

KENT BOTANICAL RECORDING GROUP

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NEWSLETTER No. 9



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Front cover: Orchis x bergenii, the hybrid between Monkey and Man Orchids. Photo by Liam Rooney, May 2016.

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2016 field meeting reports

OLD PARK WOOD, IDEN Saturday 12 March

The first KBRG meeting of 2016 was attended by eleven people and, being a weekend, the invitation had been extended to members of the Kent Field Club. The main purpose of the meeting was to record woodland ferns, to acquire some general records from an area not visited by a botanist since before 2010 and to get outdoors together again after the winter. We met in a large lay-by just east of Goudhurst on a very foggy morning but with a promise of sunshine by mid-day.



Where is this promise of sunshine?
Photo by Owen Leyshon

A public footpath led us alongside arable and into the southern part of Old Park Wood, a Local Wildlife Site covering some 160 hectares of what was once ancient mixed

broadleaved woodland and heathland. Over the years the site has been largely converted to sweet chestnut and conifer plantation but some good areas of mixed woodland still remain both in the south and the western sides where damp soils derived from Wadhurst Clay appeared to support quite a rich flora. A proportion of the wood has been sold off in blocks to private individuals with small scale clearance going on and there was also evidence of some larger scale felling and management involving the Forestry Commission. A house and timber business is situated in the south of the wood.

Bluebells were well up and along the stream *Chrysosplenium oppositifolium* (Opposite-leaved Golden-saxifrage), *Ficaria verna* (Lesser Celandine), *Primula vulgaris* (Primrose) and *Glechoma hederacea* (Ground-ivy) were in flower. We recorded *Dryopteris dilatata* (Broad Buckler-fern), *D. filix-mas* (Male Fern), *Polystichum setiferum* (Soft Shield-fern) and *Blechnum*

spicant (Hard Fern). Sedges without fruits or flower were a little more challenging but in the course of the day *Carex pilulifera* (Pill Sedge), *C. laevigata* (Smooth-stalked Sedge), *C. pendula* (Pendulous Sedge), *C. sylvatica* (Wood Sedge) and *C. remota* (Remote Sedge) were all recorded. Stephen Lemon discovered an unusual fern with fronds shaped to a very narrow, elongated triangle and giving a good impression of possible *Dryopteris x deweveri*, the hybrid between *D. dilatata* and *D. carthusiana* (Narrow Buckler-fern) but without any good indusia or spores we agreed that we weren't likely to get it determined as such.

We had a good classic specimen of *Dryopteris affinis* (Golden-scaled Male-fern) beside a track and were all able to see the dark patch at junction of rachis and pinna, its very scaly rachis and rounded pinnules. Later in the day the somewhat similar-looking *Dryopteris borreri* (Borrer's Male-fern) was seen both within the wood and on nearby lane banks. *D. borreri* also has the dark patches (which are absent from *D. filix-mas*) but its smaller stature and sparser scales are more like those of *D. filix-mas* and at least some of its pinnules were clearly truncate. The shape of the indusia was also helpful and we peered at chanterelle- or funnel-shaped ones in *D. borreri* and kidney-shaped doughnuts in *D. affinis*.

The higher plateau areas of Old Park are acidic and there we saw plenty of *Calluna vulgaris* (Heather) along the rides. Along with *Fragaria vesca* (Wild Strawberry) and *Veronica officinalis* (Heath Speedwell), that gave us three rare RPR (rare plant register) species for the day. *Betonica officinalis* (Betony), *Hypericum pulchrum* (Slender St John's-wort) and *Conopodium majus* (Pignut) were other good finds and although *Erica cinerea* (Bell Heather) has been recorded from the wood, it evaded us. A commotion from the woodland birds led Daphne to spot a roosting tawny owl, and a dead Yellow-necked Mouse was another interesting find.

The very early date and Wealden woodland venue made the day attractive to those botanists with an interest in mosses and we were all fortunate to have Jan Hendey, British Bryological Society vc recorder for Kent, join us. Jan and her followers were delighted to find some very uncommon species. Old Park Wood with its range of soil types supports as many as 70 bryophytes.

Sunshine at last... Photo by Owen Leyshon

The promised sunshine arrived by lunch time when we sat enjoying it on the edge of chestnut coppice before setting off for Knights Hole on the western side of the wood where there is an area of rich alder carr. There we found new growth on *Athyrium filix-femina* (Lady Fern) and Stephen managed to track down *Dryopteris borreri* for our fern list.



To bring in a few more species we walked the lanes back to the cars adding *Polypodium vulgare* (Polypody) and more *Dryopteris borreri* to our list of ferns. We found flowers on *Anemone nemorosa* (Wood Anemone) and *Luzula pilosa* (Hairy Wood-rush).

During the day we obtained some 200 records from six monads which included ten fern species and three RPR species.

SB

SEASALTER and WHITSTABLE Friday 29 April

SEASALTER and WHITSTABLE Friday 29 April 2016

This meeting, which was led by Sue Buckingham and Owen Leyshon with Alex Lockton, was planned to enjoy some early coastal and urban botany and hopefully to find some *Cerastiums* (Mouse-ears) on the beach. Although the day dawned dry, a bitterly cold wind from the northeast greeted the fifteen botanists who met up in a residential road in Seasalter. We began by recording a number of small species which were growing on the grass verges by our cars including *Torilis nodosa* (Knotted Hedge-parsley), *Sherardia arvensis* (Field Madder) and *Stellaria pallida* (Lesser Chickweed) and then as we crossed a road by

the railway line a number of balls of *Viscum album* (Mistletoe) were spotted on an out-of-reach Poplar. Could this have been a Railway Poplar? We wondered but could never know. Primroses also were flowering also out of reach inside the railway fence along with a very handsome Wild Pear in full bloom.

A small bridge led us over the railway line and onto the shingle beach where a number of cultivated plants had spilled out of the gardens and seeded themselves. We recorded the larger flowered garden form of *Myosotis arvensis* (Field Forget-me-not), *Lunaria vulgaris* (Honesty), *Calendula officinalis* (Pot Marigold) and *Lychnis coronaria* (Rose Campion). A local lady, concerned that we might have been walking on her flower beds informed us that the patch of *Hippophae rhamnoides* (Sea Buckthorn) we were discussing had in fact been planted by herself).



Native species such as *Glaucium flavum* (Yellow Horned Poppy) were in abundance and we were delighted to record RPR species *Euphorbia paralias* (Sea Spurge) in three different locations on the beach shingle, although Joyce Pitt suggested that it may have been introduced along with some beach restoration work. *Carlina vulgaris* (Carline Thistle) was quite frequent, we had a few plants of *Eryngium maritimum* (Sea Holly) and were most surprised to find a small patch of *Carex divisa* (Divided Sedge) on the shingle. A fourth RPR species was *Medicago polymorpha* (Toothed Medick) and we were able to compare both its fruits and its stipules with those of the common *M. arabica* (Spotted Medick) which can confusingly sometimes occur without spots on its leaves.

Not a vascular plant to be seen... Photo by Sue Buckingham

Cerastium semidecandrum (Little Mouse-ear) with chaffy margins to its bracts was soon seen and proved to be quite frequent in sparsely vegetated areas near the top of the beach. However, it was some time before we located any *C. diffusum* (Sea Mouse-ear). This had its usual four petals rather than five which is the norm for *C. semidecandrum* and its bracts have no chaffy margins, which Little Mouse-ear does. Sea Mouse-ear was spotted at the westernmost point of our beach walk and just before we turned inland to escape the very uncomfortable wind. At this point *Saxifraga tridactylites* (Rue-leaved Saxifrage) was much appreciated by everyone; and a plant of *Poa bulbosa* (Bulbous Meadow-grass) was also found which, unusually, had a good head of flowers. A small patch of *Poa infirma* (Early Meadow-grass) was flowering nearby.

We had lunch on the beach tucked down in the shelter of a breakwater and with our backs to the wind and afterwards those of us remaining drove our cars a short distance into Whitstable in order to do a little more recording at the Harbour. Alex Lockton who was with us had discovered *Sisymbrium irio* (London Rocket) in 2014 outside the nearby fish market and so we also planned to visit that. London Rocket was very obliging growing quite abundantly inside the pay and display car park and right next to *S. orientale* (Eastern Rocket) so that comparisons could be made. In under a couple of hours we collected records of 50 species in TR1066 which includes a small part of Whitstable Harbour and where no botanist had visited before us since before 2010. Finds included more *Sisymbrium irio*, *Cerastium diffusum* and *C. semidecandrum* and *Valerianella locusta* (Common Cornsalad).

*Paying homage to Medicago littoralis
Photo by Daphne Mills*



Liam Rooney led us briefly just into the next monad to find *Medicago littoralis* (Shore Medick) which he had relocated on the beach between the sailing boats. We found a good patch with a couple of very distinctive fruits to inspect. All in all, this was a good day in good company with seven rare plant species and a good number of general records.

SB

SCOTNEY CASTLE ESTATE Sunday 15 May

This meeting was held jointly with Sussex Botanical Recording Society with Helen Proctor leading for Sussex and Geoffrey Kitchener for Kent, and 27 botanists attended - mostly from the two county groups, but we also had the benefit of the presence of Jane and Tony Howard, National Trust volunteers who had been studying the flora of the estate. This was one of those areas where the boundaries of administrative counties and botanical recording vice counties do not coincide – indeed they seem quite counter-intuitive. We were not following the recording scheme of Eric Philip's two Atlases, as these were based on the administrative county of Kent, but we took the River Bewl as our boundary (west of the river for East Sussex, east for Kent). Our start from the National trust car park was in East Sussex, and along the entrance drive we saw *Lathyrus linifolius* (Bitter-vetch) with some variation in flower colour and we then set off across the estate grassland down to the Sweet Bourne valley. It became more and more apparent that this was good quality habitat, with plants such as

Ophioglossum vulgatum (Adder's-tongue) and *Viola canina* (Heath Dog-violet), which were to recur throughout the day. A large floriferous patch of violets engaged our attention and was recognised as *Viola x intersita* (*V. canina* x *riviniana*). There was an occasional *Anacamptis morio* (Green-winged Orchid), presumably having spread from the thousands which grow on the lawn banks at the house; and in a silty area by the Sweet Bourne grew *Ranunculus hederaceus* (Ivy-leaved Crowfoot). We could have wished for this in Kent, but there was no equivalent habitat near the Bewl, which we crossed in time for lunch on the valley slope.



Scotney Castle. Photo by Liam Rooney

Viola x intersita. Photo by Liam Rooney.



The Kent side also carried widespread *Viola canina* in the acid grassland and, looking out for patch-forming plants, we found at least two more with the intermediate hybrid characteristics of *Viola x intersita*. We then passed into woodland, exploring the flora of the rides, and an area of fairly recent clearance by the National Trust and associated paths showed good regeneration of *Calluna vulgaris* (Heather) together with plants such as *Carex binervis* (Green-ribbed Sedge), *Carex laevigata* (Smooth-stalked Sedge), *Luzula pilosa* (Hairy Wood-rush) and *Salix repens* (Creeping Willow). In woodland shade grew *Dactylorhiza fuchsii* (Common Spotted-orchid) and *Epipactis helleborine* (Broad-leaved Helleborine). We progressed from the woodland back onto the eastern Bewl valley slope with splendid views of the castle ruins and moat, and the grassland here continued to bear a scattering of *Ophioglossum vulgatum*. The fencing along the Bewl banks prevented as close an approach as we had been able to achieve along the Sweet Bourne in Sussex, but there were some damp seepage lines running down to the Bewl which added variety of habitat. A footbridge across the Bewl brought us back into Sussex

onto heavily sheep-grazed pasture and thence along an estate road back to the car park, where tea and cakes were provided by Sarah Kitchener.

GK

UPPER HARDRES WOOD Saturday 21 May

A dozen botanists met at Bossingham on a rather blustery Sunday morning for a joint meeting with the Kent Field Club to explore this large woodland on the dip slope of the North Downs. Upper Hardres Wood was included in Francis Rose's 1965 list of 100 Interesting Sites in Kent for its ecological sequence from acidic oak woodland on Pliocene sandy drifts to chalk coppice on the dry valley slopes. Much has changed in the fifty years since the list was compiled including the scrubbing of part of the woodland along the eastern border and the loss of nearly all the oak standards. However, it was exciting to receive permission from the landowner to explore such an extensive area of ancient woodland that has no public access – and which has plenty of botanical interest.

We gathered on the small green in the centre of the village. Of particular interest before we set off was a Kent Field Club report that Stephen Lemon brought with him of a meeting at Upper Hardres on 12th May 1963. This field meeting, led by Francis Rose, had clearly covered a lot of ground, visiting Yockletts Bank as well as Upper Hardres Wood and Stelling Minnis common. The report states that in Upper Hardres Wood, *Paris quadrifolia* (Herb Paris), *Orchis purpurea* (Lady Orchid), *Ophrys insectifera* (Fly Orchid) and *Platanthera bifolia* (Lesser Butterfly-orchid) were locally frequent on the chalky slopes, with *Blechnum spicant* (Hard Fern), *Calluna vulgaris* (Heather) and two rare bryophytes (*Atrichum angustatum* and *Lophozia inciza*) present on the acid Pliocene sands. Also mentioned in the report were *Viola canina* (Heath Dog-violet) and *Ophioglossum vulgatum* (Adder's-tongue) at Stelling Minnis as well as the long established colony of *Ulex gallii* (Western Gorse).



Ramsons at Bossingham. Photo by Daphne Mills

We set off along Lime Kiln Lane towards the wood, recording a variety of common hedgerow species. Our first stop was at an outlier of Upper Hardres Wood proper - a small patch of woodland bordering the southern edge of the road as it descended into a shallow dry valley. The woodland, largely of *Carpinus betulus* (Hornbeam), disguised quite a large chalk pit, the floor of which supported a very impressive colony of Herb Paris. This species, generally thought of as a very reliable indicator of ancient woodland, had clearly colonised ground that would have been open and very disturbed when the chalk working was active perhaps a century or two earlier. A typical variety of woodland species were also recorded here;

Hyacinthoides non-scripta (Bluebell), *Anemone nemorosa* (Wood Anemone), *Adoxa moschatellina* (Moschatel), *Neottia ovata* (Common Twayblade) as well as single plants of *Polygonatum x hybridum* (Garden Solomon's-seal) and *Helleborus orientalis* (Lenten-rose) - growing side by side and clearly garden escapes.

Upon leaving this copse, we proceeded further along Lime Kiln Lane focussing on the northern verge of the road that borders the southern edge of Upper Hardres Wood. This held several species indicative of the Clay-with-Flint soils; *Luzula forsteri* (Southern Wood-rush), *Potentilla sterilis* (Barren Strawberry), *Poa nemoralis* (Wood Meadow-grass), *Teucrium scorodonia* (Wood Sage). We were unable to locate a small patch of *Lathyrus linifolius* (Bitter Vetch) which had been found in flower on a recce a few weeks prior, but it was good to see *Lithospermum officinale* (Common Gromwell), and Stephen Lemon located *Carex divulsa* subsp. *leersii* (Many-leaved Sedge).

Upon turning into Upper Hardres Wood, we plunged into mature *Castanea sativa* (Sweet Chestnut) coppice and commenced along a track that followed the trough of a shallow dry valley running south-west to north-east (a subsidiary to the

Bossingham-Hardres Valley). The ground flora was typical of this habitat; plenty of Bluebell, Wood Anemone, *Lamiastrum galeobdolon* (Yellow Archangel) and *Silene dioica* (Red Campion). Amongst an abundance of *Dryopteris dilatata* (Broad Buckler-fern), *D. filix-mas* (Male-fern) and *Athyrium filix-femina* (Lady Fern), Stephen located a single plant of *D. carthusiana* (Narrow Buckler-fern) on the damper soils of the valley floor.

After about 300 metres of sweet chestnut coppice, the path left the shade for a broad woodland ride. Much of ride edge was dominated by extensive stands of *Cytisus scoparius* (Broom), but in more open patches we found Heather, *Galium saxatile* (Heath Bedstraw), *Potentilla erecta* (Tormentil), *Veronica officinalis* (Heath Speedwell), *Polygala serpyllifolia* (Heath Milkwort) and *Succisa pratensis* (Devil's-bit Scabious). We took our lunch in a sheltered spot and then left the woodland to cross a fallow field and reach a track (possibly an old drove-way) enclosed by hedgerows running along the length of the Bossingham-Hardres valley. Here we found *Pimpinella major* (Greater Burnet-saxifrage) and a few clumps of *Sedum telephium* (Orpine). Although this track is now situated well outside Upper Hardres Wood, historic maps and satellite images show it formed the eastern boundary of the wood until the 1960s, and the track edges certainly provided evidence of a relic woodland flora.

We soon reached a block of woodland on the eastern side of the valley (Hunts Wood). Here the soils were more calcareous than the woodland on the western side of the valley. Herb Paris was again abundant with plenty of *Orchis mascula* (Early-purple Orchid) and Common Twayblade. Despite a thorough search for Lady Orchid in suitable looking hazel coppice, we could only find a single blind rosette growing on the slopes of a chalk working. However, we did find a small cluster of butterfly orchids in bud – not possible to identify with confidence on this occasion, but a return visit two weeks later found them to be *Platanthera chlorantha* (Greater Butterfly-orchid) rather than the Lesser Butterfly-orchid which Francis Rose had

recorded on the 1963 meeting. There was no sign either of Fly Orchid.



Polystichum aculeatum, unusually with bifurcate rachis. Photo by Daphne Mills

We returned to Bossingham via the enclosed track and where this climbed the slope out of the dry valley, we found both shield ferns, *Polystichum setiferum* (Soft Shield-fern) and *P. aculeatum* (Hard Shield-fern), growing in close proximity on the steep banks. After returning to our cars several of us drove a short distance further south to Stelling Minnis where we had tea and biscuits (kindly provided by Sue Buckingham and Owen Leyshon) whilst admiring the acidic grassland. A brief search for Francis

Rose's Heath Dog-violet and Adder's-tongue was unsuccessful, but overall it was a very successful field meeting with a total of 190 species recorded as proof of this.

AG

ACRISE Wednesday 8 June

The purpose of this day was to collect general records from the area around Blandred Farm near Acrise and to survey nearby Stony Lane Wood in the hope of finding *Platanthera chlorantha* (Greater Butterfly-orchid) and *Polystichum aculeatum* (Hard Shield-fern). Nine members met up at member Jon Bramley's house on a glorious sunny morning following a night of torrential rain.

Jon led us through the farm and across pasture where we were joined temporarily by an interested herd of cattle. Through a gate and just before we reached Stony Lane Wood, a path took us alongside a broad bean crop. The farmer operates his mixed farm under a High Level Stewardship Scheme and in a wide unfertilised and unsprayed margin we found a very large

population of *Stachys arvensis* (Field Woundwort). The plants were still quite small in stature and had amongst them plants of another RPR species, *Spergularia arvensis*, (Corn Spurrey). At the foot of the slope and at the edge of the margin we recorded *Rumex x pratensis*, the hybrid between Broad-leaved and Curled Docks, with both parents in the vicinity.

Photo by Sue Buckingham

Stony Lane Wood is at the foot of a valley on the chalk. We entered it via a footpath from the south western side into hazel and sweet chestnut coppice and a flora including *Mercurialis perennis* (Dog's-mercury), *Hyacinthoides non-scripta* (Bluebell), *Lamiastrum galeobdolon* (Yellow Archangel), *Carex sylvatica* (Wood Sedge), *Anemone nemorosa* (Wood Anemone), and *Allium ursinum* (Wild Garlic). *Paris quadrifolia* (Herb Paris) was quite frequent and we found occasional plants of *Campanula trachelium* (Nettle-leaved Bellflower). For the RPR, we added *Sanicula europaea* (Sanicle) and *Oxalis acetosella* (Wood Sorrel), and on the damp grassy well-lit valley floor was *Mentha arvensis* (Corn Mint) and *Dactylorhiza fuchsii* (Common Spotted-orchid). The wood is privately owned and managed for pheasant shooting and Jon had permission to lead us away from the public footpath and up onto the eastern slope of the wood where we came upon a large colony of *Orchis mascula* (Early-purple Orchid) with *Neottia ovata* (Common Twayblade) under hazel coppice within a sea of Dog's-mercury. This looked a likely area for Greater Butterfly-orchid but in spite of a very thorough search we didn't locate any.



A little tree clearance at the top of the slope provided us with some logs to perch on for lunch and a lot of weedy *Epilobium* plants (Willowherbs), mostly too young to attempt identification. *Athyrium filix-femina* (Lady Fern) was on the wet clay at the top of the slope, not the bottom which is where I've grown used to seeing it in the Weald. More ferns clothed the banks of a steep-sided lane with a very stony bottom and which undoubtedly gave the wood its name. We found *Dryopteris borreri* and *D affinis* (Scaly Male-ferns) and *Polystichum aculeatum* (Hard Shield-fern). Both *Betula x aurata*, the hybrid between Silver and Downy Birch, and *Crataegus x media*, the cross between Hawthorn and Midland Hawthorn, were recorded.



Photo by Owen Leyshon

The day finished as promised by Jon in his garden where he very kindly supplied seating with tea and cakes.

SB

DOWN BANK, CHILHAM Saturday 18 June

This meeting, led by Alfie Gay and Sue Buckingham, was also open to Kent field Club members and was attended by fourteen people. We just managed to fit our cars into the small lay-by by Thruxted Farm in Pennypot Lane and set off hoping to find *Galium pumilum* (Slender Bedstraw) and *Herminium monorchis* (Musk Orchid), for which historic records exist on nearby Down Bank SSSI.

We followed footpaths to the west of the road through mixed broadleaved woodland where we admired *Poa nemoralis* (Wood Meadow-grass) and *Millium effusum* (Wood Millet), before passing into grazing pasture and a meadow with *Anacamptis pyramidalis* (Pyramidal Orchid). An arable strip which had been previously sown with a bird seed mix had *Cichorium intybus* (Chicory) and *Phacelia tanacetifolia* (Phacelia).



We continued through dark woodland of *Taxus baccata* (Yew) and, close to the margin with the adjoining grassland, Alfie pointed out our first *Orchis anthropophora* (Man Orchid) and three *Orchis purpurea* (Lady Orchid) plants, whose flowers were by now well over. However, the many *Epipactis helleborine* (Broad-leaved Helleborine) spikes alongside the path were yet to flower. Later on in the day a large population of *Cephalanthera damasonium* (White Helleborines) was discovered in the vicinity.

Cow-wheat under investigation. Photo by Owen Leyshon

Down Bank is a SSSI managed by Kent Wildlife Trust and is one of a few sites within the Stour Valley where Black-veined moth occurs. The Stour Valley is the only area in the UK for this very rare and vulnerable moth which feeds on *Brachypodium pinnatum* agg. (Tor-grass) and requires a light scrubby habitat. For that reason KWT management here concentrates on maintaining a low scrub growth on the open down which, although having a very rich and diverse flora, is not currently suitable for plants such as our targets species, Musk Orchid and Slender Bedstraw, both of which require a sward which is much less coarse.

Those RPR species which were recorded were *Briza media* (Quaking-grass), *Carlina vulgaris* (Carline Thistle) *Fragaria vesca* (Wild Strawberry), *Gentianella amarella* (Autumn Gentian), *Helianthemum nummularium* (Common Rock-rose) and abundant *Orchis anthropophora* (Man Orchid). A single *Ophrys apifera* (Bee Orchid) and two *Gymnadenia conopsea* (Fragrant Orchid) plants were also seen. At the top of the slope were a dozen flowering spikes of *Melampyrum pratense* (Common Cow-wheat). As we expected, the plants keyed out to subsp. *commutatum*, the chalk sub-species, the uppermost leaves below the bracts being relatively broad; just 4-5 times as long as wide. We also noted a reddish-brown tinge to the leaves.

Our circuit took us up onto a plateau with a remarkably large log-pile stacked beside the adjacent woodland and where *Trifolium medium* (Zigzag Clover) and *Lathyrus nissolia* (Grass Vetchling) were admired with just three plants of the RPR species *Spergularia arvensis* (Corn Spurrey). As we entered Denge Wood the vegetation changed dramatically and we were recording plants on the clay-with-flints that are characteristic of acid soils such as *Cytisus scoparius* (Broom), *Digitalis purpurea* (Foxglove), *Pteridium aquilinum* (Bracken), *Hypericum humifusum* (Trailing St. John's-wort), *Galium saxatile* (Heath Bedstraw), *Carex pilulifera* (Pill Sedge) and *Carex pallescens* (Pale Sedge). Near Pennypot Lane we came across another large spread of *Melampyrum pratense* but this one had longer and narrower leaves than those on the chalk bank. As expected, it keyed out to subsp. *pratense*, the one characteristic of acid soils. Both *Veronica officinalis* (Heath Speedwell) and *Solidago virgaurea* (Golden-rod) were close by.



Find of the day (Yellow Bird's nest in shady coppice)

Photo by Owen Leyshon

As we returned to our parking place congratulating ourselves on a very successful day, Mario Tortelli discovered what was to be the ultimate find; a cluster of some 40 flowering spikes of *Hypopitys monotropa* (Yellow Bird's-nest) under the shade of mixed woodland.

Our RPR plants totalled 15 for the day and we celebrated, thanks to Owen Leyshon, with tea and Welsh cakes in the lay-by.

SB

MANOR FARM, LITTLE MONGEHAM Thursday 23 June

This meeting, which was primarily intended for surveying arable weeds at Manor Farm, followed a dramatic night of torrential rain and thunderstorms and just seven KBRG members arrived on the day to find a very wet and muddy farmyard. With permission from the farmer, we were to have parked our cars in a field out of the way of farm machinery but a small lake had grown across the entrance overnight and prevented access. The prospect of tackling muddy paths through very wet corn hadn't much appeal and so, after informing the farmer of our intention, we moved our cars to the nearby village of East Studdal and began our survey of the farm fields from the drier comfort of the quiet local lanes.



Botany on the edge. Photo by Sue Buckingham

The sun came out almost immediately and we gathered a few roadside records through the village including a large patch of *Allium subhirsutum* (Hairy Garlic) which had become naturalised on the verge with *Arum italicum* (Italian Lords-and-Ladies). A couple of plants of *Ornithogallum pyrenaicum* (Spiked Star-of-Bethlehem) really did appear to have been recently planted there and we chose not to record those. However, on our return at the end of the meeting, a very attractive but seldom seen moth *Synanthedon tipuliformis* (Currant Clearwing) was seen and admired feeding on one of the flowers. *Campanula persicifolia* (Peach-leaved Bellflower) had seeded itself on a roadside bank opposite a pretty little garden from which it obviously originated.

On an unsprayed margin of a nearby wheat field 20 or more plants of *Papaver argemone* (Prickly Poppy) were admired. As is usual with this species, virtually all of the petals had fallen and we could only photograph the long spiky fruits. We walked via another lane alongside a narrow and very sterile-looking margin to a wheat crop which didn't look as though it had any interesting weeds at all until *Fumaria parviflora* (Fine-leaved Fumitory) was re-located, originally from a 1999 record. We found it in very good quantity with *Fumaria densiflora* (Dense-flowered Fumitory) on both sides of the road and particularly on and around a great mound of very smelly manure which had been sealed with a layer of grey ash. There it was accompanied by *Papaver hybridum* (Rough Poppy).

Part of our mission for the day was to inform the farmer of locations for good arable weeds and to recommend management which would enable them to continue to exist. A wider margin would certainly be beneficial as wherever the tall roadside grasses and coarse weeds had established, they had fallen over the very narrow margin leaving no room at all for any classic arable weeds. We would pass on this and our list for the day to Dan Tuson, Natural England Stewardship Advisor, with whom we had arranged the meeting.

We had lunch in the shade of a hedgerow when the sun had dried everywhere out and afterwards we set off on a footpath alongside the crop. We soon added *Anthemis cotula* (Stinking Chamomile) to the list and a single plant of *Petroselinum segetum* (Corn Parsley). On a field corner which had escaped the spray was a good quantity of *Valerianella dentata* (Narrow-

fruited Cornsalad), another Rare Plant Register species. We were pleased to add *Legousia hybrida* (Venus's-looking-glass) and *Chaenorhinum minus* (Small Toadflax) before taking a footpath across more broad beans to the road. Tucked away under the crop were a few plants of *Euphorbia exigua* (Dwarf Spurge). Our eighth RPR species for the day was *Helianthemum nummularium* (Common Rock-rose), just a couple of straggly plants which managed to hold out on a bank between arable fields.

Fumitory amidst fumes of manure/ash heap.
Photo by Sue Buckingham

We decided to finish the day with a look at *Orobanche picridis* (Oxtongue Broomrape) at its well-known site below the chalk cliffs at nearby Kingsdown and there was tea and cakes at Sue's for the remainder of the party.

SB



PRESTON MARSHES SSSI Tuesday 5 July

The purpose of this meeting was to record in the southern part of Preston Marshes SSSI, and we had permission from Natural England and the landowner to visit the site. Species recorded from that area in the past include *Groenlandia densa* (Opposite-leaved Pondweed), *Potamogeton acutifolius* (Sharp-leaved Pondweed) and *Carex acuta* (Slender Tufted-sedge). We were expecting to have a fair distance to walk in order to reach our target area from where we parked and met up, at a very busy Wickhambereux village green. However, recent heavy rain had raised the level of the local fishing lakes, preventing us accessing as planned and so we moved off to alternative parking on high ground with just a quarter mile to walk instead.

We were ten KBRG members and began with a detailed look at some ditch vegetation. There were plenty of typical plants including *Phalaris arundinacea* (Reed Canary-grass); *Berula erecta* (Lesser Water-parsnip); *Nasturtium officinale* (Water-cress); *Hypericum tetrapterum* (Square-stalked St. John's-wort); *Lythrum salicaria* (Purple Loose-strife); and both *Sparganium erectum* (Branched Bur-reed) and *S. emersum* (Unbranched Bur-reed), which were easily differentiated vegetatively. Our first

RPR species was *Juncus subnodulosus* (Blunt-flowered Rush) followed by *Hydrochaeris morsus-ranae* (Frogbit). The rush was particularly interesting both because we found a considerable amount of it during the day and because, although it is shown for the area in Eric Philp's 1980 Atlas, it wasn't recorded here in his New Atlas of the Kent Flora.

Demonstration by Alex. Photo by Owen Leyshon



The fishing lake was full of a great mass of floating vegetation so grappels were thrown in to see what we might find. We hauled out two flowering and fruiting pondweeds, one of which was recognised as *Potamogeton pectinatus* (Fennel Pondweed) from the manner in which the leaf sheath and stipule came away together, when a leaf was pulled, rather like a grass sheath and ligule. Also, the leaf had two hollows in cross-section (visible using a lens). The other narrow-leaved pondweed required taking home for closer inspection. It was identified later as our third RPR species

for the day, *Potamogeton pusillus* (Lesser Pondweed) which has closed or tubular stipules unlike the very similar *P. berchtoldii* (Small Pondweed), whose stipules are open. Checking for this requires a sharp razor-blade, a microscope and a lot of patience.

We fished out a third pondweed with broader leaves, flat stems, and well-formed nodal glands from a stream and identified it as *Potamogeton friesii* (Flat-stalked Pondweed). *Myriophorum verticillatum* (Whorled Water-milfoil), *Sagittaria sagitifolia* (Arrowhead), *Ranunculus circinatus* (Fan-leaved Water-crowfoot) and *Potamogeton natans* (Broad-leaved Pondweed) were close by.

Carices for the day were *Carex hirta* (Hairy Sedge); *C. paniculata* (Great Tussock-sedge) which was occasional along the lake shore and stream banks; *C acutiformis* (Lesser Pond-sedge); and *C. otrubae* (False Fox-sedge). The most northerly ditch was bordered by a great deal of sedge growth amongst which Alfie Gay pointed out something obviously different. Distinct tussocks of plants with leaves much greyer than those of neighbouring stands of Lesser Pond-sedge took Alfie back to his time spent last year in the Norfolk fens where *Carex elata* (Tufted Sedge) is a common species. He pointed out the uppermost bract which was shorter than the inflorescence and hardly anything left of fruits because this is such an early flowering species.

In the partial shade of some willows at the end of a ditch where we had hoped to find *Groenlandia densa*, Alex spotted a sedge which he thought appeared to be a hybrid and possibly between *Carex elata* and *C. acuta* (Slender Tufted-sedge). It had the appearance of *C. elata* with a short bract but the male and female spikes were long as you would expect in *C. acuta*. The utricles were flat and appeared to be empty. (Although *C. acuta* is on the SSSI citation, we found none that day although Alex knows it to be present not far away). He took a specimen of the likely hybrid to send off to BSBI Carex referee, Mike Porter. There are only a few confirmed records for this hybrid in the British Isles, so even the referee is not very familiar with it. However, Mike Porter agreed that on balance it should indeed be recorded as *Carex x prolixa*.

The mystery sedge (C. x prolixa). Photo by Alfie Gay



Although we didn't find any one of our three target species, the day was a very interesting one with a number of unexpected finds. It ended with welcome tea and welsh cakes. Our grateful thanks for access were to the Fisheries, to Natural England and a local farmer.

SB

DUNGENESS RSPB RESERVE (OPEN PITS) Sunday 10 July

On yet another windy, grey day which this British summer has thrown at us, a large group of 21 members of the Kent Botanical Recording Group and Kent Field Club met in the Dungeness RSPB Visitor Centre car park.

A brief introductory chat was given by Owen Leyshon introducing Dr Brian Ferry and Brian Banks who have looked at the pits on Dungeness for their botanical richness for decades and they shared their knowledge throughout the day. Printed maps with a route and a Kent Rare Plant Register (RPR) list to look out for, linked to the numbered pits, were then distributed.



Joyce Pitt at Pit 8 with Brian Banks on the banks.

Photo by Owen Leyshon

As to be expected, the first notable plants were found around the cars: *Samolus valerandi* (Brookweed) and *Glaucium flavum* (Yellow Horned-poppy) to start with. The route took us down a private shingle track towards the causeway which allowed us to make our way between the large Burrowes Pit and the New Diggings to access the Open Pits on the far side of Burrowes opposite the

Visitor Centre. Notable plants along the track included *Filago vulgaris* (Common Cudweed), *Hypochaeris glabra* (Smooth Cat's-ear), *Erodium maritimum* (Sea Stork's-bill), *Cynoglossum officinale* (Hound's-tongue), *Sagina nodosa* (Knotted Pearlwort), *Silene nutans* (Nottingham Catchfly), *Carlina vulgaris* (Carline Thistle) and *Centaurium pulchellum* (Lesser Centaury).

As we crossed the sheltered causeway *Salix repens* var. *argentea* (Creeping Willow) was noted and an odd-looking willow was collected and later determined by Joyce Pitt as *Salix x holosericea*, the hybrid between Grey Willow and Osier. Thousands of Common Blue and Azure Damselflies were disturbed as we walked through the long grass and the first of a few Great Green Bush Crickets was noted. Once over the causeway we worked our way around a number of the pits, which were varying in size and accessibility. Stephen Lemon noted the first addition with *Carex nigra* (Common Sedge) in the first large unmanaged pit (Pit 1).

As we carefully worked our way around the agreed route, we came across three more classic plants found on old, undisturbed acidic shingle ridges, all of which are scarce in Kent - *Jasione montana* (Sheep's-bit), *Teesdalia nudicaulis* (Shepherd's Cress) and *Cuscuta epithymum* (Dodder). In Pit 8, the stand of *Carex elata* (Tufted Sedge) was admired which was next to big patches of *Comarum palustre* (Marsh Cinquefoil), *Eriophorum angustifolium* (Common Cotton Grass) and *Thelypteris palustris* (Marsh Fern), together growing in an environment unique in south east England.

Sue Buckingham produced a large sprig of *Urtica dioica* subsp. *galeopsifolia* (Stingless Nettle) from the edge of a pit; and several patches of *Ceratocapnos claviculata* (Climbing Corydalis) scrambling through the pit margins were admired.

Getting to grips with Carex (Alfie Gay and Stephen Lemon). Photo by Daphne Mills

In Pit 8, *Epilobium palustre* (Marsh Willowherb) was found and a large patch of Sphagnum moss was present in the middle of the small pit, with more Marsh Fern. Pit 3 had a dense stand of *Carex disticha* (Brown Sedge) on its margin and a small number of *Comarum palustre* plants. A patch of *Carex leporina* (Oval Sedge) on the edge of Pit 4 was noted where it was found two years ago, starting to be overgrown by taller vegetation this year. This last pit also held *Comarum palustre*, *Eriophorum angustifolium* and *Thelypteris palustris*, as with Pit 8.



Lunch was taken quickly as the drizzle had set in. On the way back, Pit 2 was looked at where some scrub work had been carried out by the RSPB – *Ranunculus lingua* (Greater Spearwort), *Carex riparia* (Greater Pond-sedge) and *Ribes nigrum* (Black Currant) were present plus a small area of *Hydrocotyle vulgaris* (Marsh Pennywort).

Grey Bush Cricket was discovered and photographed amongst the pits, a species which is reasonably well scattered across Dungeness. Marsh Harriers were noted occasionally throughout the day and Cetti's Warblers continue to burst out in song. Good numbers of Swifts were feeding on the gravel pits in the thick low cloud which by then had descended across Dungeness.

Great Fen-sedge. Photo by Daphne Mills



To finish off the day, after a few early departures from the group, we crossed over the main track and headed down to Pit 6 which has the well-known population of *Cladium mariscus* (Great Fen-sedge) and we very quickly found other notable species such as *Carex rostrata* (Bottle Sedge), *Carex spicata* (Spiked Sedge), *Ranunculus flammula* (Lesser Spearwort) and *Veronica scutellata* (Marsh Speedwell). A quick sweep around to the back to the Visitor Centre resulted in a Mottled Grasshopper being found and we walked past a stand of *Hippophae rhamnoides* (Sea Buckthorn) on the bank, noting also *Crambe maritima* (Sea Kale). However, Tim Inskip was not finished - finding a clump of *Carex muricata* subsp. *pairae* (Small-fruited Prickly Sedge). Although the sedge is known sparsely across Kent, it looked to be the first Dungeness record (at least since Francis Rose at Lydd Common in 1954) and was less than 20m from the parked cars.

As is becoming the custom on Kent Botanical Recording Group field meetings, tea and coffee were served in the car park, with multiple packs of Welsh Cakes, courtesy of Owen. A quick tot-up of Kent RPR plants came to a very impressive 24 species for the day, plus a couple of hybrids, which just emphasises how unique and special Dungeness is, in this corner of England.

Thank you to the Dungeness RSPB team for allowing access to this private area of their reserve and I hope the records generated will be of use in shaping the management of the Pits in the future.

OL

HATCH PARK Thursday 21 July (Grasses day)

Twenty botanists attended this session, devoted primarily to grasses, sedges and rushes. It was to have been led by the late Mervyn Brown, whose expertise and dry humour were greatly missed, and Geoffrey Kitchener took the group round instead. In the absence of direct access from the car park to the ancient deer park, we had to go out along the main drive, thence by the side of the A20 to The Ridgeway. We sorted out the differences between *Agrostis capillaris* (Common Bent), *A. gigantea* (Black Bent) and *A. stolonifera* (Creeping Bent) before reaching the A20, where the number of different grasses was such as to slow our progress somewhat. Apart from the commoner species, we encountered along this section *Bromus commutatus* (Meadow Brome); casuals *Hordeum distichon* and *H. vulgare* (Two-rowed and Six-rowed Barley); *Poa angustifolia* (Narrow-leaved Meadow-grass); *Puccinellia distans* (Reflexed Saltmarsh-grass), whose roadside presence was related to the use of highway de-icing salt; and another cereal casual, *Triticum aestivum* (Bread Wheat).

A footpath led us past the back of the Hatch Park complex, via sightings of *Aira praecox* (Early Hair-grass) and *Juncus bufonius* (Toad Rush), into the park by Heron Pond. The damp margin was carpeted with another *Agrostis* species, the fine-leaved *A. canina* (Velvet Bent); and we worked round the edge, to a scattered stand of *Calamagrostis epigejos* (Wood Small-reed). Alfie Gay forged ahead through wetter ground to discover a single plant of Rare Plant Register (RPR) species *Carex echinata* (Star Sedge) by the back of the pond.

The park itself is credited in its SSSI description as being of special interest for its unimproved acid grassland, a scarce habitat in Kent, and with the turf believed to have been unbroken for over 500 years. However, the area to which we directed our attention immediately after lunch appeared to have undergone some disturbance in the past. It was acid ground with virtually no topsoil over the Folkestone Sands, including what appeared to be old sand pits and with furrowed land adjoining. Here, on a highly infertile substrate, was probably the most extensive colony of *Nardus stricta* (Mat-grass) in the county, growing with *Festuca filiformis* (Fine-leaved Sheep's-fescue), *Rumex acetosella* (Sheep's Sorrel) and very little else, apart from mosses and lichens.



Photo by Sarah Kitchener

We then walked south west on less barren grassland, passing en route a perfectly circular colony of *Brachypodium pinnatum* agg. (Torch-grass), normally a plant of chalk, but inexplicably present here at least as far back (from aerial photos) as 1960. This route brought us to the

western end of Boating Pond, an artificially formed waterbody with botanically interesting margins. This interest began with *Bidens cernua* (Nodding Bur-marigold) and increased as we worked along the north side towards where the ground became marshier. *Stellaria alsine* (Bog Stitchwort) and RPR species *Veronica scutellata* (Marsh Speedwell) were found, and then Alfie Gay ventured out into the wetter areas with considerable success, locating RPR species, *Carex nigra* (Common Sedge – but not at all common in Kent); *Pedicularis sylvatica* (Lousewort); *Oenanthe fistulosa* (Tubular Water-dropwort); and yet more *Carex echinata*. These discoveries more than compensated for our not re-finding *Carex rostrata* (Bottle Sedge) mentioned in the SSSI description, although not all of us, without wellingtons, were able to reach the wetter areas.

A break-out from the brake.
Photo by Geoffrey Kitchener

We attained this area of exceptional habitat without much thought as to how we would get out of it other than by retracing our steps; but an optimistic advance party set off to beat a way through the bracken, some of it up to head height. This took longer than anticipated, which emphasised how much of the park grassland has been lost to bracken encroachment; but we all eventually got back to the car park, where Sarah Kitchener kindly provided tea and cakes, and we saw escaped *Thymus vulgaris* (Garden Thyme) on a nearby wall. Thanks are due to the Mersham Hatch Estate for access, with the ability to depart from the public footpaths.



GK

CRYSTAL PALACE Saturday 23 July

This joint meeting with Surrey Botanical Society was a new venture for us, the first organised foray by the group into metropolitan West Kent/Surrey. Caroline Bateman led for Surrey; and Geoffrey Kitchener for Kent. We convened outside

Crystal Palace station, a total of twenty botanists, ten contributed by each county. We could easily have been more, as this seemed to be a meeting place for many activities, and there were hopefults who thought they might be able to join a walking group – but we had to explain that the traditional botanists' pace falls far short of what is usually recognised as a walk.

The meeting got off to a good start with Rodney Burton finding *Medicago polymorpha* (Toothed Medick) for the Surrey recorders and, indeed, the morning was spent on the Surrey side of the vice county border, a notional line which runs across Crystal Palace Park. Any physical characteristics relating to the boundary have long since vanished, and the Crystal Palace development itself involved an immense amount of Victorian landscaping, particularly for the terraces, where we spent some time botanising. The gridline intersection for four monads – where *Lepidium ruderale* (Narrow-leaved Pepperwort) grew) – was focussed on the terraces, which complicated Surrey recording; and this was compounded by park signage and intuition



placing north-south directions other than where they really lay. Eventually the group was cajoled into vice county 16, West Kent, where we all promptly sat down for lunch.

Trifolium fragiferum (we're all trying not to walk on it)

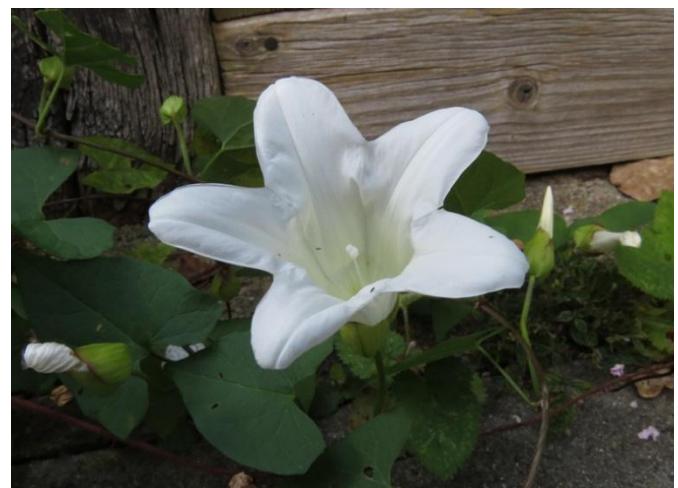
Photo by Geoffrey Kitchener

Given the artificiality of the park's habitats overall, it was gratifying to find that above the Concert Bowl lake the Kent part had

some sloping damp ground which is probably not susceptible to mowing until dried out, and here we found sheets of flowering *Trifolium fragiferum* (Strawberry Clover). Around the seepage patches were also some more hints of a 'native' flora, including *Alopecurus geniculatus* (Marsh Foxtail) and *Hordeum secalinum* (Meadow Barley); with *Glyceria notata* (Plicate Sweet-grass) by the lake. The lake waterlilies were presumed to have been planted, likewise well-established *Schoenoplectus tabernaemontani* (Grey Club-rush); but the abundant *Spirodela polyrhiza* (Greater Duckweed) may well have arrived with waterfowl. We left the park by Westwood Gate, near which grew the American grass *Ceratochloa cathartica* (Rescue Brome). This route enabled us to add some variety to our recording, by street botanising along Crystal Palace Park Road, and round Charleville Circus. We recorded *Carex divisa* subsp. *divisa* (Grey Sedge), a diminutive specimen of *Epilobium roseum* (Pale Willowherb) and the rather exotic-looking var. *quinquepartita* of *Calystegia silvatica* (Large Bindweed), with its deeply cut corolla lobes.

Calystegia silvatica variant. Photo by Daphne Millsr

We returned to the park via Fishermans Gate and worked the inner edges round to Penge entrance, near where the vice county boundary leaves the park and where we were able to make a second ice cream stop: sun and heat were taking their toll! The life-sized Victorian prehistoric monster models (apparently listed buildings) lurked near the next lake, in botanical Surrey, amidst the remains of tree fern plantings which appear not to have received winter protection. Much of the lakeside flora was originally planted, but *Ophrys apifera* (Bee Orchid) had presumably arrived on its own account. The party, somewhat fragmented, returned to our start point and those who were able to find our tea provision point were able to enjoy refreshments kindly provided by Sarah Kitchener. We ended up with 144 vc16 records from two monads (with 17 other species seen on the recce but not re-found by the meeting), a respectable total for a day spent mostly in the neighbouring vice county, and a useful foray into urban territory which might otherwise lack botanical attention.



DARTFORD MARSHES Thursday 4 August

For this meeting led by Rodney Burton, thirteen botanists met in Dartford Clay Shooting Club park in Joyce Green Lane (with kind permission from the Club) in order to explore the remote northern section of Dartford Marshes. We were joined by two non-members from Kent Wildlife Trust who were working on an ecological survey of the Marshes. A large heap of soil in the car park had us occupied for some time before we set off. There, among a population of Knotgrass, some plants were seen which appeared to fit the description for the Rare Plant Register (RPR) species, *Polygonum rurivagum* (Cornfield Knotgrass). They were erect, slender and with leaves all less than 4 mm wide. The fruits were exserted from the reddish perianths and after Geoffrey Kitchener and some others of us took a closer look at home, it was decided to name them as such. Also on the heap were two very different looking patches of *Artemisia*. The first, a non-flowering patch was initially thought to be *A. verlotiorum* (Chinese Mugwort) and the second, which comprised some very tall branched flowering plants, also proved to be

something of a puzzle so specimens were collected hopefully for determination at a later date. A pod of Opium Poppy with a diameter of 4.5 cm was also collected and Geoffrey said it looked to be that sometimes called *Papaver somniferum* cv. '*Giganteum*'.

ID time. Photo by Sue Buckingham



Rodney, who had made occasional botanical visits to Dartford Marshes over a long period of time, gave an introduction to the area and told us of the multiple pursuits currently carried out there. As well as the shooting club, a model aircraft flying club was close by; also a motorcycle track, a paintballing site, and a local farmer grazes his cattle on the grassland and saltmarsh margins.

We made our way on a public footpath towards the Thames, recording beside a ditch a stand of flowering *Scutellaria galericulata* (Skullcap), *Lotus tenuis* (Narrow-leaved Bird's-foot-trefoil) and *Poa compressa* (Flattened Meadow-grass). Geoffrey identified a plant of *Rumex obtusifolius* (Broad-leaved Dock) as var. *transiens* which has very few teeth on its tepals. He also identified a bush of *Rosa x dumalis*, a taxon which Roger Maskew, the BSBI referee for *Rosa*, showed us last year and is likely to be at least as and probably more frequent in Kent than *Rosa canina*.

The River Thames has two sea walls here, an inner higher one of recent origin and the other which is nearest the water and much older and more interesting botanically. On the landward side, we found a patch of RPR species *Hordeum marinum* (Sea Barley) and on the saltmarsh, typical species such as *Triglochin maritima* (Sea Arrowgrass), *Glaux maritima* (Sea Milkwort), and *Aster tripolium* var. *discoideus*, the rayless form of Sea Aster. Walking in an easterly direction on the old sea wall, we saw a few plants of *Verbascum nigrum* (Black Mullein) and at the foot of the wall, a small patch of *Trifolium fragiferum* (Strawberry Clover). *Allium vineale* (Wild Onion) was spotted with flowers as well as the usual bulbils.

Darent Flood Barrier. Photo by Sue Buckingham



After a while we turned back along the sea wall and had lunch by the River Darent Flood Barrier. Then our route took us southwards alongside the River Darent and a little into the next monad with saltmarsh and ditch vegetation to explore. *Apium graveolens* (Wild Celery) was occasional in the saltmarsh and we pulled out RPR species *Myriophyllum verticillatum* (Whorled Water-milfoil) with turions present as well as *M. spicatum* (Spiked Water-milfoil) from a nearby ditch. *Rorippa palustris* (Marsh Yellow-cress) was identified from the same ditch, with *Potamogeton pectinatus* (Fennel Pondweed).

The track back towards the shooting club car park had obviously been flooded in at least one place and there we stopped to inspect *Plantago major* subsp. *intermedia* (Greater Plantain), another species for the RPR. Very close by was a single plant of *Puccinellia rupestris* (Stiff Saltmarsh-grass), our fourth species for the register.

Back at the car park we chose to purchase our tea from the Shooting Club restaurant as a small mark of our appreciation for being allowed to park our cars there.

SB

TRENLEYPARK WOOD, NEAR CANTERBURY Wednesday 10 August

I love it when a plan comes together!

Back in the late autumn of 2015 Sue Buckingham and I put together a Kent Botanical Recording Group 2016 Field Meetings programme with the help of many other colleagues, providing a mix of opportunities to survey private land, ‘white spaces’ on the County Atlas maps and locations for targeting specific rare plant species which have not been seen for years within the County.

Well, Trenleypark Woods was supposed to be the last site for *Lotus angustissimus* (Slender Bird’s-foot-trefoil) which was then thought to have been last recorded in the County in 1987 and, although it subsequently appeared that there had been a later sighting, it is fair to say that it has been looked for by many botanists since that date without success. So let’s try again!

An initial surprise for the meeting was the presence of new managers at the George and Dragon pub, at whose car park I had arranged parking back before Christmas with the previous management. After apologising and having a quiet chat with the lovely staff, we parked our small number of cars down the far end of the car park and promised to return for a drink at the end of the day.



The thrill of the find. Photo by Daphne Mills

The ten of us walked through Fordwich village and along the Stour Valley Way eastwards and up into Trenleypark Wood complex, with our ID paper, BSBI database sheets and a summary of the last records with grid references for *L. angustissimus*.

The first chestnut coppice we came to after a 15 minute stroll had been coppiced only in the last two years and looked promising. At the first cross-path, we were just about to spread out and look, when Sue Buckingham excitedly gathered everyone around and kept saying, “I don’t believe it” – and there was a small cluster of four Slender Bird’s-foot-trefoil plants on a bare, steep sandy stony path, which must be a winter storm run-off from the wood.

After photographs and more smiles and comments about returning to the pub straight away, just a further 10 metres along the track it slowly became clear that hundreds, if not thousands, of plants were present along this main path which is actually the Stour Valley Way. The edge of this section of the Stour Valley Way had thick bramble spreading out, but a group of 30-40 *Gnaphalium sylvaticum* (Heath Cudweed) plants were found in small pockets along the same path. As we moved into a dense block of more mature Chestnut coppice, we decided to head up and cross over the Stodmarsh road and into another block of woodland which Alfie Gay knew held a few interesting plants from previous visits in recent years.

As we approached the road – another single *L. angustissimus* plant was found which involved a more restrained stop, after the excitement an hour previously.

On the other side of the road we had our lunch, before descending down to a flood-prone wooded depression which had a small stream/ditch with *Paris quadrifolia* (Herb Paris), plus many various flower shades of *Epipactis helleborine* (Broad-leaved Helleborine). A small well-lit pond held *Potamogeton lucens* (Shining Pondweed) and *Potamogeton pectinatus* (Fennel Pondweed), both of which were fished out with a grapnel which Sue had decided to keep in her rucksack for a sandy woodland walk.

*More Lotus-hunting.
Photo by Sue Buckingham*



Back up another slope we skirted around a disappointing landscaped sand pit. I always feel it is best to keep such a site as an open bare sandy habitat and not to grass-seed it, mow and graze it as may be encouraged by aftercare planning conditions. Alfie showed us a cluster of *Convallaria majalis* (Lily-of-the-valley) in leaf on the edge of the path and another coppiced chestnut block yielded nothing new. The track around the edge of the sand pit had many *Centaurium pulchellum* (Lesser Centaury) plants.

We crossed back over into the wood on the north side of the Stodmarsh road and commented on the size of a very large *Quercus cerris* (Turkey Oak) on the edge of the path which we reckoned must be 200 years old. A reasonably direct route back to the cars was followed by drinks all round with a little celebration in the George and Dragon pub and talk about what field meetings could be arranged and organised for next year, which Sue jotted down in the notebook for further consideration – the pressure is on...

A total of four Kent Rare Plant Register species were seen during the day and one new addition to the register.

OL

BLUEBELL HILL / DITTON QUARRY Wednesday 17 August (Roses day)

Eighteen botanists gathered on a warm sunny day at Bluebell Hill car park (three more were to join for the afternoon session) in order to explore the chalk slopes for roses. Throughout the entire day we saw not a single wild rose flower – but this fitted the objective, as rose identification is based on the hips in conjunction with other characters. Our leader, Geoffrey Kitchener, armed with secateurs and thick gloves, provided a crib-sheet for Kent rose identification and recording, which is included in this newsletter – revised in the light of its use during the meeting.

We were covering territory reviewed by the BSBI referee, Roger Maskew, in 2015 and hoped to be finding bushes which he had expertly identified. We did succeed in some cases, but not all. The meeting started with some non-rose plants, the car park having rare plant register species *Cynoglossum officinale* (Hound's-tongue) and *Filago vulgaris* (Common Cudweed) growing at the margins, and there were also several specimens of *Rumex x pseudopulcher*, growing with the parents Curled

and Fiddle Docks. Having started on roses, we soon found *Rosa x dumalis*, a hybrid which we were already aware would be as common as *Rosa canina* (Dog-rose), and required some practice in separating. Disconcertingly, our first apple-scented sweet-briar was not pure *Rosa micrantha* (Small-flowered Sweet-briar) which was the most likely species for this chalk downland (and which we saw subsequently), but the shrub we found had some characters of *Rosa rubiginosa* (Sweet-briar) and we concluded that this was a hybrid between both. Another puzzling shrub appeared to be *Rosa stylosa* (Short-styled Field-rose) with a slight admixture of some other species, perhaps *R. micrantha* – where species boundaries lay and what might be the influence of hybridization or introgression proved to be recurrent topics. *R. stylosa* is known to be confusable with a variety, var. *spuria*, of *R. canina*, which also has a very conical disc topping the hip – but we found this separately and this variety lacked the stylar column which we saw on the *R. stylosa* plant (whose English name, Short-styled Field-rose does not seem particularly apt, unless compared with an even longer-styled species such as *Rosa arvensis*).

The chalk grassland flora was superb, and there was a passing Clouded Yellow, but we tried to maintain our focus on roses, and even the discovery of the hybrid between Pedunculate and Sessile Oaks, *Quercus petraea* x *robur*, did not take us too far from the meeting theme, its binomial being *Quercus x rosacea*. One of Roger Maskew's determinations, the hybrid between *Rosa arvensis* (Field-rose) and *R. canina* was re-found, growing at a wooded boundary, the former species being a plant of shade. We came across some similar plants on top of the hill and also the species *R. arvensis*, growing in fairly full shade. A garden hedge of *Rosa rugosa* (Japanese Rose) was admired; we understood that their hips were particularly tasty, as rose hips go, but no-one ventured. The lane at the top of the hill carried more *R. canina*, and we got more practice in allocating plants to the groups within which the species is sometimes divided: Pubescentes, Dumales, Lutetiana and Transitoriae.

This rose was not going to get away without a consensus on ID. Photo by Daphne Mills



The afternoon session was taken at Ditton Quarry, a former ragstone quarry now a nature reserve, and this provided species both similar to, and different from, those found in the morning. Again, we began with finding both *R. x dumalis* and *R. canina*, both recordable within *R. canina* agg., but distinguishable, especially when seen together. *R. rubiginosa* was found early on – indeed, there is a lot of this species spreading widely within the reserve, as well as the other apple scented sweet-briar, *R. micrantha*, the latter being less common. We got used to telling these apart from a distance: both had visibly stalked glands on the pedicels, but *R. rubiginosa* had persistent erect or semi-erect sepals and *R. micrantha* had reflexed sepals, dropping early from smaller, urn-shaped hips. The hybrid between these species was also present – but there was also a somewhat disconcerting sighting of what at first looked like this, but which was found to be both species growing so close together as to appear a single shrub!

We then encountered a plant which caused much debate, but once Liam Rooney had suggested the rare *Rosa agrestis* (Small-leaved Sweet-briar), this identification appeared to fit well, subject to whether the sepals had reflexed as fully as might have been expected. We decided then to compare with what Roger Maskew had determined, which Sue Buckingham believed she had located earlier from Roger's grid reference and, after a digression in passing a specimen of *Rosa tomentosa* (Harsh Downy-rose), we looked at two large shrubs which appeared to be a good match for *R. agrestis*. Roger had also recorded the extremely rare hybrid, *R. agrestis* x *canina*. Both these species were growing near each other, and at a distance there was a very large and vigorous shrub, some 3.5m high, with *R. agrestis* foliage but the leaflets seeming somewhat larger and variable; hips were also somewhat variable. We concluded that this was indeed *R. agrestis* x *canina* and speculated as regards how quickly it might have attained that size, bearing in mind that *R. agrestis* (surprisingly) seems likely to have been



planted in the quarry in the early 2000s according to Sue Buckingham's investigations; and so only hybrids and younger plants (of which our first *R. agrestis* specimen appears to have been one) are likely to have arisen spontaneously in situ.

Rosa agrestis x canina and admirers. Photo by Liam Rooney

There is a lot of rose regeneration in the quarry generally, with young plants popping up in the scrub and in the open, but by now we had seen all the species we were likely to have found and we worked our way back to the car park, where Sarah Kitchener kindly provided refreshments. It is probably fair to say that the session gave a lot of us more confidence in grappling with roses,

but also some wariness as regards the fuzziness of species boundaries at times.

GK

PENSHURST TO POUNDBRIDGE Saturday 3 September

This joint meeting of the Kent Botanical Recording Group and Kent Field Club was attended by thirteen members who explored the rolling countryside of the High Weald along the upper Medway valley. Pleasant walking weather prevailed, in contrast to the hot muggy conditions the previous weekend when the route was recce'd. The leader, Stephen Lemon, was very grateful to Sue Buckingham who kindly stood in as leader for the first hour whilst he was delayed in a traffic jam on the A21.

Starting from Penshurst Place car park, the group first examined the colony of *Polypodium cambricum* (Southern Polypody) which was showing its triangular-shaped fronds and pointed pinnules. The species was re-discovered here last year, growing on lime mortar along the upper edge of the north east facing corner of the old garden wall. The group moved off along the main road, crossed the River Medway and turned southwards onto a footpath, by which time the leader had arrived. A hedge along the path contained the hybrid Dog-rose *Rosa x dumalis*, which added another record towards its recently recognised status as a widespread Kentish plant. Wheat and Oat crops in the fields either side of the public footpath had been harvested but *Bromus secalinus* (Rye Brome) was still widespread along the uncut field edges and one plant was found infected with the fruiting bodies of *Claviceps* sp (Ergot). Another Fungus seen nearby was a fresh specimen of *Laetiporus sulphureus* (Chicken-of-the-Woods), growing on a large *Quercus robur* tree (Pedunculate Oak). A fine and no doubt planted specimen of *Tilia platyphyllos* (Large-leaved Lime) was admired at the corner of the Swaylands estate and on its leaves Daphne Mills identified the *Eriophyes tiliae* gall.



White-fruited Elder. Photo by Daphne Mills

The group passed beside the low stone wall marking the estate boundary, where an adjacent field contained specimens of *Plantago major* (Greater Plantain) which displayed characteristics suggestive of subsp. *intermedia*, although not enough to confirm. On the recce for this meeting, the leader had visited a spring under a culvert close to the boundary wall where abundant masses of the moss *Leptodictyum riparium* were found in the spring water and probable *Fissidens pusillus* was on

the damp sandstone stonework of the culvert. *Rosa canina* (Dog-rose) in a hedgerow was by joint effort keyed out to the *Transitoriae* group. Further along towards Old Swaylands, the low stone wall was exchanged for an old brick wall that supported a number of plants. Growing from the brickwork was *Asplenium adiantum-nigrum* (Black Spleenwort), which was obtaining some shade from abundant *Rubus fruticosus* agg. (Bramble). Also growing from the brickwork was *Sambucus nigra* (Elder) with apparent white berries, although it was suspected that the colour was perhaps induced by stressful growing conditions. Nevertheless, a white-fruited form is known and is generally treated as part of the range of the rare green-fruited form, *forma viridis*. There was a short diversion along a shady sunken lane to admire the large colony of *Trachystemon orientalis* (Abraham-Isaac-Jacob) and further along was a fine example of Kent's oldest geology, the Ashdown Formation, which outcrops here as large sandstone blocks.

We left the higher ground and descended onto the floodplain of the River Medway heading towards Poundsbridge. *Impatiens glandulifera* (Indian Balsam) was flowering in the corner of a baled field near the edge of a small stream, where it was noted among the other herbs without aggressively dominating. The edge of this stream is listed as a site for *Agrimonia procera* (Fragrant Agrimony) in Hanbury & Marshall's 1899 Flora of Kent and although no longer present here, the plant can still be found in the local area. Crossing the River Medway for the second time, the group observed *Myosoton aquaticum* (Water Chickweed) flowering on the steep eroded bank of the river. Lunch was had beside a small, cattle-poached pond in a wood, where more *Myosoton* was seen along with flowering *Oenanthe aquatica* (Fine-leaved Water-dropwort) and *Ranunculus sceleratus* (Celery-leaved Buttercup). Another more open pond in the middle of a field was investigated and found to be dominated by *Potamogeton natans* (Broad-leaved Pondweed). *Alisma plantago-aquatica* (Water-plantain) and *Gnaphalium uliginosum* (Marsh Cudweed) were two of the more interesting plants on the heavily cattle poached edge. The free floating aquatic liverwort *Riccia fluitans* was abundant among *Lemna minuta* (Least Duckweed). A grapnel was used to drag the pond and produced a small narrow leaved pondweed that was suspected and later confirmed as *Potamogeton berchtoldii* (Small Pondweed).



Hypericum x desetangsi, showing sepals. Photo by Stephen Lemon

Another footpath led the group into a large maize-field and the edge was followed where it bordered the wide wooded bank of the river. The group discussed the finer points of identifying *Avena fatua* (Wild-oat) using the basal scar of the floret. A good range of arable weeds was discovered along the edge of this field, the most interesting being a Fumitory with very small flowers found by Owen Leyshon. After much deliberation it was considered to be a small flowered *Fumaria officinalis*. (Common Fumitory). Other arable weeds found included abundant *Kickxia elatine* (Sharp-leaved Fluellen), *Viola arvensis* (Field Pansy), *Euphorbia helioscopia* (Sun Spurge), *Sherardia arvensis* (Field Madder) and more *Bromus secalinus* (Rye Brome). The wooded river bank had a different but no less interesting flora. Among the many *Rosa canina* bushes were a few bushes of *Rosa tomentosa* (Harsh Downy-rose), displaying their hairy leaves and hips. The find of the day was discovered along this bank by Alfie Gay, in the form of a robust group of St John's-wort plants. Most of these plants were in seed, displaying dentate ends to the sepals and weakly four-angled stems. Sue Buckingham skilfully keyed these plants out to *Hypericum x desetangsi*, the hybrid between *Hypericum maculatum* (Imperforate St John's-wort) and *Hypericum perforatum* (Perforate St John's-wort). This was a new taxon for most of the group and its discovery here provides hope that the much rarer of the two parent plants, *H. maculatum*, may still be present somewhere in the local area.

On crossing another small bridge over the Medway, we saw a second Polypody fern growing on the brick pillar of the former bridge which had been identified from material collected on a previous visit as *Polypodium interjectum* (Intermediate Polypody). The walk back to the car park crossed stubble fields which along their edges still had lines of derelict hop poles, long out of use. A damp corner of one stubble field produced flowering *Myosotis arvensis* (Field Forget-me-not) and *Juncus bufonius* (Toad Rush). The group examined some plants with extremely large leaves a metre long which were eventually considered to be non-flowering *Arctium lappa* (Greater Burdock).

The meeting ended with a good tally of vascular plant records for the KBRG database, collected from the five monads passed through.

SHELL NESS, SHEPPEY Monday 10 October (Glassworts day)

The purpose of this meeting, led by Lliam Rooney and Sue Buckingham, was to concentrate on the species of *Salicornia* and *Sarcocornia* (Glassworts) to be found on the extensive area of saltmarsh which has formed behind Shell Ness at the eastern tip of Sheppey. Twelve of us met on a lovely sunny but cool October morning in the car park alongside Shell Ness hamlet, equipped with copies of a very useful identification sheet which Lliam had produced with detailed photographs of the commoner *Salicornia* species (given below). We set off in a south westerly direction along the sea wall within the Swale National Nature Reserve with the added intention of getting into as many monads as time allowed, and acquiring general records from this remote area.

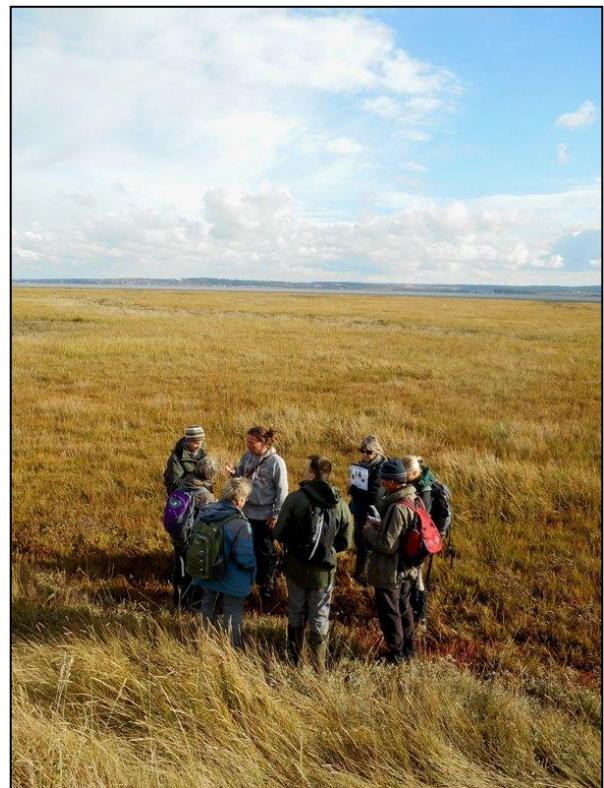
The glassworts were colouring up beautifully and the first recorded was *Salicornia ramosissima* (Purple Glasswort), living up to its name and present in all of the monads we visited. It is the most common of all the Glassworts and is usually easy to pick out from a distance when it changes colour to a deep purplish-red after flowering. This is quite useful when it is being this obliging, as it is probably the most polymorphic of all the *Salicornia* species, varying as it does from being a large bushy many-branched plant (hence its taxonomic name) to a tiny unbranched single spike where it can form extensive colonies. Lliam pointed out, echoing the words of Eric Philp, that this species is the only one likely to be found on the landward side of the seawall away from the saltmarsh. Again, rather obligingly, it was indeed found there in several places. We soon found *Sarcocornia perennis* (Perennial Glasswort) which was very abundant throughout. Although this species can be found in most parts of the saltmarsh it does seem to have a habit of growing along the runnels and edges of pools and so these make a good starting point to begin looking for it.

*One of the most extensive areas of saltmarsh in the county.
Photo by Owen Leyshon.*

It was a while before we found a second *Salicornia* species, which was *S. pusillus* (One-flowered Glasswort) now with a new name of *S. disarticulata*. This species seems to like the margins of the many shallow pools we came across and also the open drier flat areas that surrounded them. More often than not, these populations are mixed in with *S. ramosissima* and so Lliam suggested that we looked for the only recognised *Salicornia* hybrid, *S. x marshallii*. It's usually just a matter of time and pot luck before the hybrid is found and so it wasn't too long before a putative candidate was put forward, seemingly showing a marked degree of introgression.

After a while another *Salicornia* species was picked out, *S. europaea* (Common Glasswort) - although this doesn't live up to its English name, at least in Kent, as it appears to be a difficult species to come across. This is probably because of its similarity to *S. ramosissima* and indeed some taxonomists suggest that they are not distinct enough to be regarded as separate species. However, after speculating what defines a scarious margin we were happy to name it, especially as it consistently showed a distinctive sharp tip to the upper fertile segments which is typical of *S. europaea*.

As we moved further up the coast and more among the *Spartina* we started coming across a new kind of *Salicornia*, *S. fragilis* (Yellow Glasswort). Lliam patiently explained the differences between the two *Salicornia* groups, the diploid *S. europaea* group which has a larger central flower with smaller laterals and distinctive convex sides to the fertile segments giving it a beaded appearance; and the tetraploid *S. procumbens* group, of which *S. fragilis* is part, and which has all flowers roughly the same size and the fertile segments more or less straight-sided giving it a more cylindrical appearance. Interestingly, among



this population of *S. fragilis* were *S. ramosissima* plants, which belong in the *S. europaea* group and there were certain plants that seemingly had both diploid and tetraploid characteristics. The lower fertile segments of the terminal spikes and branches seemed to show equal flowers and more or less straight sides whilst the upper fertile segments showed distinctively beaded sides with much smaller lateral flowers, flushing purple. Several ideas were put forward as to why this might be happening, including the possibility of hybridity.

As one can only speculate for so long, we decided to look for another tetraploid species, *S. dolichostachya* (Long-spiked Glasswort). This typically grows on the lower levels of the saltmarsh and so has a greater tidal coverage than the other *Salicornia* species. Its preferred habitat is bare mud, hence its other given name, Mud Glasswort. It wasn't very long before we came across some likely plants and after counting the number of the fertile segments in the terminal spike we were happy to name them as such. Lliam pointed out that this species tends to have fertile segments which lower parts slightly bulge over the upper margins of the segments below, likening them to a fat person's stomach bulging over a tight belt! (A trait, he mentioned, that is also shared with the very similar *S. fragilis* but to a lesser degree.)

All the expected non-glasswort saltmarsh species were present in most of the visited monads. They included the rare plant register (RPR) species *Artemisia maritima* (Sea Wormwood) and *Inula crithmoides* (Golden-samphire), both of which still had some flowers, along with *Limonium vulgare* (Common Sea-lavender). Also still with a few flowers were both varieties of *Aster tripolium* Sea Aster present in more or less equal amounts, that is the rayless kind *var. discoideus* and the 'normal' rayed kind *var. tripolium*. Three saltmarsh grasses were very conspicuous: *Puccinellia maritima* Common Saltmarsh-grass; and *Elytrigia atherica* (Sea Couch) in the drier parts; and *Spartina anglica* (Common Cord-grass) where it was wetter.

By lunch time we had reached our fifth monad and so took our well-earned break on the sea wall before returning back the way we had come. A lunchtime highlight was the rare sight of a distant Common crane in the cattle pasture behind, followed later by a second much closer view from the sea wall as we walked back.

In a large drainage ditch on the landward side of the sea wall we were pleased to discover a considerable amount of another RPR species *Hippuris vulgaris* (Mare's-tail) along with both *Ceratophyllum submersum* (Soft Hornwort) and *C. demersum* (Rigid Hornwort); also *Potamogeton pectinatus* (Fennel Pondweed) and *Myriophyllum spicatum* (Spiked Water-milfoil). On the landward side of the sea wall Geoffrey Kitchener pointed out *Rumex x schulzei*, the hybrid between *Rumex crispus* (Curled Dock) and *R. conglomeratus* (Clustered Dock) with both parents present and in two different places. A final RPR species was *Hordeum marinum* (Sea Barley) in large quantity at the saline base of the landward side of the wall and present in three of the five monads.



*Celebrating with the *Lotus angustissimus* cake.
Photo by Liam Rooney*

Having done all we could with the *Salicornias* we didn't need to venture back onto the saltmarsh but Lliam wanted to point out a strange population of *Salicornias* he had found. Also, Stephen Lemon could only make the afternoon so it was only fair that he at least got to look at some of the Glassworts. The *Salicornias* that Lliam had found formed a long swathe at the foot of the seawall and were all consistently a rosy-pink in colour with a large percentage being small simple unbranched spikes. Whilst they had the general jizz of *S. ramosissima* Lliam could only make them out to be *S. fragilis*. Geoffrey and Lliam, taking a closer look at the more branched plants present, began to speculate on whether or not they had found the very rare *Salicornia obscura* (Glaucous Glasswort). Whilst it seemed to tick a lot of the right boxes for that species they had to concede that it must just be *S. fragilis*, albeit a very odd population. They were also in agreement that more work needs to be done with these fascinating plants and that after a *Salicornia* meeting one often comes away more confused rather than enlightened!

boxes for that species they had to concede that it must just be *S. fragilis*, albeit a very odd population. They were also in agreement that more work needs to be done with these fascinating plants and that after a *Salicornia* meeting one often comes away more confused rather than enlightened!

Shortly before reaching the car park Geoffrey spotted a scruffy bit of *Atriplex* from the saline landward side of the sea wall and took a piece home for further investigation. He later identified it as *Atriplex x gustafssoniana* (Kattegat Orache), the hybrid between *Atriplex longipes* (Long-stalked Orache) and *A. prostrata* (Spear-leaved Orache). This taxon was last seen in Kent in the vicinity by John Badmin in 1977. Geoffrey picked it out because of its stalked bracteoles (a feature of one of the parents, *A. longipes*, which apparently is often not present with the hybrid).

This last meeting of the 2016 season ended in the traditional manner in the car park with tea and cakes and a birthday cake topped with an edible picture of *Lotus angustissimus* for Sue.

LR & SB

SUMMARY by OWEN LEYSHON

My boss always tells me - Never look back, just look forward...however, I would like to just give a quick summary of how the Kent Botanical Recording Group Field Meetings programme went in 2016.

This is all relevant, as many members invest plenty of time planning, leading and organising the programmed meetings and highlighting the rich County Flora and how we can share our knowledge and expertise. So here is my crude assessment:

There have been 16 KBRG Field Meetings from March to October in 2016 with 233 people coming along, giving an average of 14.5 (so really 15 people!) per event.

Out of the 16 KBRG events, seven were on weekends of which five were combined as Kent Field Club events as well, with an average of 18 people per meeting.

Out of the 16 KBRG events, nine were in midweek with an average of 12 people attending.

The total average attendance per KBRG event was 15, but if one takes away the joint field meetings with Sussex and Surrey it dropped to 13.

There is a method to the process of setting up the annual programme, but we do need to be guided by members and their suggestions as to what people want and enjoy.

OL

FRANCIS ROSE'S KENT FLORA



WHAT HAPPENED TO FRANCIS ROSE'S FLORA OF KENT?

Photo by David Gove

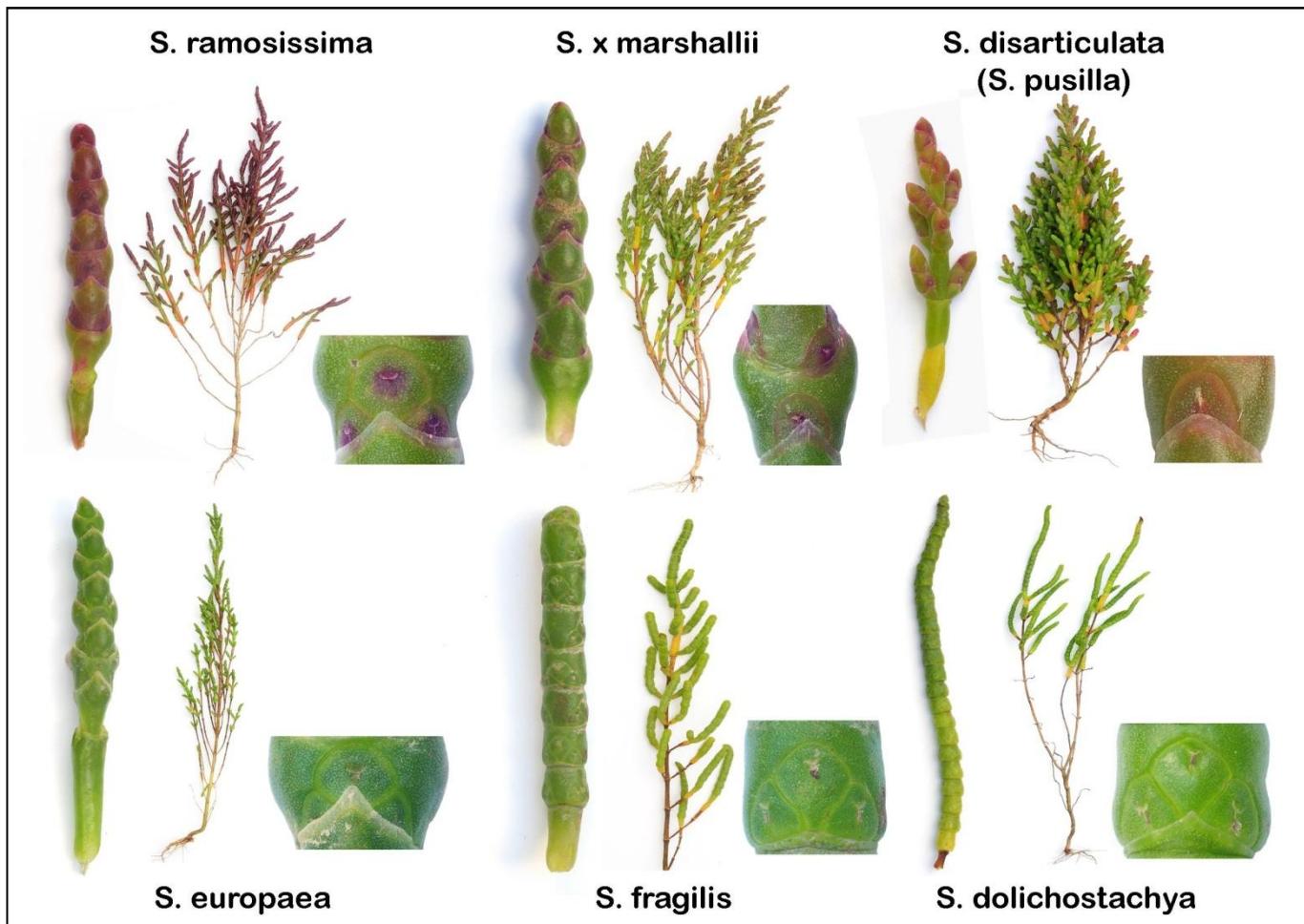
For fifty years, Francis Rose worked intermittently on a Flora of Kent. The manuscript was seen by a number of people from time to time but after his death in 2006 could no longer be traced. Only fragments are known, photocopies or typed-up sections, whose survival in various hands is more or less accidental. The loss is great: Francis Rose had a deep understanding of plants in general, the county flora and its ecology, as is apparent from his numerous publications and as anyone who had been out with him in the field will know.

These fragments have now been pieced together and, although it is not yet possible to make a final version generally available, the current state of the transcript can be emailed, on request, to any botanist with an interest in seeing it.

GK

GLASSWORTS in KENT

by Liam Rooney



BURDOCKS in KENT

by Liam Rooney

Guide to Burdocks

Species	<i>Arctium lappa</i>	<i>A. minus</i> Ssp. <i>minus</i>	Ssp. <i>pubens</i>	<i>A. nemorosum</i>
Inflorescence				
Stem Cross section				
Capitula Size	20 30 	11 24 	11 24 	19 29
Mid Phyllary Sizes	0.9 - 1.7mm 	0.6 - 1.8mm 	0.6 - 1.8mm 	1.6 - 2.5mm
Penduncle Length	$\geq 2.5\text{cm}$ 	0 - 0.8 cm 	0.5 - 1.2 cm 	0.0 cm
Phyllary/Corolla Ratio	1 - 5mm 	$\leq 3.6\text{mm}$ $\leq 2.5\text{mm}$ 	$\leq 3.6\text{mm}$ $\leq 2.5\text{mm}$ 	1.2 - 6mm
Notes	Corolla glabrous or glandular-hairy	Corolla glabrous to glandular-hairy	Leaves and Capitula more hairy.	Corolla glabrous
	Achenes usually with black blotches			

These notes on roses were produced for the purposes of the KBRG Roses Day on 17 August 2016 (see field meeting reports)

ROSA in KENT



What is *Rosa canina* agg.?

Is it everything in Section Caninae?

- = the dog- and field-roses *Rosa stylosa*, *R. canina*, *R. canina x caesia* (*R. x dumalis*), *R. obtusifolia* (no recent records), plus the downy-roses *R. tomentosa*, *R. sherardii* (no recent records), *R. mollis* (no recent records), plus the sweet-briars *R. rubiginosa*, *R. micrantha*, *R. agrestis*



or

Is it everything in Sub-Section Caninae?

- = the dog-roses *Rosa canina*, *R. canina x caesia* (*R. x dumalis*), *R. obtusifolia* (no recent records)



What is *Rosa canina* (in the strict sense)?

R. canina is very variable and includes:

- Group 'Pubescentes'. Hairy under leaves (sometimes midrib only) and on leaf stalk/rachis. Leaves uniserrate, no glands generally; maybe a few glands on stipule margins.
- Group 'Lutetiana'. Glabrous throughout. Leaflets uniserrate, no glands generally; maybe a few glands on stipule margins.
- Group 'Dumales'. [Nothing to do with *R. x dumalis*.] Glabrous throughout. Leaflets biserrate or multiserrate, with scentless red glands on leaf teeth. Similar glands on stipule margins, some on leaf stalk/rachis, occasionally on leaf underside esp. midrib.
- Group 'Transitoriae'. Intermediate between last two groups. Glabrous throughout. Leaflets irregularly uniserrate, i.e. small leaf teeth sometimes between large ones and not on sides of large ones. Some glands on stipule margins, occasionally on leaf stalk/rachis.

So we can record *Rosa canina* if we know it's that species (and the Group if we know it); or *Rosa canina* agg. if we know it's a dog-rose; or *Rosa* sp. if we know it's a rose but we're not sure if it's a dog-rose, field-rose, downy-rose, sweet-briar or some other rose.

R. canina is distinguishable from its hybrid *R. x dumalis* (common in Kent and behaving like a species):

<i>Rosa x dumalis</i>	<i>Rosa canina</i>
Head of stigmas always hairy to some degree	Head of stigmas generally not hairy, but occasionally slightly so
Wine-red pigmentation usual in stems	Wine-red pigmentation normally absent from stems
Some short pedicels and large foliose bracts, often partly hiding them	Pedicels generally longer, bracts smaller and less conspicuous
Leaflets often have a tendency to fold, dark green and smooth on the upper side and slightly glaucous on the under side	Leaflets not folded

How do we distinguish between the apple-scented roses?

<i>Rosa micrantha</i>	<i>Rosa rubiginosa</i>
Sepals mostly reflexed , falling before fruit reddens	Sepals mostly erect to patent , persistent until fruit reddens
Prickles more or less equal, no acicles (small straight prickles)	Prickles unequal, may have acicles, especially on branch below hips
Stems arching	Stems erect
Styles more or less glabrous	Styles hairy
<i>See also Rosa agrestis</i> below (under roses with hairy undersides to leaves) – scented but not strongly so	

Which Kent roses have columnar styles?

<i>Rosa stylosa</i>	<i>Rosa multiflora</i>	<i>Rosa arvensis</i>
Flowers/fruits single or in groups of generally not more than 8; top of hips conical; leaflets shiny, dark green and sharply pointed; sepals lobed	Flowers/fruits in groups of 10 or so; not a native plant, but sometimes found in rural hedgerows	Flowers/fruits single or in groups of generally not more than 6; tops of hips flat; sepals almost undivided; stems glaucous green &/or wine red

Which Kent roses have hairy undersides to the leaves?

<i>Rosa canina</i> Group 'Pubescentes'	Smooth pedicels and uniserrate leaflets distinguish from <i>R. tomentosa</i> , prickles also more strongly curved; scentless glands distinguish from <i>R. micrantha/rubiginosa</i> . See above (viz. what is <i>Rosa canina</i>).
<i>Rosa tomentosa</i>	Hips and pedicels glandular-hispid; leaf stalks/rachis tomentose; stipules densely gland-fringed. Biserrate leaflets (irregularly so, with small secondary teeth). Climbing habit. Sepals spreading or spreading-erect (eventually reflexed in <i>R. canina</i>).
<i>Rosa spinosissima</i>	Can be glabrous or slightly pubescent. Dense mixed prickles; blackening hips.
<i>Rosa rugosa</i> and <i>R. 'Hollandica'</i>	Large red hipped garden roses with dense mixed prickles; leaflets rugose (esp. <i>R. rugosa</i>).
<i>Rosa stylosa</i>	Pubescent, at least on veins. A columnar-styled rose.
<i>Rosa rubiginosa</i> , <i>R. micrantha</i>	Apple-scented. See above (viz. how do we distinguish between apple-scented roses).
<i>Rosa agrestis</i>	May be with or without hairs on underside of leaflets, but many sweet-smelling glands there. Separated from other sweet-briars (<i>R. rubiginosa/micrantha</i>) by glands not being strongly apple-scented and by smooth pedicels; also separated from <i>R. rubiginosa</i> by sepals being reflexed. Leaflets often wedge-shaped at base.
<i>Rosa obtusifolia</i>	No recent records, but note: prickles more strongly curved than <i>R. tomentosa</i> , pedicels generally shorter than <i>R. tomentosa</i> and sepals strongly reflexed. Leaflets neat, often overlapping, rounded; reddish-brown glands on teeth.
<i>Rosa mollis</i> , <i>R. sherardii</i>	No recent records.

Some Kent hybrids (a selection from the areas chosen for the KBRG meeting of 17 August 2016):

Rosa arvensis* (female) x *canina has more broad-based curved prickles (sometimes clustered) and larger leaflets than *R. arvensis*; usually some pinnately lobed sepals (undivided in *R. arvensis*); and variously shaped, sometimes abortive hips.

Rosa micrantha* (female) x *canina differs from *R. micrantha* in having larger variously shaped hips and leaflets (more sparsely pubescent below), and fewer glands than normal.

Rosa micrantha* (female) x *rubiginosa has the arching habit of *R. micrantha*, but differs in having more unequal prickles, some strongly curved, some scattered acicles on the pedicels and on the tops of most flowering branches; variable hips.

Rosa rubiginosa* (female) x *canina resembles *R. rubiginosa*, but has larger, ovate leaflets; sepals which may only reach patent position rather than erect; pedicels of varying length, some well exceeding 1cm; and some broad based hooked prickles amongst the more slender ones. From *R. rubiginosa*, acicles may be present. and apple-scented glands at least on pedicels and leaf undersides.

Rosa agrestis* (female) x *canina differs from *R. agrestis* in having a mixture of leaflets, some with a rounded base and only a scattering of sweet-smelling glands, others with cuneate bases, moderately glandular. Variable hips, some large subglobose, others smaller and slightly urn-shaped.

General notes on roses:

- Rose identification normally requires well-developed fruit, best available from the last week in July until the end of September, or later if leaves have not yet fallen.
- Identifying roses should involve viewing the general habit of the plant, the fruiting sprays (so as to see hips with their sepals and stalks), and leaves with their stipules, stalks and rachis, plus prickles (to be viewed in particular on barren shoots or the stems from which flowering shoots arise – strong current year shoots should be avoided).

- Roses are subject to much hybridisation and often introgression, which makes identifying the species harder.
- Rose hybrids will generally resemble the female parent more closely than the male.
- Glands on roses may be:
 - odourless, reddish-brown and either warty or on stalks (stalked versions present on pedicels of *R. arvensis* and *R. stylosa*)
 - faintly resinous, red to orange yellow/translucent on very short stalks (*R. tomentosa*)
 - apple-scented, golden or brownish/translucent on stalks (*R. rubiginosa/micrantha* and – not so clearly apple-scented –*R. agrestis*).

GK

MERVYN BROWN

As members will be aware, Mervyn Brown, who has led meetings for the group and shared generously his knowledge of grasses, died in June this year. His natural history interests were wide and he brought rigorous scientific method to his observations, consistent with a laboratory working background, but never taking orthodoxy for granted. As this was combined with a dry sense of humour, it was not always easy to tell in conversation whether he was expressing a serious, but iconoclastic view or was attempting to pull one's leg. But he showed us new ways of looking at things; and attendees of



KBRG meetings will not forget his application of Young's modulus to the bend in the branch of a grass panicle weighted down by florets or seed.

Mervyn examining Bromus ramosus subsp. benekenii

He would readily share his identification skills at meetings, from the days of the North Kent Wildlife Preservation Society, of which he was chairman in the 1980s, through to the Kent Field Club and latterly the KBRG. He is acknowledged in Eric Philp's New Atlas of the Kent Flora (2010) as being a regular companion and a great help with the surveying for that Atlas. He was the discoverer of plants mentioned in that work, such as *Scrophularia peregrina* (Nettle-leaved Figwort) and subsequently found persuasive evidence for the over-looked occurrence of *Bromus ramosus*

subsp. *benekenii* (*Bromopsis benekenii*) in the county. His knowledge of grasses was great, strengthened by the cultivation of native species. This led him into hot water with the local council, who found this use of allotment cultivation unconventional.

He was devoted to research into *Eryngium campestre* (Field Eryngo), about whose British occurrences he probably knew more than any other British botanist; and he built up a case for native status, which departs from current orthodoxy but is not readily dismissed. For many years he cared for the Darenth colony and, indeed, so frequently was he there that his car is visible at the site as shown on a Bing satellite view of the area (a view which is being replaced by a more recent one). He had intended to write up his views on *Eryngium*, but felt he was held back by having so much to say. However, the essence of these views was probably contained in a 2013 exhibit at the BSBI's Annual Exhibition Meeting; a talk at the 2015 KBRG AGM; and the account in the rare plant register.

Mervyn excavating in order to measure the depth of Eryngium campestre roots in cultivation.



Our sympathies lie with his daughters and with his partner Louise.

GK

I COULDN'T BELIEVE MY EYES

I went to my local Doctors in New Romney on Tuesday 4 October to have my eyesight checked and as I walked up to the front of the surgery I looked down and I saw four clumps of *Polycarpon tetraphyllum* (Four-leaved Allseed). The plants were on a dry, bare strip between the kerb and a low wall.

The species is on the Kent Rare Plant Register and is spreading across the County, with records from the docks in Chatham and across Thanet. The first East Kent record was found on a road verge in Lydd on the Romney Marsh five years ago by Tim Inskip and I have been keeping an eye for the plant locally, but this is the first record for the 10km square TR02.

The moral of the story is - unusual and rare plants can turn up anywhere, even tiny plants outside Doctors' Surgeries when you are going in to get your eyes tested.

OL

[Editor: one might also conclude that Owen's eyesight passed the test – these plants are seriously small!]

KENT BOTANICAL RECORDING GROUP FIELD MEETING IDEAS OR SUGGESTIONS – 2017

Sue Buckingham and I usually start in November to plan and draft the next year's Kent Botanical Recording Group field meetings programme.

How we usually do this is to ask a few key members to come up with suggestions and possibly lead or co-lead in their areas of expertise. We throw into the mix joint field meetings with our neighbours and partners in Sussex and Surrey and the Kent Field Club. We try a Workshop or a difficult species/ group as well. We also target Kent Rare Plant Register species and extinct species which might be still surviving in the County. Another factor is the desirability of having a good spread across the County, weekends and midweek events in key areas or in poorly recorded pockets of the County.

This time last year we didn't get any responses from KBRG members, but sitting in the pub in August after the *Lotus angustissimus* (Slender Bird's-foot-trefoil) discovery at Trenleypark Wood, the ideas were flooding in and Sue even got her notebook out and was scribbling down some suggestions.

Between the two of us we would like to have some guidance from members as to what they enjoyed or worked for them, what they might screw their nose up at, or would like us to organise. So please either phone or email Sue or myself to make 2017 KBRG field meeting programme just as exciting and productive as previous years. Please remember it gets harder as the years go by to do new and rewarding meetings...

Sue Buckingham – 07971 230840 suebuckingham7110@btinternet.com

Owen Leyshon – 07770 670316 owenleyshon@rmcp.co.uk

OL

Minutes of the Kent Botanical Recording Group Annual General Meeting 2.00 p.m., Saturday 2 April 2016

This meeting was held at Tyland Barn, headquarters of the Kent Wildlife Trust, Chatham Road, Sandling, Maidstone ME14 3BD. Twenty-nine members of the Group and guests attended the

meeting including the Chairman and Vice County Recorder for Kent, Geoffrey Kitchener.

1 WELCOME

The Chairman began by thanking everyone for coming to the meeting and Sue Buckingham for agreeing to take the minutes and for arranging the use of the room, courtesy of Kent Wildlife Trust (KWT). The AGM was to be illustrated with slides for the reports and the Chairman thanked Alfie Gay, Colin Osborne, David Steere, Liam Rooney, Sue Buckingham and Stephen Lemon for use of their photographs.

2 APOLOGIES FOR ABSENCE had been received from Jon Bramley, Mervyn Brown, Rodney Burton, Margot Godfrey, Georgina Hopkins, Jacky Langton, Lesley Mason, Rosemary Roberts and Ian Sapsford.

Pauline Heathcote said that she would pass on everyone's good wishes for a speedy recovery to Mervyn who was currently unwell in hospital.

3 MINUTES OF AGM held on 28 March 2015 were published in Newsletter no. 8 which was circulated to all members 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 were twofold. The first was with regard to the starting up of a record of conservation activities relating to rare plant register species. This had been promoted by Owen Leyshon and his report was a separate agenda item. The other was an action to provide information regarding the mileage expected to be covered at field meetings and this had been fulfilled in our programme.

4 REPORTS FOR THE YEAR

Membership. The Chairman reminded us that KBRG is a group open to all with an interest in the botany of Kent, whether that was an armchair interest or an active one. Our numbers continue to rise. We began with 35 members in March 2010, rising to 106 last year and currently membership stood at 113.

Meetings. In 2015 and in addition to the AGM we had thirteen field meetings plus reciprocal arrangements with Kent Field Club (KFC) for ten of their botanical meetings. Thanks were due to all the meeting leaders as well as those who attended the KFC meetings and passed on records.

For 2016 sixteen main meetings had been arranged plus an invitation to eight KFC meetings with botanical content. The Chairman thanked Owen Leyshon and Sue for putting together such an extensive and stimulating programme and those who had agreed to lead or to co-lead meetings. Next he showed a slide to show the spread of meeting locations in 2016 and asked if anyone had any comments about meetings.

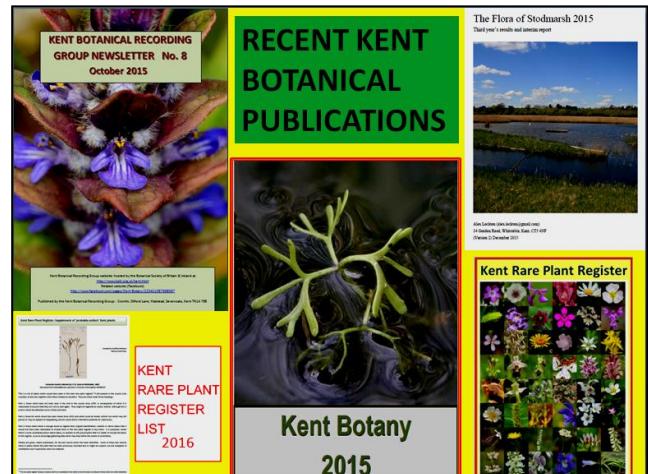


Joyce Pitt asked if meetings were arranged specifically to target under-recorded areas to which Sue replied that she and Owen considered that as well as a variety of other factors when putting the programme together. Joyce said that she could

suggest sites for our 2017 programme to wooded areas of the Low Weald and her offer was gratefully received especially because access and parking in this area of the County are generally difficult to arrange and for that reason we are not covering it as well as we would like to. Sue and Owen would liaise with Joyce later in the year. **Action: Sue & Owen with Joyce.**

In reply to a query about the possibility of BSBI hosting field meetings in Kent, the Chairman stated that BSBI currently concentrate their field meetings in those very poorly recorded parts of Great Britain and Kent is a very well-recorded county.

Publications



Our publications since the last AGM were:

- Newsletter no.8, last October
- Alex Lockton's 2015 further interim report on the Flora of Stodmarsh National Nature Reserve, which is on our webpage
- Kent Botany 2015 with all the latest discoveries
- The balance of Part H of the rare plant register together with parts I, J and K, all issued as consultation documents, revised with feedback and placed on our webpage. Part L and most of part M had been sent out recently as consultation documents.

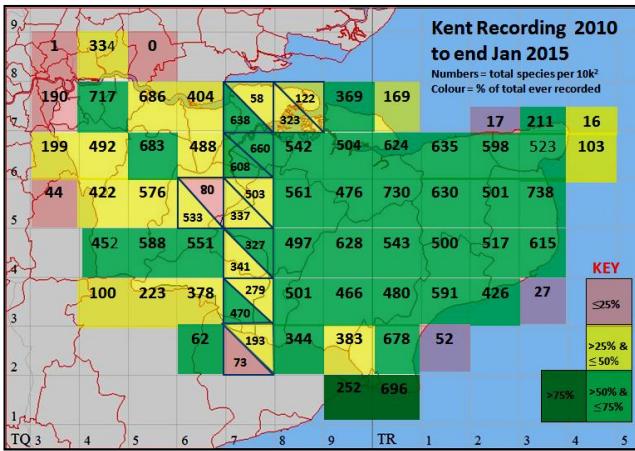
The annual update of all the earlier rare plant register accounts, together with the lists of rare species and the list of probably extinct species was put onto our website in February.

Finances. The Chairman confirmed that we continued to have no financial commitments. Our website, he explained, is provided free of charge by BSBI and he hoped that the situation would continue to operate in spite of Alex Lockton no longer working for BSBI. He took the opportunity to thank Alex for his encouragement in the past which has resulted in KBRG having a vibrant and up-to-date website. The room at Tyland Barn has continued to be provided free of charge for which the Chairman thanked KWT and, although he was asked at each AGM, he reiterated that he had incurred no material expenses for the Group. He concluded by saying that as long as that situation continued there was no reason to change the basis of subscription-free operation.

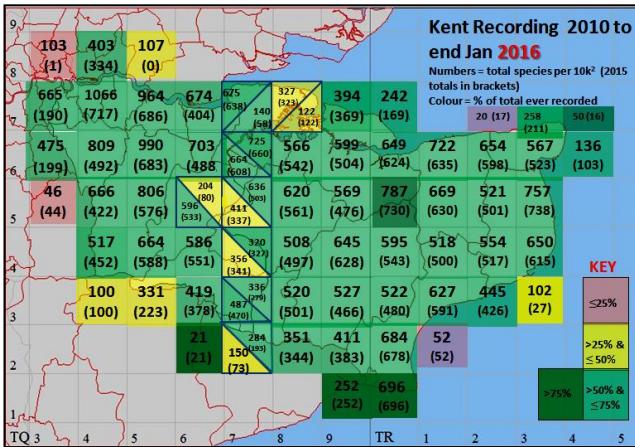
Recording, The Chairman used a slide to illustrate the manner in which our records have grown since 2010. He had reported the

total number of 225,700 records in Kent Botany and he explained that in six seasons this figure placed us within sight of the quarter million records which went into the New Atlas of the Kent Flora, although the nature of the recording was not fully comparable with that. Our records were provided by 64 botanists, many of whom were present at the current meeting. Some produced one or two and some several thousands of records and all he said, were welcome. Records also came from the meetings of four different societies or groups including our own.

He then showed a slide which we had seen at last year's AGM.



It gave the total number of species seen since 2010 in each 10km square with colour-coding to show the percentage relationship between the number seen since 2010 and the total number ever seen in that square. This was intended as a way of identifying where recording was needed, not just to bring up numbers to a general level but because some areas had always had less species than others and so would never be brought up to the same level. It was an attempt to bring numbers up so that that the total number of species recorded from 2010 onwards became a respectable proportion of the total ever recorded for that area. The slide gave purple-pink colour for 10km squares where we had recorded no more than 25% of all the species recorded for those squares before 2010; yellow where we had recorded no more than 50% and shades of green for the better recorded squares. It gave a means of deciding where best to target our 2015 recording efforts. The Chairman then showed the same slide updated to demonstrate how far we managed to change things in 2015. We had succeeded in reducing the number of low-recorded pink-purple and yellow areas and we now had more light green for reasonably well-recorded and dark green for very well recorded areas.



The remaining low-recorded areas were either those on the edge of the county or those involved with the boundary of east and west Kent where single squares have separate lists of records for each side of the boundary. The updated slide also showed the total number of species found since 2010 as of January 2016 compared with the total a year earlier. It indicated that nearly every square had been visited during 2015. The Chairman offered to e-mail this around the membership if that was wanted. He asked for comments on recording and **Alex Lockton** asked if the effect of recording species new to a square was potentially to make it harder to score a high percentage. The Chairman suspected that this was so; but considered that there was still value in the map as indicating progress. There might, however, be data distortions in marginal squares at the boundary and in some of those which included only small or inaccessible areas it would be a harder task to bring up the numbers anyway.

Rare plant register

With just over 1500 rare plant records received for 2015, the Chairman reported that we were getting a much better idea of the status of our rare plants in the county. Plants that we thought might not be seen again in the county had made an appearance and he showed slides of the following:

- *Anthemis arvensis* (Corn Chamomile), photographed by Stephen Lemon;
- *Fumaria bastardii* (Tall Ramping-fumitory), photographed by Colin Osborne;
- *Polypodium cambricum* (Southern Polypody), re-found and photographed by Stephen Lemon in West Kent

The first sighting of *Galium pumilum* (Slender Bedstraw) in West Kent for over 60 years and a new location as well was found by David Steere.

Since the last AGM, 34 new register species accounts had been issued, thus bringing us up to *Myosotis secunda* and the Chairman reminded everyone that many of these include details of old sites that are worth investigating. He had also updated all of the earlier register accounts (which would have included all of our 2015 records and any fresh information) and they were issued online in February.

Sometimes, he said, the fresh information was old information only recently received, for example the *Adonis annua* account now included some 18th century information about its use as a cut flower called Red Morocco.

The rare plant register list had been enlarged to include *Anthemis arvensis*; *Polypodium cambricum*; *Salvia verbenaca* (Wild Clary), this being a plant regarded as Near Threatened in England because of the speed of its decline; and *Trichomanes speciosum* (Killarney Fern). The Chairman explained the importance of the latter (which was new to Kent) in that no frond of Killarney Fern has ever been seen outside cultivation any nearer than Wales and Cornwall; but it had been found by Stephen Lemon in caves or rock crevices in an immature state looking like moss and never producing a frond. Stephen's initial discovery was in botanical East Sussex and subsequently it was also found in two places in Kent where the geology and aspect seemed right.

Rare plant register conservation activities.

The Chairman said that following Owen Leyshon's appeal at the last AGM, Owen had now provided the first excellent account of conservation activities relevant to our rare plants, which everyone on e-mail would have received. Owen was invited to comment further on this. He said that he was pleased with the response which involved members, friends and colleagues sending him reports of works carried out for the benefit of various species by such organisations as RSPB, Plantlife, KWT, Forestry Commission, Lesnes Abbey Conservation Volunteers, Bexley Environment Volunteers, EDF Energy, KCC, White Cliffs Countryside Partnership, Elmley Trust and Romney Marsh Countryside Partnership. Owen said that he was committed to doing whatever he could to halt the decline of rare plants due to lack of management. In this, he had been inspired by the work of Brian Laney who goes out across multiple counties in the Midlands and manages road verges or patches of land where rare plants are declining, have disappeared or need attention and where conservation bodies are unable to help. He appealed to members to send any habitat works in 2016 to him and to take some photos for the report so that next year the report would increase in size by a few pages. Contact Owen at owenleyshon@rmcp.co.uk Tel: 07770670316.

5. LOOKING AHEAD

Botanical developments in 2016

The Chairman reported on the following items which had come to his attention:

Hieracium (hawkweeds) Mike Shaw of Sussex was proposing to produce a book on hawkweeds of south east England, on the lines of Vincent Jones' work for Yorkshire, to help with what one suspects we all find to be a difficult group of plants. The work was expected to take some years but it afforded us the prospect of some fieldwork and the Chairman invited anyone who might be interested to let him know after the meeting.

Orchids. The Chairman said he was glad to hear that David Johnson's book on Kentish orchids was making good progress this year with the text being finalised and preparation of the maps being looked at this summer. David thanked the Chairman for his help with the book and said that he expected publication probably to run into next year.

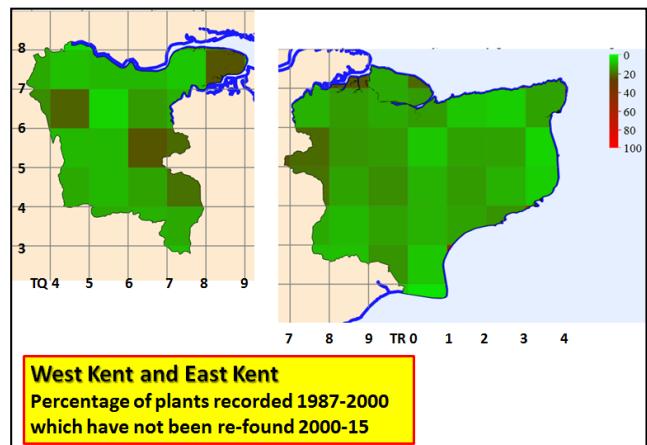
Ranscombe A paper by Richard Moyse had already come out in the current year comparing the effect on arable weeds of full ploughing and light tillage at Ranscombe Farm, and this could be read in the online journal '*Conservation Evidence*'.

Kentish Milkwort. The Species Recovery Trust had embarked on a project for safeguarding the Kentish Milkwort, in conjunction with KWT and interested Kent botanists. The Chairman said that this species could be regarded as a subspecies different from other British plants, in which case its conservation risk assessment would be Critically Endangered. He said that he had with other members attended a meeting the previous month regarding the project plans.

Our recording plans for 2016-19

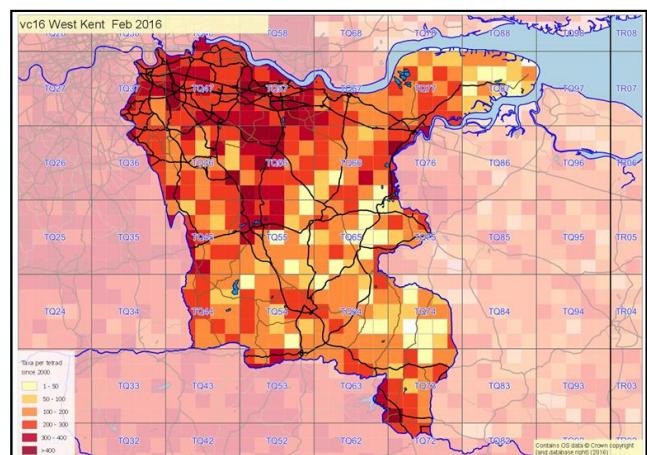
The Chairman said that previously our plans for the year had been based on aiming for good county coverage for the period from 2010 (when the group was formed) to 2019. That period is

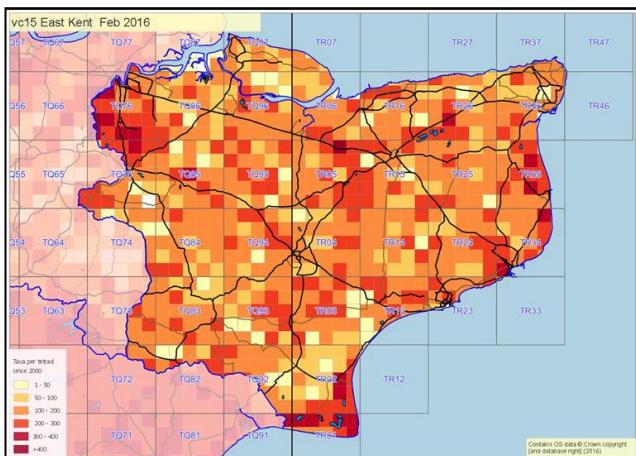
a BSBI date class which means that all the records within such a ten year span are used to compare with the records in each of the previous date classes, to see if there are any changes in distribution. However, for 2016 to 2019, the Chairman proposed a change in our plans in order to give greater priority to recording where needed for BSBI's next national Atlas. The last BSBI Atlas covered the period from 1987 to 1999 and the next one will cover that from 2000 to 2019. The Chairman had received a lot of analysis from BSBI in relation to the progress we have made towards a new Atlas and his next slide showed, in general terms, where we stood in relation to the records needed in both vice counties.



The darker the colour for a 10km square the more records in the last Atlas still need to be found for the new one. He pointed out that if we compare the map with the earlier slide to show by colour coding what areas need more records for the period 2010 – 2019 they are very similar with the same mid-county areas, the Hoo peninsula and some marginal areas all needing more records.

The next slides showed current recording density in both vice counties based on recording effort since 2000 (and so designed for BSBI Atlas purposes) but this time showing tetrads and although our recording is in monads, the Chairman pointed out that if we see a white or pale yellow square on the map then any of the four monads in that tetrad would be worth recording in.





Joyce Pitt said that she would appreciate a copy of the maps and the Chairman said that he was already using them himself and would send them out as a general mailing to the Group. **Action:** *Chairman.*

Finally the Chairman added that he had heard of some similar planning in relation to the London Flora Project where Rodney Burton and Judy Johns have been assembling data on how far recent monad recording in Metropolitan West Kent has reached and where the gaps are.

6. KENT WILDLIFE TRUST ECOLOGY GROUPS

Paul Tinsley-Marshall, the KWT Conservation Evidence Ecologist, was invited to introduce himself and the new KWT 'Ecology Groups' project for which he is responsible. This involves an opportunity for botanical surveying which he hoped might appeal to KBRG members. Paul explained that his post had been created to address a lack of focus in judging the success or otherwise of management plans both on KWT reserves and also in the wider landscape across Kent. In 2014

general survey work had begun in the Medway area by a group of volunteers called the Medway Smile Ecology Group. Paul had drawn up a programme for 2016 which included planned surveying and monitoring work in that and in two more areas of Kent, namely Darent and Blean. The programme outlines general project details, ecological groups to be covered by the surveys, a description of the required amount of knowledge and skill required (or not required) in order to volunteer and dates and venues for the various surveys throughout the year. Copies were available at the meeting and further details could be obtained from Paul at KWT, Tyland Barn or contact Paul at paul.tinsley-marshall@kentwildlife.org.uk

7. ANY OTHER BUSINESS OR COMMENTS

Sue Buckingham said that due to a recent house move the progress she had promised to make over the previous winter months towards compiling a list of axiophytes for Kent had not materialised. She apologised and said that she expected to get on with the work before the 2017 AGM.

8. DATE AND PLACE OF NEXT AGM.

The next AGM will be Saturday 1st April 2017 at Tyland Barn.

With no further business, the formal part of the meeting closed at 3.00 p.m.

Stephen Lemon and Liam Rooney had brought a selection of botany books free of charge for members and after refreshments, which were kindly supplied by Sarah Kitchener, there followed a presentation by John Badmin describing the artistic work of his uncle - *Illustrating British Trees: the work of Roy Badmin*.

Contributions and photographs for the next newsletter will be welcome!

- The editor will be glad of articles, letters, queries, comments and photographs, etc.
 - Whilst KBRG 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 email, please provide at reasonably high resolution.
 - All contributions should be sent to Geoffrey Kitchener, contact details below.

Thanks to all who led meetings in 2016; to Alfie Gay, Liam Rooney, Owen Leyshon and Sue Buckingham for meeting reports, and the latter also for the AGM minutes; to Sarah Kitchener for reviewing this newsletter; 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