers were forecast but we set off in dry weather after our safety briefing from the training area marshal.

We expected to see acid lovers on the high dry ground and so, on leaving the golf-course car park, were surprised to come upon a large extent of the very attractive grass *Avenula pubescens* (Downy Oat-grass) with *Galium verum* (Lady's Bedstraw), both indicating alkaline conditions. Nearby we recorded *Carex muricata* subsp. *pairae* (Prickly Sedge), *Rumex acetosella* (Sheep's Sorrel), *Galium saxatile* (Heath Bedstraw), *Polygala serpyllifolia* (Heath Milkwort), *Ornithopus perpusillus* (Bird's-foot) and *Aphanes australis* (Slender Parsley-piert). With everyone on hands and knees some tiny annuals were added: *Cerastium semidecandrum* (Little Mouse-ear), by now in fruit but clearly showing chaffy margins to its bracts; *Trifolium micranthum* (Slender Trefoil); *Spergularia rubra* (Sand Spurrey); and both subspecies of *Sagina apetala* (Annual Pearlwort) – subsp. *apetala* and subsp. *filicaulis* – although these are now separate species in Stace edition 3.

A hunt for little clovers began with *Trifolium subterraneum* (Subterranean clover) and Alfie's discovery of a non-flowering patch of Clustered clover. Shortly afterwards we selected a pleasant grassy spot for lunch and just before sitting on it discovered an area of over 30 yards of almost continuous flowering *Trifolium*

glomeratum with *Trifolium striatum* (Knotted Clover). Whilst we ate lunch and photographed the tiny clovers, a Nightingale serenaded us.

The golf course was extremely busy and clearly unsafe for us to linger on and this prevented us from searching the adjacent alder carr. We were, however, able to get access at the very northern part of the site and battled our way through head-height vegetation to locate some fruiting *Chrysosplenium alternifolium* (Alternate-leaved Golden-saxifrage). This was growing with the common opposite-leaved species so it was good to compare size and leaf shape.

Lunch taken on Trifolium glomeratum. Photos by Sue Buckingham



Some other interesting plants for the day were *Silene x hampeana*, the hybrid between Red and White Campion with both parents, *Trachystemon orientalis* (Abraham-Isaac-Jacob) established with other dumped garden waste and *Senecio sylvatica* (Heath Groundsel). Frog, toad and grass snake were seen and records promised to KRAG (Kent Reptile and Amphibian Group). Apart from a heavy shower towards the end of the afternoon, the weather was much kinder than expected.

JUNE 2014						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Saturday 7 June 2014: Holborough Marshes

This was a joint meeting with the Kent Field Club led by Stephen Lemon and Geoffrey Kitchener with access to the Holborough Marshes reserve by kind permission of the Kent Wildlife Trust. The focus of the meeting was on the identification of sedges, of which we saw an extraordinary number.



Eighteen people met whilst thunder began rolling: we looked at the rain for some time from cars or tree shelter, before setting off, but the weather cleared before long. The KWT reserve had not been grazed down for some time and remained wet after the damp winter, but it was accessible for what we wanted to see. The marshes are subject to some saline influence nearest the tidal Medway and are otherwise fairly base-rich, providing a habitat of unique quality in West Kent.

Stephen Lemon and Geoff Joyce examine a sedge specimen. Photo by Owen Leyshon

Stephen directed us to *Carex divisa* (Divided Sedge), *C. disticha* (Brown Sedge) and gave us an opportunity of viewing, in near proximity, three sedges with somewhat glaucous leaves – *Carex nigra* (Common Sedge, so-called), *Carex panicea* (Carnation Sedge) and *Carex flacca* (Glaucous Sedge). He demonstrated with patience and clarity their differentiating characters and that it was possible to go a long way in sedge identification with vegetative material alone.

We were shown how the presence or absence of stomata on different sides of leaves provided useful information in addition to the usual analyses of leaf and ligule shape.

We had intended visiting the newly rediscovered colony of *Eleocharis uniglumis* (Slender Spike-rush) in its only West Kent area, but Stephen directed us to two nearer and smaller populations instead, which provided the challenge of proximity to *Eleocharis palustris* (Common Spike-rush). It is not easy to separate them when intermixed, but on the whole, Slender Spike-rush does look more slender, and its inflorescence often tilts to one side – the encircling basal glume of course providing confirmation. The plant is readily overlooked, which was demonstrated by a trampled pattern next to one of the colonies. Photographers had stood here to photograph a handsome specimen of *Dactylorhiza x kerneriorum* (the hybrid between Common Spotted-orchid and Early Marsh-orchid). All had no doubt turned their backs to the greenery behind, in which the Slender Spike-rush was growing, and they missed what was a considerable rarity, in Kent terms. In fairness, there was a lot of what were, or had been, photogenic orchids generally, with much *Dactylorhiza incarnata* (Early Marsh-orchid) and *Dactylorhiza x grandis* (the hybrid between Common Spotted-orchid and Southern Marsh-orchid), but they were tangential to the purpose of our meeting.

Other sedges seen were: *Carex distans* (Distant Sedge), *Carex hirta* (Hairy Sedge), *Carex otrubae* (False Fox-sedge), *Carex pseudocyperus* (Cyperus Sedge), and *Carex riparia* (Greater Pond-sedge). A patch of *Carex acuta* (Slender Tufted-sedge) was examined as well as a fairly similar, but very shy-flowering patch, which was suspected of being a hybrid involving *C. acuta*. We gathered material for the national referee, but he found that it did not show anthers clearly enough for the status of the plant to be confirmed.



Carex discussion group. Photo by Geoffrey Kitchener

We took lunch outside the marshes, on chalky ground near the Medway and John Puckett pointed us to where *Orchis anthropophora* (Man Orchid) had been seen recently, and was still present. Somewhat surprisingly, the compacted,

chalky ground near the river carried the dried-up remains of *Poa bulbosa* (Bulbous Meadow-grass). We then skirted the outside of the reserve, noting the continued presence of the well-known *Dianthus deltoides* (Maiden Pink), and finding yet another sedge species, namely *Carex spicata* (Spiked Sedge). Before we turned back into the reserve, our attention was drawn by some chalky ground which had been subject to tree/scrub clearance and soil regrading in preparation for the anticipated construction of a new road crossing over the Medway. This provided much of interest, with newly establishing *Althaea officinalis* (Marsh-mallow), a scattering of *Neottia ovata* (Common Twayblade) which looked as though it had been bulldozed around, *Ranunculus sardous* (Hairy Buttercup) and a number of annuals, including *Euphorbia exigua* (Dwarf Spurge).

Returning through the reserve, we paid closer attention to the ditches and wetter areas. Two aquatic *Ranunculus* species were seen: *Ranunculus baudotii* (Brackish Water-crowfoot) and *Ranunculus trichophyllus* (Thread-leaved Water-crowfoot). Then we converged on a ditch where a slight flow through a piped section gave onto a clear patch of water. Across this was spread what at present seems to be our only West Kent *Groenlandia densa* (Opposite-leaved Pondweed), so we will now have photographs for our rare plant register account of this species. We made a number of new records during the day, although this was not the primary purpose of the meeting and in any event, the tetrad within which we spent the day (TQ76B) has by far the highest number of taxa recorded since 2010 for a Kent tetrad, 449. We concluded with tea and cakes, a welcome provision by Sarah Kitchener.

JUNE 2014						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Thursday 12 June 2014: Hartlake Bridge, east of Tonbridge

Eleven KBRG members attended this meeting led by Stephen Lemon and Sue Buckingham in which, with kind permission from Hadlow Place Farm, we planned to explore the farmland, ditches and gravel pits east of the bridge.



Stephen had previously found *Carex vulpina* (True Fox-sedge) in a ditch on the northern side of the River Medway and the meeting began with Stephen leading everyone in brilliant hot sunshine to the location where JRW (probably John Richard Wallis) and later Francis Rose had recorded it in 1943 and 1952 respectively. *Carex vesicaria* (Bladder Sedge) was also present and Stephen took time to explain to the group the characteristics of each species.

A utricular examination. Photo by Sue Buckingham

Much of the heavy clay land here south of the River Medway is currently under intensive arable farming so it was a surprise to see rare plant register species *Scandix pecten-veneris* (Shepherd's-needle) growing at the margin of an otherwise virtually weed-free cereal crop. Phil Wilson remarks in *Arable Plants – a field guide (English Nature, 2003)* that the recent reappearance of this Critically Endangered species may be due to the over-use of the few herbicides to which it is resistant. Shepherd's-needle was first recorded from this area about a kilometre further east in 2013 but today we were pleased to record it in a new monad. The few other arable weeds included *Alopecurus myosuroides* (Black-grass), *Lolium multiflorum* (Italian Rye-grass) and *Matricaria chamomilla* (Scented Mayweed).

The ditches amidst the arable were very overgrown and disappointingly of little botanical interest. A recently dug long narrow water-filled pit currently being used for crop irrigation had a great deal of *Crassula helmsii* (New Zealand Pigmyweed); both *Typha latifolia* (Bulrush) and *T. angustifolia* (Lesser Bulrush) were present and

plants with leaves of intermediate width were probably *Typha x glauca*, the hybrid between the species. However, without a flower spike it was not possible to be certain. *Myosotis laxa* (Tufted Forget-me-not) and *Galium palustre* (Marsh Bedstraw) were recorded and great numbers of dragonflies and damselflies seen flying over the water.

We had lunch on the bank of a large gravel pit with *Rorippa palustris* (Marsh Yellow-cress), *Lythrum salicaria* (Purple Loose-strife) and *Potamogeton trichoides* (Hairlike Pondweed) which was growing in the shallow water close to the bank, possibly benefiting from enrichment with goose droppings!

Exploring marginal habitat. Photo by Owen Leyshon



Two stands of *Carex acuta* (Slender Tufted-sedge) in a deep ditch were admired after lunch. Stephen had traced the history of this ditch with the help of Google maps and discovered that it had been cleared of tree cover with the creation of the adjacent gravel pit in 2005. This would have benefited both *Carex acuta* and the *Carex pseudocyperus* (Cyperus Sedge) which was growing near to hand. Close by, a much younger ditch had four or five young clumps of *Carex vulpina*. This one was created in 2005 at the same time as the gravel workings and clearly demonstrates the importance of drastic clearing operations for the

survival of sedges in ditches on arable land.

Around the margins of the gravel pits *Carex spicata* (Spiked Sedge) and *Carex flacca* (Glaucous Sedge) were recorded and a fine flowering patch of *Genista tinctoria* (Dyer's Greenweed). Throughout the day we enjoyed a profusion of colourful flowering legumes, including *Lathyrus nissolia* (Grass Vetchling), *Trifolium hybridum* (Alsike Clover), *Vicia tetrasperma* (Smooth Tare), *V. hirta* (Hairy Tare) and *V. cracca* (Tufted Vetch). *Zannicellia palustris* subsp. *palustris* (Horned Pondweed) and *Potamogeton crispus* (Curled Pondweed) were hooked out of the water.

We admired the already known, main area of *Scandix pecten-veneris* just south of East Lock and some flowering *Agrostemma githago* (Corncockle) which had presumably been sown along with *Glebionis segetum* (Corn Marigold) on disturbed ground beside the lock.

Our walk took us into five monads (two tetrads) from which we acquired a total of 279 records. Tea and cake were most welcome in the shade back at Hartlake Bridge.

JUNE 2014						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Sunday 22 June 2014: Dungeness Nuclear Power Station

The twenty-five who attended this meeting, led by Owen Leyshon, were treated to a dazzling yellow blaze from a carpet of flowering *Lotus corniculatus* (Bird's-foot Trefoil) and *Glaucium flavum* (Yellow Horned-poppy) on arrival at the Dungeness 'B' station overflow car park. The scene was reminiscent of photographs of spring in Namaqualand! An invitation to the meeting had been extended to members of Kent Field Club and as a result KBRG members were joined by some KFC entomologists. Owen had acquired permission for the visit from EDF in order for us to record shingle plants within the perimeter fence of the nuclear power station and over to the large National Grid converter station.

Erodium maritimum (Sea Stork's-bill) was our first Rare Plant Register species for the day, growing abundantly on the sandy margins of the car park where in one corner a patch of *Carex arenaria* (Sand Sedge) was spotted.

The gate from the car park was opened for us by power station staff and after a safety briefing from Owen we began to explore. The group was helped greatly throughout the day by Tim Inskipp who co-ordinates the plant recording across the Dungeness shingle landscape. Tim has collated all botanical records in the last 60 years on the shingle and set them up in a large monad based spreadsheet. The two monads within the power station complex provided an opportunity not to be missed for general recording.

Typical shingle species included *Crambe maritima* (Sea Kale), *Crithmum maritimum*, (Rock Samphire), *Silene uniflora* (Sea Campion) and *Ameria maritima* (Thrift). *Teesdalia nudicaulis* (Shepherd's cress), *Silene nutans* (Nottingham Catch-fly) and *Jasione montana* (Sheep's-bit) were recorded for the rare plant register.

A wired rabbit-proof enclosure attracted everyone's attention for the comparatively luxuriant growth within. It had originally been erected to protect a plant of *Ophrys sphegodes* (Early Spider-orchid) which disappeared some years ago. Small specimens of *Hypochaeris radicata* (Common Cat's-ear) with glabrous leaves received attention but the capitula were too large for *H. glabra* (Smooth Cat's-ear) which was a possibility for the day. These plants may be the subspecies *ericetorum* mentioned in Stace's Flora for sand and shingle. It was pleasing to see *Cuscuta epithymum* (Dodder) growing quite abundantly on *Teucrium scorodonia* (Wood Sage).

For lunch we climbed up onto the high shingle artificial coastal defence bund and enjoyed a cool breeze from the sea. While we were sitting on the top a couple of Hummingbird Hawk moths flew past along the beach.



High and dry. Photo by Owen Leyshon

The birds noted through the day included adult and young Wheatears which breed in this area and the odd Linnet was seen on the gorse patches as well.

After lunch, we had a quick look in an area just south of the National Grid converter station where some redundant structures had been removed and returned to shingle, but the vegetation was sparse in this area. We then continued up the east side of the National Grid converter station, noting *Ceratocarpus claviculata* (Climbing Corydalis) and *Senecio sylvatica* (Heath Groundsel) among the gorse bushes. It was also in a couple of areas here that Dark Bush Crickets were noted and a number of caterpillars of the Buff Tip moth. Then Owen led us off to an area where *Galeopsis angustifolia* (Red Hemp-nettle) had been seen on the bend of the main road. We found one flowering plant and a good number of small seedlings in an area of recently disturbed shingle.

Finally, Owen led us through a pedestrian access gate near the roundabout and over to the 'Moat' by the Dungeness Bird Observatory to admire a good population of *Vicia lutea* (Yellow Vetch) which was still in flower and popular with the photographers.

Vicia lutea and admirers.
Photo by Owen Leyshon

The regular tea and cake session was supplemented by a box of the most splendid iced flower cupcakes you ever saw and which had been specially made for us by Owen's daughter, Lottie – a delicious end to the day.



JUNE 2014						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Friday 27 June 2014: Dibgate Sand Quarry, Cheriton, Folkestone

Owen Leyshon arranged for group access to this disused quarry, acquired three years before by the Ministry of Defence and used as a Counter Improved Explosive Device training area. There were ten of us, waved through the security barrier and escorted through various gates to the site. While the quarry only extended over about 210m x 250m, it was an area with many changes in level, aspect and habitat and it provided enough interest for most of the day's botanising, especially as for recording purposes it fell into two different monads (and tetrads).

We began at the eastern end of the quarry, where there were many ruderals, together with the first signs of some calcareous influence evidenced by the presence of *Blackstonia perfoliata* (Yellow-wort), *Carlina vulgaris* (Carlina Thistle) and *Equisetum telmateia* (Great Horsetail). The Lower Greensand here included coarse and poorly consolidated sandstone, but the terrain generally did not appear particularly acid, although *Carex muricata* (Prickly Sedge), generally a plant of acid soils, was found well scattered.

Working round the northern side of the quarry with a buzzard flying overhead we encountered the first of several rose bushes, all of which appeared to be *Rosa rubiginosa* (Sweet-briar), confirmed by its apple scent and hairy styles. Part of the northern slopes carried extensive patches of a willow, which give rise to some discussion as to whether it might be *Salix aurita* (Eared Willow) or its hybrid with *Salix cinerea* (Grey Willow) – subsequent study showed it to be the former. It would have been more expected on damp acid ground, rather than here, on an apparently dry slope with the calcicole *Viola hirta* (Hairy Violet) nearby. This was a new hectad record. So was *Polypogon monspeliensis* (Annual Beard-grass), found by Daphne Mills in a seasonally damp small gully, more usually a plant of coastal grazing marshes. In the vicinity we also found the pale flowered forma *pallida* of *Anagallis arvensis* (Scarlet Pimpernel), which seems only recently to have attracted record in East Kent, and a single diminutive specimen of *Epilobium lanceolatum* (Spear-leaved Willowherb).

Lunch was taken in the north western corner of the quarry, not far from a dried-out depression bearing *Carex riparia* (Greater Pond-sedge). Working back towards our start point, however, we found a much drier sedge-bearing habitat – a very steep-sided isolated hillock of quarry spoil, with totally improbable *Carex acuta* (Slender Tufted-sedge) well established down one precipitous face. We took some while to convince ourselves of this – it was in quite the 'wrong' part of Kent, let alone the 'wrong' habitat for a shallow water margin plant, and the most closely associated species was the dry chalk grassland plant, *Carlina vulgaris* (Carlina Thistle). However, its diagnostic characters, down to the two stigmas, were fully present; and some stunted *Typha latifolia* (Bulrush) at the top of the hillock suggested that dredgings from a wet area of the quarry had been

deposited in the past, although we could not find the sedge in any of the present wet areas. Also of interest in this general area was *Lathyrus sylvestris* (Narrow-leaved Everlasting-pea) and as we approached our parked cars we encountered some fine specimens of *Ophrys apifera* (Bee Orchid).



Plant determination – ‘when you have eliminated the impossible, whatever remains, however improbable, must be the truth’ (S. Holmes, per A. Conan Doyle). Photo by Owen Leyshon

With some time to spare, we took a short walk out of the quarry into a neighbouring monad, via a railway under-bridge with much *Asplenium adiantum-nigrum* (Black Spleenwort) on the brickwork, returning for tea and cakes/biscuits kindly supplied by Owen.

We were then escorted off the MOD land and some of the party continued to a neighbouring site for *Amsinckia*

micrantha (Common Fiddleneck), previously recorded at the quarry, but not seen by us on this occasion. This was a successful day overall, with 119 plants recorded for TR1736, 131 plants for TR1836 and 12 plants for our short foray into TR1837. There was a fair amount of overlap in the flora for the two squares into which the quarry was divided for recording purposes, but we saw 177 different taxa in the course of the day. Most memorable were the plants which ‘shouldn’t have been there’ - *Salix aurita*, *Polypogon monspeliensis* and *Carex acuta*. We are grateful to the MOD for affording us the opportunity of investigating and to Richard Goslett, the Defence Infrastructure Organisation’s rural estate surveyor, for accompanying us.

JULY 2014						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Wednesday 9 July 2014: Bramlingcourt Farm, near Wingham

Bramlingcourt is a 200 hectare arable farm dating from the fifteenth century and is currently operating under a high level stewardship scheme particularly to benefit farmland birds such as Grey Partridge, Skylark and Corn Bunting. Both Dan Tuson from Natural England and the farmer John Marland were in the yard at Bramlingcourt to welcome the nine KBRG members and to tell us about the farm and how it can operate successfully as a commercial business but still provide good habitat for birds, insects and plants. As well as adding to our own records, the day’s list would be passed on to Dan and to John, providing them with important evidence that the scheme is working. We agreed to pass on any additional sightings we might have of birds, insects, etc.

Our main target was the unsprayed field margins of the farm’s broad bean and cereal crops but to reach these involved a short walk along a lane with chalk banks where we recorded plants including *Knautia arvensis* (Field Scabious), *Inula conyzae*, (Ploughman’s-Spikenard), *Origanum vulgare* (Wild Marjoram). Our first unsprayed field margin was six metres wide, cultivated annually at the same time as the rest of the field but left unsown and unsprayed. It gave us RPR species *Euphorbia exigua* (Dwarf Spurge), which we were to come across frequently throughout the day, along with abundant *Legousia hybrida* (Venus’s-looking-glass) and occasional *Papaver hybridum* (Rough Poppy).

Anagallis arvensis subsp. *arvensis* f. *pallida*, a pale pinkish form of Scarlet Pimpernel, was spotted in a field corner among the weedy uncultivated remains of last year's Rape crop with a mass of *Silene x hampeana*, the hybrid between Red and White Campions. We had to look carefully at the fumitories to find *Fumaria densiflora* (Dense-flowered Fumitory) among *Fumaria officinalis* Common Fumitory and we got used to spotting its distinctive rounded sepals. Both *Kickxia* (Fluellen) species were found but not in great quantity, though we may have been a little early for them.



Lunch was had in a field corner near to the southern edge of the farm not far from a large patch of RPR species *Anthemis cotula* (Stinking Chamomile) and shortly afterwards two large drifts of *Bromus secalinus* (Rye Brome) along the crop margin.

'Good' weeds (Papaver rhoeas)

Noxious weeds (Cirsium arvense).

Photos by Sue Buckingham

All day we were treated to the "jangling keys" of singing male Corn Buntings, Skylarks, good views of Buzzards, a Marsh Harrier, various butterflies, moths, bush-crickets and a very close view of a hare as it ran past.

The day's total of 316 plant records was collected from the arable margins, the lanes and various areas of unsprayed unfertilised crop and other rough grassland areas. They were from four monads across three tetrads. A species list will be passed on to Natural England and the farmer in due course.



Tea and cake were enjoyed in the farmyard.

JULY 2014						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Wednesday 16 July 2014: Lullingstone (Grasses Day)

Twenty-three members met outside the Tudor gatehouse of Lullingstone Castle for a day concentrating on grass identification, ably led by Mervyn Brown. We all learnt much from Mervyn, particularly what is not to be found in identification books. It may or may not have been consoling to appreciate that not all grasses can be fully named, given that cultivars have been sown around the countryside which depart considerably from the typical form of species. Near the gatehouse we happened upon a grass which could only be described as *Poa*

pratensis (Smooth Meadow-grass) in the wide sense, given that it was intermediate between *Poa humilis* (Spreading Meadow-grass) and the typical form of *Poa pratensis*.

We had only gone a few steps further when Mervyn pointed out *Bromus ramosus* subsp. *benekenii* (= *Bromopsis benekenii*, Lesser Hairy-brome), all too easily passed by un-noticed, and (until recently) unrecorded in Kent



since 1986. It had been on our county 'probably extinct' list. Just to show that this was not a fluke occurrence, he directed us later to this grass near Shoreham as well. It could easily have been taken for a common grass with a drooping panicle such as *Brachypodium sylvaticum* (False-brome), which was growing in similar habitats or *Schedonorus giganteus* (Giant Fescue), which we saw a little later. Lesser Hairy-brome's close relative, the common grass *Bromus ramosus* subsp. *ramosus* (= *Bromopsis ramosa*, Hairy-brome) was growing nearby, which helped us appreciate the difference between them, although it has to be said that intermediates seem to be not unusual. A key feature of the rare grass was the lack of hairs on the small scale below the lowest panicle branches.

Mervyn examines Lesser Hairy-brome's hairless scale. Photo by Geoffrey Kitchener

Bromus ramosus subsp. *benekenii*. Photo by Liam Rooney

We then followed the riverside path, on the edge of which *Elymus caninus* (Bearded Couch) grew, its awns providing the beard, to the visitor centre. Near this, Mervyn directed us to *Bromopsis inermis* subsp. *inermis* (Hungarian Brome), whose lack of awns provides the Latin name, presumably as being defenceless against herbivores, not that there were any here. A cereal field gave us sight of *Anisantha diandra* (Great Brome) as a crop weed and curiously, there were tufts of grass along the margin which Mervyn identified as *Festuca rubra* subsp. *commutata* (Chewing's Fescue), normally sown as a lawn grass.



After lunch by Lullingstone Castle we re-convened near Shoreham Station and followed a field margin above the A225. Three Bent-grasses were growing in the margin: *Agrostis stolonifera* (Creeping Bent), whose panicle contracts after flowering; *Agrostis capillaris* (Common Bent) whose panicle remains open; and *Agrostis gigantea* (Black Bent), whose panicle remains open but with spikelets which are somewhat clumped together. Also in the margin were tufts of *Festuca ovina* agg. (Sheep's-fescue), raising a suspicion that these had been sown and were not necessarily the true native species. A non-graminoid discovery along this boundary was a seedling of what appeared to be *Sorbus x thuringiaca* (the hybrid between Rowan and Common Whitebeam), with leaves lobed at the base, the lowest lobes almost constituting free pinnae, albeit as a whole it appeared to be closer to the Whitebeam parent. This might suggest an F₂ cross, particularly in that there is an old record for a hybrid tree in the same hedge-line, but the BSBI *Sorbus* handbook suggests that F₂ crosses are unlikely to occur.

Near the junction with Fackenden Lane, Mervyn directed us to another location for *Bromus ramosus* subsp. *benekenii*, growing in a marginal shaded habitat on chalk, again with its commoner relative, subsp. *ramosus* growing nearby. Across the road we almost missed *Puccinellia distans* (Reflexed Saltmarsh-grass), taking advantage of the winter application of highway de-icing salt, and Fackenden Lane itself had *Melica uniflora* (Wood Melick) and *Poa nemoralis* (Wood Meadow-grass) on its banks. We then traversed White Hill, with its

chalk grassland somewhat in need of management but bearing *Briza media* (Quaking-grass) and what is usually more an East Kent plant than West, Tor-grass (*Brachypodium rupestre*, but previously treated as *B. pinnatum*).



Bromopsis inermis attracts interest.
Photo by Geoffrey Kitchener

The meeting concluded with refreshments at Lullingstone World Garden organised by Mervyn and by Louise Scott; and a guided tour of the garden by Tom Hart Dyke in which Poaceae were represented by bamboos and we were treated to sight of a remarkable range of exotic and unusual plants. In all, a most memorable day.

AUGUST 2014						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Tuesday 5 August 2014: Dering Wood, near Pluckley

There weren't too many dog walkers using the small Woodland Trust car park at Dering Wood, so luckily there was just enough parking space for the sixteen KBRG members who arrived on a lovely sunny morning for this meeting, led by Owen Leyshon and Sue Buckingham.

Dering Wood covers some 300 acres of predominantly ancient mixed broadleaved woodland on Weald clay. It is both a Woodland Trust Reserve and a Local Wildlife site. The heavy clay soils vary from slightly acidic at the southern end to more calcareous in the north. In 2009 a KWT survey recorded twenty-nine ancient woodland indicator species. We hoped to find *Epipactis purpurata* (Violet Helleborine) and *Hypopitys monotropa* (Yellow Bird's-nest), and to acquire a good quantity of general records.

We began by making for some recently cleared hornbeam coppice where *Hypopitys* had been recorded but unfortunately the area was very overgrown and impenetrable. Instead we set out along one of the many wide



rides that criss-cross the wood and onto a fairly acidic area, recording everything we saw including *Solidago virguarea* (Goldenrod), *Senecio sylvaticus* (Heath Groundsel), *Gnaphalium uliginosum* (Marsh Cudweed), *Lythrum portula* (Water-purslane) and *Carex pilulifera* (Pill Sedge). Brian Woodhams pointed out fruiting *Viola x bavarica*, the hybrid between Common and Early Dog-violets, in three different places during the day.

Photo by Owen Leyshon

A bracken-lined ride which led down to a wetter part of the wood soon provided *Scutellaria minor* (Lesser

Skullcap) and, surprisingly, a plant of Black Knapweed which fitted the Stace description for *Centaurea debauxii* (whose vernacular name of Chalk Knapweed may not be entirely apt)! A stand of *Athyrium filix-femina* (Lady-

fern) was admired by all and then everyone was down on hands and knees to inspect rare plant register species *Centunculus minima* (Chaffweed), which was growing quite abundantly amongst *Mentha arvensis* (Corn Mint), *Galium palustre* (Marsh Bedstraw) and *Lythrum portula*.

In spite of various sorties off the path into the Hornbeam coppice we were unable to find any Violet Helleborine. The recent dry weather may have been to blame but lack of ride management and shrubby overgrown coppice margins certainly weren't helping us or the Helleborines and it was agreed to pass on to the Woodland Trust the need for action to rectify this.

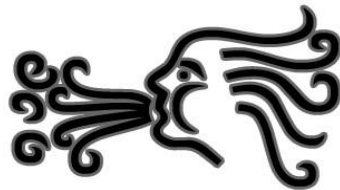
Lunch was taken on a dry heathy ride with *Polygala serpyllifolia* (Heath Milkwort), *Succisa pratensis* (Devil's-bit Scabious), *Potentilla erecta* (Tormentil) and a little *Calluna vulgaris* (Heather). *Pedicularis sylvatica* (Lousewort) took a little extra searching.

After lunch we found ourselves on richer deeper soils in the north western part of the wood with some fine coppiced *Quercus petraea* (Sessile Oak), and gradually a more diverse list of woodland species was put together, including *Frangula alnus* (Alder Buckthorn), *Crataegus laevigata* (Midland Hawthorn), *Tamus communis* (Black Bryony), *Ajuga reptans* (Bugle) and *Dactylorhiza fuchsii* (Common Spotted-orchid).

An impressive list of records for the day included nine *Carex* species. Non-botanical sightings were of Clouded Yellow butterfly, large numbers of Migrant Hawkers (*Aeshna mixta*) and the odd Southern Hawker (*Aeshna cyanea*), along with Common Darters (*Sympetrum striolatum*) and the inevitable Buzzards and a single Hobby was seen as well. Throughout the day numerous small Common Frogs were encountered hopping across the rides, following rain on the day before, which must have triggered some activity.

Tea, cake and Welsh cakes were enjoyed in the car park at the end of a most enjoyable day in this fine and remarkably diverse old wood.

AUGUST 2014						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						



Sunday, 10 August 2014: Iden Lock

This meeting was cancelled as the Met Office issued a weather warning while ex-hurricane Bertha passed through.

SEPTEMBER 2014						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Thursday, 4 September 2014: Mereworth Woods

The Mereworth Woods complex form part of the largest tract of woodland, apart from Blean Woods, in the whole of Kent. The purpose of our meeting was to acquire general records from at least two monads in the southern area just north of Gover Hill, where it was hoped that recent sweet chestnut coppicing might encourage a good appearance of *Gnaphalium sylvaticum* (Heath Cudweed) for the rare plant register.

The soils here are largely derived from Lower Greensand and are acidic, especially on the higher ground, whilst in the valleys deeper, more alkaline soils occur. Although much of the area, formerly all broadleaved ancient woodland, has been converted to pure sweet chestnut coppice and other tree plantations, over 60 ancient woodland indicator species have been recorded and the entire area is a KWT Local Wildlife site.

Our first record only just off the roadside was for *Alchemilla mollis* (Garden Lady's-mantle), no doubt from discarded garden waste. Cameras came out for a fine specimen of *Solanum lycopersicum* (Tomato), with both

flowers and fruits, amidst sprouting coppice stools nearby, as also for a large unexpected population of *Impatiens parviflora* (Small Balsam).



Photo by Rodney Burton

Amongst the cut coppice was an attractive low carpet of acid-loving species such as *Hypericum humifusum* (Trailing St John's-wort), *Galium saxatile* (Heath Bedstraw), *Veronica officinalis* (Heath Speedwell) and *Carex pilifera*, (Pill Sedge). Taller flowering plants including *Solidago virgaurea* (Goldenrod), *Succisa pratensis* (Devil's-bit Scabious), *Potentilla erecta* (Tormentil), *Teucrium scorodonia* (Wood Sage) and a little *Calluna*



vulgaris (Heather) lined the path. In one such spot Mervyn Brown spotted a patch of *Agrostis vinealis* (Brown Bent) amongst the herbage and the much more common *A. capillaris* (Common Bent). After detailed explanation of its characteristics and comparisons between the species, Mervyn continued to find more *Agrostis vinealis* throughout the day and we now have records for it in two tetrads within Mereworth Woods.

Peripatetic pirri-pirri-bur. Photo by Sue Buckingham

Only a foot or so from the *Agrostis* two plants of *Gnaphalium sylvaticum* (Heath Cudweed) were spotted and a couple more just two hundred yards away in recent coppice and not far from *Clinopodium vulgare* (Wild Basil), which seemed a bit out of place. Fruiting *Acaena novae-zelandiae* (Pirri-pirri-bur) was seen along the path. Introduced into Mereworth Woods in sheep fleeces used for shoddy fertiliser, its hooked achenes have enabled it to spread aggressively along many of the paths and rides. We were to come across much more later on in

the day when the burs became fixed to our boots and trousers.

The path dropped down sharply into a valley where deeper soils brought about a very obvious vegetation change. Woodland ferns including *Athyrium filix-femina* (Lady-fern) now lined the path and we admired a large patch of fruiting *Paris quadrifolia* (Herb-paris).

Back on the high dry plateau we had lunch on the edge of *Quercus petraea* (Sessile Oak) woodland with an under-storey of *Vaccinium myrtillus* (Bilberry). *Erica cinerea* (Bell Heather) and *Melampyrum pratense*, (Common Cow-wheat) were welcome additions. A patch of abnormally tall *Agrostis vinealis* received Mervyn's attention. He later re-confirmed its identity after checking out the measurement range. The plants were 10cm longer than is quoted for the species (up to 60cm), but as the appearance was not coarse enough to suggest *A. gigantea* he considers that we should leave the specimen with its *A. vinealis* identification since as it corresponds in all features other than height.

A specimen of *Potentilla* with four petals, trailing stems and numerous good looking achenes was spotted alongside a track and a specimen later sent to the BSBI referee, Dr Brenda Harold, for determination. Brenda was pleased to confirm its identity as *Potentilla anglica* (Trailing Tormentil), using both the microscopic size of its pollen grains and what she describes as the main distinguishing feature of *P. anglica*, namely the ternate leaves, with quite broad leaflets whose teeth are confined to the distal part making them look a bit fan-shaped. The much commoner Hybrid Cinquefoil, *Potentilla x mixta* which also trails and has four or five petals,

is highly sterile with 0 to a few achenes per flower and our plant had more than 20 good swollen ones per head.

We made a total of 264 records from this very interesting area, which some of us knew from nocturnal nightjar watching trips but weren't so familiar with its botany. We made a non-botanical record for a dead mole and finally we agreed to take great care to remove every last Pirri-pirri-bur achene from boots, trousers, etc., before setting out anywhere else.

OCTOBER 2014						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Friday, 3 October 2014: Elmley, Isle of Sheppey

With a brilliant clear blue sky and temperatures of 22°C we couldn't have wished for a better October day for our last meeting of 2014, led by Liam Rooney and Sue Buckingham. The purpose was to concentrate on saltmarsh plants and in particular *Salicornia*, glasswort species, in Sharfleet, Cockleshell and Wellmarsh Creeks in the south of the Elmley National Nature Reserve. This 3000 acre reserve is owned and managed by a farming family who graze some 700 cattle on its vast freshwater marshes for the benefit of birds, hares and wildlife in general. Up until May 2013 the RSPB were looking after part of the reserve but management is currently back in the hands of the owners who very kindly gave us permission to botanise in areas which are normally out of bounds to the public.



Glassworts galore. Photo by Geoffrey Kitchener

Our group of 13 members and friends began exploring the saltmarsh on the western side of Wellmarsh Creek where plenty of *Salicornia* plants were colouring up well, this being a helpful aid to glasswort identification in late summer and autumn. Liam began by patiently explaining the features of *S. ramosissima* (Purple Glasswort) and *S. fragilis* (Yellow Glasswort) both of which were in good quantity. Many *S. ramosissima* plants with their strongly beaded fruiting segments were turning a characteristic reddish-purple whilst *S. fragilis* plants were mostly yellow or yellowish with long terminal spikes consisting of up to 22 more or less straight-sided segments. A few plants of the similarly coloured *S. dolichostachya* (Long-spiked Glasswort) were picked out by virtue of their tapering terminal spikes, and where they had more than 22 segments, they were clearly beyond the range of non-tapering *S. fragilis*. With all meeting participants equipped with copies of keys and descriptive text from both Clive Stace's *New Flora* and *The Plant Crib* we were all able to take part in lively discussion and debate on this very difficult group.

On bare mud towards the upper part of the marsh we found a few plants of *S. pusilla* (One-flowered Glasswort) which has only one flower (instead of the usual three) to each cluster. This makes *S. pusilla* easy to identify; however, other plants which initially appeared to have only one flower were found on closer inspection to have the occasional three- or two-flowered clusters, suggesting either that they were young plants of *S. ramosissima* or possible hybrids between the two species. For the latter, one should be able to see a cluster of three or two flowers above the single ones.

Along the creek margins *Sarcocornia perennis* (Perennial Glasswort) was a welcome find as it proved to be the easiest glasswort to identify on account of its creeping rhizomes and abundant non-fertile shoots.

S. europaea (Common Glasswort) was thought to be present at one point with three bright green, well branched plants growing together on bare mud. The segments were relatively straight-sided with a good

acute cusped pointed angle at the apex but the scarious margin to the top edge of the segments appeared to be too wide for the species.



Similarly plants were examined for possible *S. obscura* (Glaucous Glasswort). The growth habit and colour agreed well with its description but uncertainty over exactly what is meant by the scarious margin required material to be taken home for further investigation.

Lunch on the sea wall. Photo by Sue Buckingham

At the seaward edge of the saltmarsh in Wellmarsh Creek a quantity of fragments of *Zostera marina* (Eelgrass) complete with flowers and fruits enclosed in their leaf-sheaths were freely floating in a shallow pool, presumably having been bitten off by wildfowl feeding on the beds out in the Swale and then washed in with the tide.

Fishing for eelgrass. Photo by Geoffrey Kitchener

For the rare plant register we came away with records in both monads for *Zostera*, four Glasswort species and *Inula crithmoides* (Golden Samphire). A short walk inland at the end of the afternoon into the very dry well grazed marsh added *Chenopodium glaucum* (Oak-leaved Glasswort) and *Plantago major* subsp. *intermedia* although the last two had previously been recorded there.



All day we enjoyed the sights and sounds of wading birds, views of Hobby, Marsh Harrier, Hares and Clouded Yellow butterflies. Thanks to our host Gareth Fulton and particularly to Liam who not only guided us through the identification of this very difficult group of plants but also provided cakes to go with our tea at the end of the day.

Rare plant register revisited

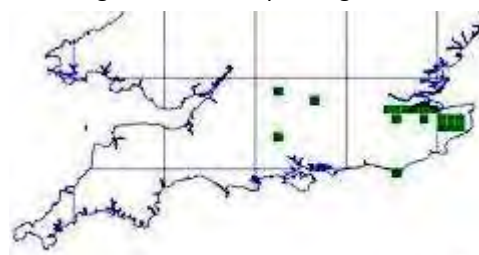


Did you think that *Briza media* (Quaking-grass) is rare? Or *Campanula rotundifolia* (Harebell), *Knautia arvensis* (Field Scabious), *Oxalis acetosella* (Wood-sorrel), *Fragaria vesca* (Wild Strawberry), *Calluna vulgaris* (Heather) or *Solidago virgaurea* (Goldenrod)? Probably not, although you might have thought that these are 'worthy' plants and indicators of what are likely to be habitats good for searching generally. (To that extent, they might be regarded as good candidates for our axiophyte list – see Sue Buckingham's report in section 4 of the AGM minutes below.)

Solidago virgaurea at Dover, 2014, an addition to the rare plant register. Photo by Geoffrey Kitchener

However, we do now need to think of these as potential plants for the rare plant register following the publication launch of *A Vascular Plant Red List for England* on 17 September 2014. The Red List gives the conservation status of native plants (including ancient introductions), whether they are extinct (EX, RE or EW), critically endangered (CR), endangered (EN), vulnerable (VU), near threatened (NR) or there are no particular concerns about a plant being at risk (least concern – LC). These status categories are based on International Union for Conservation of Nature standards. Broadly speaking, they are concerned with the position where a plant is restricted to locations which are few or not widespread, or where a plant is declining significantly.

Our rare plant register list has regard to these conservation status categories and includes all those plants with a material risk of extinction (CR, EN, VU or NR). This is the case, even though the plant may not be particularly rare in Kent, because the information we have about how such plants are coping in Kent could be relevant to how they are faring elsewhere, and how conservation might be managed. An example might be *Orchis purpurea* (Lady Orchid) where we have many East Kent sites, some quite substantial, but there are very few sites outside Kent – see map of 2010-14 records ⇨.



Until now we have used the threat categories published for Great Britain, but the new Red List for England assesses many plants with different results. The Bluebell of Scotland (*Campanula rotundifolia*) no doubt still flourishes in Scotland, but (as Harebell) in England, whilst still common, it is on a downward trend. It is a poor competitor with vigorous grasses and so suffers where habitats develop coarser vegetation and it appears to react poorly to nitrogen deposition. In England we have many species which are still widespread but which show decline with the loss of lowland heath and unimproved grassland; the susceptibility of wet infertile soils to eutrophication, cessation of grazing or hydrological changes; and the conversion of ancient woodland to farming or plantations.

Even so, the results of this assessment seem counter-intuitive at times, with a risk rating applied to *Cruciata laevipes* (Crosswort); and with the same rating (Near Threatened) applied in England to both *Eryngium campestre* (Field Eryngo) (critically endangered in the British Isles, although hardly present other than in England) and *Eryngium maritimum* (Sea-holly).

Plants which now have a threat category of CR, EN, VU or NR in England, even though over Great Britain as a whole the threat is only of 'Least Concern', are listed below, where relevant to (and not already in) the Kent rare plant register. It is proposed that they will be added to the register and so records of these will be particularly welcome. In general, however, we will not need map references beyond monad level.

- Artemisia maritima* (Sea Wormwood)
- Briza media* (Quaking-grass)
- Calystegia soldanella* (Sea Bindweed)
- Calluna vulgaris* (Heather)
- Campanula rotundifolia* (Harebell)
- Carlina vulgaris* (Carlina Thistle)
- Cerastium arvense* (Field Mouse-ear)
- Cichorium intybus* (Chicory)
- Cruciata laevipes* (Crosswort)
- Erica cinerea* (Bell Heather)
- Erica tetralix* (Cross-leaved Heath)
- Eryngium maritimum* (Sea-holly)
- Erysimum cheiranthoides* (Treacle-mustard)
- Filago minima* (Small Cudweed)
- Fragaria vesca* (Wild Strawberry)
- Genista tinctoria* (Dyer's Greenweed)
- Gentianella amarella* (Autumn Gentian)
- Glaucium flavum* (Yellow Horned-poppy)

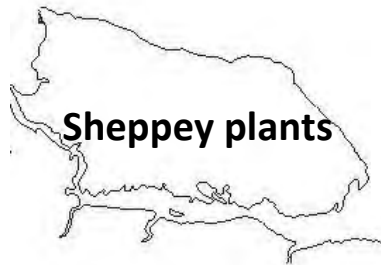
- Helianthemum nummularium* (Common Rock-rose)
- Hottonia palustris* (Water-violet)
- Knautia arvensis* (Field Scabious)
- Lathyrus linifolius* (Bitter-vetch)
- Lepidium campestre* (Field Pepperwort)
- Melampyrum pratense* (Common Cow-wheat)
- Mentha arvensis* (Corn Mint)
- Moenchia erecta* (Upright Chickweed)
- Oenanthe lachenalii* (Parsley Water-dropwort)
- Ononis spinosa* (Spiny Restharrow)
- Oxalis acetosella* (Wood-sorrel)
- Pedicularis sylvatica* (Lousewort)
- Pheum arenarium* (Sand Cat's-tail)
- Plantago media* (Hoary Plantain)
- Polygala serpyllifolia* (Heath Milkwort)
- Potentilla erecta* (Tormentil)
- Prunus cerasus* (Dwarf Cherry)
- Ranunculus flammula* (Lesser Spearwort)

Ruppia maritima (Beaked Tasselweed)
Sanicula europaea (Sanicle)
Silene flos-cuculi (Ragged-Robin)
Solidago virgaurea (Goldenrod)
Succisa pratensis (Devil's-bit Scabious)

Trifolium fragiferum (Strawberry Clover)
Valeriana officinalis (Common Valerian)
Veronica officinalis (Heath Speedwell)
Veronica scutellata (Marsh Speedwell)

Checking through the conservation status of species generally has revealed that *Glebionis segetum* (Corn Marigold) and *Cuscuta epithymum* (Dodder) were inadvertently omitted from the list until now and should be included.

What is the rare plant register? Paradoxically, it is not about all of our rarest plants, many of which have arrived in Kent, or the British Isles, relatively recently with the assistance of man and have no claim to be native. Rather, the register is about native plants, including ancient introductions, which are at risk, whether in Kent or more widely. Hopefully, the register information will assist in understanding the nature of the risk, as it applies to Kent plants and can be used to inform decisions which might affect them. The latest batch of 'at risk' plants is consistent with that objective, but the quantity of relatively common plants identified as in decline in England (but still common) means that the name 'rare plant register' may conjure up expectations no longer sit comfortably with that name.



Readers who are not also members of the Kent Field Club may be interested to know of the content relevant to botany of volume 18 of the Club's transactions, published this year as *The Natural History of the Isle of Sheppey*. There are some fascinating accounts of habitats and landscape in Chris Young's *The geology and landscape of the Isle of Sheppey*, Nick Delaney's *Revisiting the habitat definition of the marshes on Chetney and the Isle of Sheppey*, and John Badmin's *Sheppey's saltmarshes and Flora and fauna of the soft cliffs of Sheppey*. Ian Tittle's *Sheppey: observations on its long history of natural history and flora* includes an interesting account of historic botanical collectors on the island and their records, and adds to the listing of species and the current flora status contained in Geoffrey Kitchener's account of *The vascular plants of Sheppey*. A lot of work by John Badmin has gone into producing a volume which is both very readable and scientifically valuable.

Minutes of the Kent Botanical Recording Group Annual General Meeting 2.00 p.m., Sunday 29 March 2014

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

1 WELCOME

The Chairman began by thanking everyone for coming along to the meeting and Sue Buckingham for agreeing to take the minutes.

2 APOLOGIES FOR ABSENCE had been received from Chris Rose, Georgina Hopkins, Jan Armishaw, Jenny Gibb, Margot Birkbeck, Margot Godfrey, Richard Ludlow, Rodney Burton and Rosemary Pavis.

3 MINUTES OF AGM held on 24 March 2013

These were published in newsletter no. 6 which was circulated to all members at the time and published on our webpage. The Chairman proposed that the minutes should be adopted as a true record of the proceedings, which they were with no objections. **Matters arising** from those minutes were comments about widening leadership of field meetings and encouraging meetings with permission over private land and he said that these would be covered in the natural course of the agenda.

4 REPORTS FOR THE YEAR

The Chairman's reports were illustrated by slides and he thanked Liam Rooney for providing most of the photographs.

Membership

The Chairman said that from our start in 2010, we have continued to increase in number and membership currently stood at 95. He showed a graph illustrating a large early build-up of members and although the curve was flattening out now, it continued to rise. He said that he imagined it would increase gradually after we reach 100 members and maybe peak at 120–130. The main source of new members seemed to be by people spotting us on the BSBI website and although some of our members might be less active than others, their support contributed to our wider recognition.

Meetings

In addition to the 2013 AGM at Tyland Barn last year we held ten field meetings, two more than the previous season and we had reasonable take-up for all. The meetings included joint sessions with our neighbouring counterpart recording groups in Surrey and Sussex with walks crossing the county boundaries. This year we have twelve field meetings and the Chairman thanked Owen Leyshon and Sue Buckingham for organising the programme. The Chairman said it was particularly gratifying that a range of members are leading or co-leading these sessions; and that several involve access over private land with permission so that we have opportunities of recording where botanists would not normally go, such as the Hadlow estate, Ministry of Defence property and a

nuclear power station. This year we also have a reciprocal arrangement with the Kent Field Club over weekend meetings, giving us a total of seventeen meetings, a remarkable set of opportunities. KFC is likely to have a wider focus of wildlife interest than botany which may suit many KBRG members and we also have the opportunity of identifying their plant records to the appropriate 1km square grid reference, which is generally lacking from Field Club reports but is at the heart of KBRG recording.

The Chairman asked for comments from members about the meetings and suggestions for what we might do for next year. There were no responses.

Publications

Since the last AGM, publications were as follows:

- A newsletter in October
- Kent Botany 2013, thirty-five pages of reports on the Group's finds over the year
- Parts D and E of the rare plant register went onto the website after members' feedback: Part F was issued for consultation and afterwards also went on the website and Part G has been issued for consultation.

Twenty new species accounts for the RPR had been issued since last March which was not as fast as the Chairman would have liked. With 106 out of 268 accounts now completed we had reached 40%. However, we continue to progress and have this year received further helpful data on the county's rare plants from KMBRC (Kent and Medway Biological Records Centre). He emphasised that all of the previous issues of register plants have been updated and reissued this year, reflecting the concept that the register should be a live document taking in new records and developments as they materialise. He gave Stephen Lemon's and Joyce Pitt's exciting new 2013 discoveries for our rarer sedges as an example of such developments which are all included in the February 2014 reissues. Those reissues also comprised the list of rare plants and 'probably extinct' ones.

The Chairman reminded members to look on the website for the RPR updates as they are too bulky to send out to everyone by e-mail. He asked for comments on publications and **Sue Poyser** congratulated him on the excellence of his work on them.

Finances

There continues to be no need to introduce membership subscriptions because we operate

through the internet for publications and e-mail; BSBI provides our website service (for which the Chairman thanked Alex Lockton); there are no postage costs except for a couple of members for whom there are special arrangements; and Kent Wildlife Trust provide our meeting room free of charge. The Chairman asked for comments on finances and when asked if he was out of pocket, he gave assurance that he was not and that there were simply no finances.

Recording

As a general report on the 2013 recording position was published in Kent Botany 2013, the Chairman said he would try not to duplicate that too much as he continued to give the current position:

- In four years' recording we have reached 100,000 records, exceeding this in early January. At the AGM date, the total was over 103,000 with at least 2,000 more to input.
- He showed a slide to demonstrate that when projected out to ten years' recording, finishing at the end of 2019, a total of 250,000 records is reached, about what was achieved over 15 years for the New Atlas of the Kent Flora. He explained that our 2013 records have been shared with BSBI and that passing on 2013 data had also been discussed with KMBRC and would be completed shortly once there is nothing more to input for last year.
- The highest number of 2013 records for a 10km square was from TQ75 Maidstone with 1697 records and these came from a number of sources but particularly from the Chairman and his wife Sarah as they walked the Medway Valley walk. Next was TQ56, the Darent valley, with 1511 records, a lot of these from Rodney Burton; and then TQ57, the Dartford/Crayford area, with 1434, again with many contributions from Rodney including sightings from LNHS meetings. There were 1406 records from TQ76, the Medway valley through to Rochester, from several recorders, mostly from Sue Poyser and Doug Grant.
- There are 66 10km squares covering land in botanical Kent, sometimes just a few square yards. Sixty one of them have *Plantago lanceolata* (Ribwort Plantain) recorded since 2010 and sixty have *Urtica dioica* (Common Nettle) and *Galium*

aparine (Cleavers). These seem to be our most widespread plants.

Rare plant register

The Chairman reported that in 2013 we had 842 rare plant records, including 11 species which had otherwise not been seen since before 2010, and in some cases much earlier. *Eleocharis uniglumis* (Slender Spike-rush) was not recorded for the New Atlas of the Kent Flora, although apparently there was a sighting in 2004. This is now back as a current species and Stephen Lemon will be showing it to us in a field meeting programmed for June.

Lactuca saligna (Least Lettuce), recorded only in one location in the New Atlas (where regarded with suspicion), has been rediscovered in 2013 at a major Sheppey site with over 1,000 plants and the Chairman showed a slide of the survey in process.

Doug Grant asked if *Lactuca saligna* had also been rediscovered at its Yantlet Creek site as he possesses some of Eric's old recording cards including grid references for certain species. The Chairman said that it had been re-found there but that there are public access issues.

New records are added to rare plant register accounts where there is already one drafted but where there is not, records and photos are saved up for the drafting or a preliminary draft may be prepared for when the relevant part of the register is being put together. Amongst others, the White Helleborine account was updated and there are now more records in four seasons than in the fifteen years of survey covered by the New Atlas of the Kent Flora.

Axiophytes

This report was given by Sue Buckingham who began by quoting from BSBI's national website in order to explain the meaning of the term. 'Axiophytes are worthy plants, the forty percent or so of species that arouse interest and praise from botanists when they are seen. They are indicators of habitat that is considered important for conservation, such as ancient woodlands, clear water and species-rich meadows. Lists of axiophytes provide a powerful technique for determining conservation priorities. Sites with many axiophytes are usually of greater importance than those with fewer; and changes in the number of axiophytes in a site over time can be used for monitoring the outcome of management practices. They are not the same as rare plants: species that have only ever been recorded in one or two sites

in a county are often just chance occurrences and have little ecological (or statistical) significance.'

Sue explained that she had drawn up a preliminary list for Kent, using the guidelines set out by BSBI. She emphasised that it was very much in its early stages, needed more thought and testing in the field and possibly input by others before it is finalised. A draft copy indicating progress to date was available for members to take a look.

Lesley Mason suggested that there might be crossover between the key indicator species which are used by surveyors when demonstrating the better quality unimproved grassland types and the axiophytes.

When asked how long it should take to complete our axiophyte list, **Alex Lockton** replied that it takes years and we should consider it to be a long term project. As part of BSBI recording strategy it needs to be finalised by 2019. Sue asked if we should include those plants which are notoriously difficult to identify, e.g. *Agrostis vinealis*, and he replied that because it was us who would be doing the recording, it was fine to include difficult, though not critical species and we might want to consider including mosses as well. **Alex** suggested marking probable axiophytes onto a recording card in order to test them in the field and finally the Chairman suggested trialling the axiophyte list on field meetings this summer. **Action: Sue Buckingham.**

5 GENERAL RECORDING

The Chairman explained that this was listed as a separate item on the agenda because it involved looking at the strategic direction in which the Group is going as regards recording. He said that up until the present we have been emphasizing the importance of rare plant register records as we have plenty of information about the recent distribution of commoner species in the New Atlas of the Kent Flora. We have been including on the database any records for plants generally but had not made a special appeal for them although we had acquired 100,000 in four seasons. BSBI treats plant records in ten year bands, the current one being from 2010 to 2019, and this helps us to detect changes in plant distribution as well as paving the way for publication of a new national Atlas around 2024. For these reasons he said that we need to aim for good county recording coverage by the end of 2019 and he would welcome even more general records from now until then. He went on to give some guidance and information on general recording:

- General records will be welcome from anyone as long as the recorder is justifiably confident of their identification. The minimum needed for a record is the plant name, the date of finding, who found and identified it and where, i.e. a place name and map reference (at least the 1km Ordnance Survey square).
- Ideally lists should come from under-recorded 1km squares. The Chairman showed a map with all of the 1km squares where we have records already, coloured red, coverage being good but a little patchy in the Weald. However, some of the coloured squares had only one record so more were needed. With 2780 1km squares in East Kent and 1703 in West Kent, some without access, he said that he did not expect that we would get into every single one in the county and that was not necessary. For a good spread of records, we need to achieve good sampling with no large gaps.
- With regard to even recording spread, the Chairman had done some analysis of the number of records in each 10km square and he projected a map showing four currently under-recorded squares: TQ74, TQ84, TQ95 and TR03. They cover Marden, Headcorn, Doddington and Hamstreet (and are not areas which include sea or any of the surrounding counties) and he suggested that these might be priority survey areas, at least for the current year.
- The next county map showed the relative number of species recorded in each 10km square in which TQ74, TQ84, TQ95 and TR03 also showed fairly low number of species records (as well as overall record numbers). However, TR26 which includes Stourmouth and Chislehurst doesn't have a high number of records but does show a reasonable number of species. In contrast TQ87 which includes Grain, has a reasonable number of records but not many different species and TQ37 up into London, where Middlesex, Surrey and West Kent join, also shows low species numbers; however, the Chairman anticipated that more recording effort would take place in TQ37 within the Greater London Flora project.
- The final map showed total number of species recorded from 2010 onwards for

each 2km (or tetrad) square and he explained that he could make this available generally for recorders to see when deciding where recording is worthwhile. Although we actually want 1km square records and the map is at 2km level for easy viewing, he pointed out that if a 2km square is poorly recorded then any of the 1km squares in it would be worth surveying, whether or not it is in a 10km priority square. He also said that he was easily able to e-mail to members a list of what is known from any 1km square on request.

The Chairman asked for members' comments and opinions on the shift of our recording emphasis and they are as follows.

Lorna Holland asked if Plantlife was planning to share the records collected from its current recording project with the BSBI. The Chairman replied that because the Plantlife Survey was based on quadrats and transects rather than on monad based recording there was limited cross-over with our recording plans; he had not been involved yet, although it could be that a link might develop in the future.

Lesley Mason asked if the Chairman receives the records that she sends to KMBRC from her survey work, to which he replied that he had so far received only rare plant data from KMBRC and not all records en masse. KMBRC share data with us but they are understandably reluctant to have all of their records passed via us to BSBI and then onto BSBI database, because of concerns about ownership. Lesley had asked because she did not want to cause unnecessary duplication to which the Chairman replied he was not too concerned about that and KMRC's data contained a fair amount of duplication in any event.

Alex Lockton enquired if any Kent members had copies of MapMate for recording purposes and whether the Chairman accepted sync files directly from them. To this the Chairman replied that he was only aware of Liam Rooney as a current regular contributor using MapMate [Note added to minutes: we do, however, have other MapMate users, including Jacky Langton, Jon Bramley, Tim Inskipp and, from summer 2014, Stephen Lemon]; and that, on recommendation, when importing records from MapMate users, he asked for Mapmate records to be first converted into a spreadsheet so that he had editorship before incorporating them. Furthermore, he said that if any member wanted to buy a copy of MapMate to work with then he would be happy to send them all of the records that we have so far on the current

MapMate database, which would obviously be a great bonus.

It was generally agreed that a copy of the Chairman's final map showing the total number of species recorded from 2010 for each 2km square would be welcome as a general mailing from him.

Action: Geoffrey Kitchener.

Doug Grant wondered if he was doing the right thing in recording from every monad in his chosen area where he is covering his two local 10km squares. There followed discussion about staying local and also about revisiting monads within three or four years or at least at a different time of year. Doug commented on the changes that were apparent in recording the same areas for Eric's two Atlases, which in itself would make an interesting study.

Alex Lockton felt it would be unfortunate to have to revisit monads because a recorder had chosen not to record particular groups of plants.

Pauline Heathcote asked about those squares with no or very few records and how one could know if these were not simply areas with few plants.

Lesley Mason said that when surveying for the ARCH (Assessing Regional Habitat Change) Kent Habitat Survey, only limited numbers of species were recorded in each parcel of land surveyed. These were generally the key indicator plants, some tall ruderal species, rare plants or main components of matrix features such as hedges, scrub or veteran trees. The lists were therefore incomplete because not all species present were recorded; however, they involved huge numbers of records (up to five surveyors over more than two seasons and county wide) and so are potentially valuable to KBRG. Lesley would have liked them to have been made available and as they had not been she would be forwarding all of her lists, including those for Local Wildlife sites, to the Chairman.

Alex Lockton suggested that in order to encourage better recording, members could be given a report on their recording skills.

Finally on the subject of general recording, the Chairman said that we should see how it goes this year.

6 CONSTITUTION

Although we have no formal constitution, in practice there are various roles: the Chairman acting as general co-ordinator, Sue Buckingham as joint BSBI recorder for East Kent, as a meetings leader and as having organised the meetings programme jointly with Owen Leyshon. Charmian Clay has helped with the production of Kent Botany and Kate Kersey with the Newsletter.

Sarah Kitchener has also helped with publications, acting as recorder at some of the meetings and as provider of refreshments. The workings of an active group are covered with minimal formality but if there was any wish to have more defined roles or to establish a committee, the Chairman said that this was the time to raise it and there was no comment.

7 ANY OTHER BUSINESS OR COMMENTS

There was none.

8 DATE OF NEXT AGM

The Chairman asked if members had any preference regarding venue because with the

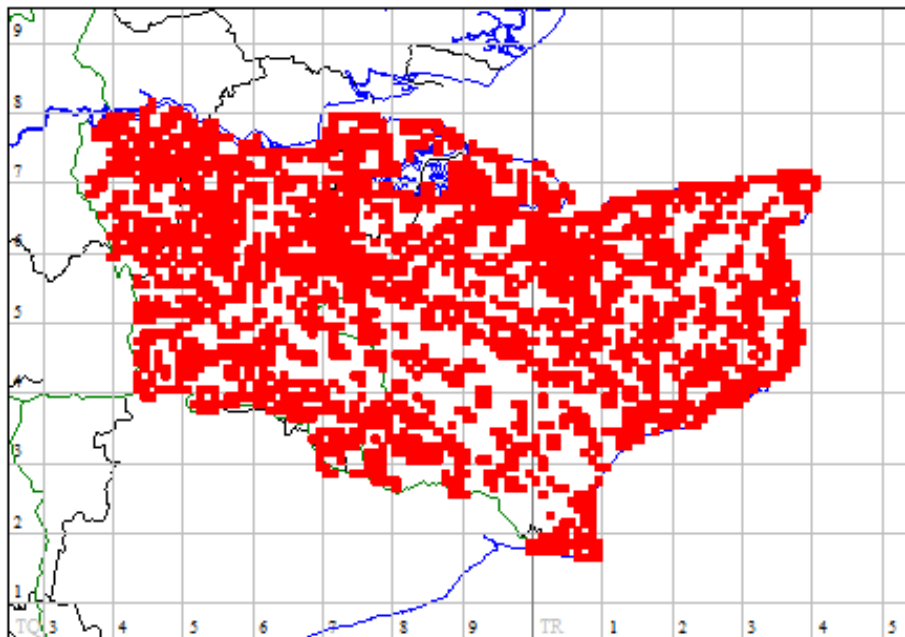
exception of one meeting at Brogdale, we have held all others at Tyland Barn which so far has the advantage of being free. **John Puckett** said that *Tyland Barn is the best option being most central for members, including those from East Kent, to which there was general agreement.*

The **next AGM will be Saturday 28 March 2015** at Tyland Barn.

With no further business, the formal part of the meeting closed at 3.25 p.m.

This was followed by an entertaining talk by Alex Lockton on *What has the BSBI ever done for us?*

County recording

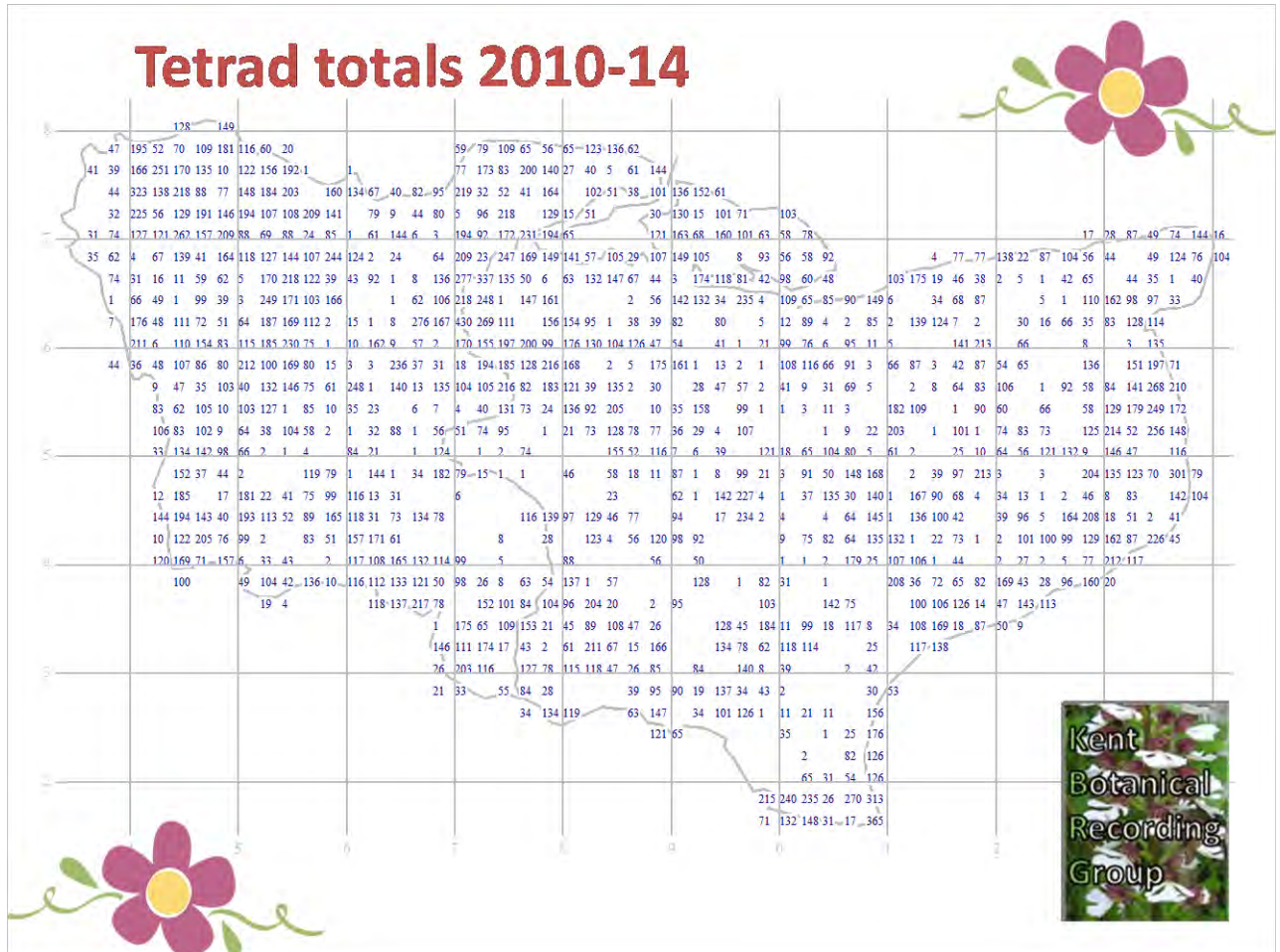


The current state of play (as at March 2014) in county recording was illustrated by maps in the Chairman's AGM report. Some were subsequently circulated by email, so as to be able to inform members' selection of localities in which to record during 2014.

They included this map, in which monads (1x1km squares) visited by botanists from 2010 onwards are shown in red. Each square has at least one (but generally more!) plant record for that period.

The following map (which you may wish to enlarge in viewing on computer) gives the total number of records per tetrad (2x2km square) for 2010 to early 2014. This is still useful, but will be affected by recording for the current year, which should have reduced the areas showing low, or no, records. Once all our 2014 records are reported and input to the county database, we will be able to compare.

But to give a flavour of what will have been achieved, the areas which needed a boost in records were the hectads (10x10km squares) TQ74 (Marden), TQ84 (Headcorn), TQ95 (Doddington) and TR03 (Hamstreet). As at the beginning of October 2014, TQ74 records had risen from 606 to 2177; TQ84 went from 714 to 2492; TQ95 went from 535 to 2211; and TR03 increased from 787 to 1221. Clearly we still need to get to the Hamstreet area a bit more!



Charophytes in Kent

In December 2014 Jon Bramley is starting gentle field work by looking for Charophytes in a number of known historical sites. This algal group, especially many of the rarer species, have declined markedly in the UK in the last 50 years due to water enrichment and sedimentation.

Jon is very happy to re-visit sites in Kent (vice counties 15 and 16) where members have come across Charophytes in either of the Kent Vice-Counties and has historical records dating back beyond 1910 to check out – so all records no matter how old would be appreciated.

He would also like to have any recent records, as and when members come across specimens. He would then aim to visit these sites and note some basic environmental parameters of pH and conductivity, as these are factors important in distribution.



Jon's contact details are: Jon Bramley, Holly Lodge, Reece Lane, Acrise, Kent CT18 8LW
 Telephone: 01303 844709 or 07810 278372
 email: jonathan.bramley@bopenworld.com

Competition: Guess the height of the *Verbascum densiflorum*

Clue: Sell & Murrell say 50–150cm....

Photo by Owen Leyshon at Calfstock Lane, Farningham Wood, July 2014



You can find this tongue-in-cheek trailer for the epic film of the Kent botanical recording task in Kent Botany Facebook. You do not have to be a Facebook member to view it.

More seriously, however, Liam Rooney has also produced Kent identification videos on *Crataegus*, *Equisetum*, *Myosotis*, *Papaver* and *Ruppia*. These can be accessed via the BSBI Kent webpage. See our front cover for BSBI and Facebook links.

Contributions and photographs for the next newsletter will be welcome!

The editor will be glad of articles, letters, queries, comments and photographs etc.

Whilst KRBG does not produce a research journal as such, there may also be scope to put articles of a substantial nature and other papers onto the website by way of publication, as an alternative.

If sending photographs for inclusion in the newsletter by e mail, 300dpi minimum, please.

All contributions should be sent to Geoffrey Kitchener, contact details below.

Thanks to all who led meetings in 2014; to Sarah and Miranda Kitchener for reviewing this newsletter; to Sue Buckingham for the AGM minutes and most of the meeting reports; and to the photographers credited above.

Contact details for Geoffrey Kitchener:

Email: geoffreykitchener@yahoo.com ☎ 01959 532282
Cromlix, Otford Lane, Halstead, Sevenoaks, Kent TN14 7EB



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