# KENT BOTANICAL RECORDING GROUP

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#### **Lizard Orchids under threat**

Members will have received email information as regards а development proposal for the construction of a surfing lagoon and associated buildings at Betteshanger Country Park which would eviscerate the second largest population of Lizard Orchid in the British Isles and involve digging up c.800 plants of this supposedly protected species. (There would also be damage to important habitat and prejudice to other wildlife including turtle doves.)

As at 24 November, Dover District Council had received 10 consultee comments and 771 public comments. These include a letter of opposition from the President of the BSBI pointing out that this is an issue of national significance. The public comments were classified as 401 objecting, 368 supporting.

Thank you, those who have expressed their opinion to the Council as regards destruction of the remarkable wildlife value of the site. It seems all the more pointless when an aquapark has already just opened about 5km away, at Sandwich. There is a decision determination deadline of 28 December, and the Council is still accepting representations...

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# 2022 field meeting reports

**SANDWICH BAY, Monday 23 May** 

This first outing of the year to Sandwich Bay was surely the wettest KBRG meeting ever. The forecast was certainly pessimistic but, nonetheless, ten brave souls turned up at the Sandwich Bay Bird Observatory, donned their wet weather gear and umbrellas and kept going all day in the knowledge that at least the plants were enjoying the continual rain. It never once let up. Sue Buckingham led, and we were fortunate to be joined by Steffan Walton, the Observatory's warden, who filled us in with plenty of local information whilst we explored the

sandy grassland, wet hollows, and beach in the vicinity of the 'Obs'.

#### Sandwich Bay in the rain. Photo by Owen Leyshon

Rhinanthus minor (Yellow-rattle) was flowering just across the road in a sandy meadow where we also stopped to single out Eleocharis uniglumis (Slender spike-rush) in a hollow that floods in winter. We crossed what's known as the Haven Stream and entered the Bird Observatory's Whitehouse Field near where the Heligoland bird trap is situated. There we admired flowering Rare Plant Register species Silene flos-cuculi (Ragged Robin), Viola canina (Heath Dogviolet) and Anacamptis morio (Green-winged Orchid). All were much shorter than normal as a result of the dry weather we had been experiencing up until the day. Sandwich dunes are normally excellent hunting at this time for little winter-germinating annuals such



as *Moenchia erecta* (Upright Chickweed) and various small clovers and medicks. Dry weather had affected them as well and although we managed to find some very dried-up fruiting Upright Chickweed, the little clovers were very scarce with just a few minute plants of *Trifolium suffocatum* (Suffocated Clover) found by a nearby public footpath. However, we were pleased to discover a nice flowering plant of *Orobanche caryophyllacea* (Bedstraw Broomrape) in the dune grassland some 200-300 yards away from the main beach colony. John Puckett spotted *Carex spicata* (Spiked Sedge) which was a surprise as this is mostly a clay species in Kent.

There were plenty more sedges as we dropped down into an old dune slack by the footpath with *Carex flacca* (Glaucous Sedge), *C. arenaria* (Sand Sedge), *C. distans* (Distant Sedge), *C. disticha* (Brown Sedge) and then one that had Stephen really interested as he considered that it could be a candidate for *Carex trinervis* (Three-nerved Sedge) or *Carex x timmiana*, its hybrid with *Carex nigra* (Common Sedge). *C. trinervis* is currently extinct in the UK and was known from a dune slack in Norfolk in the 1860s-1890s. Our plant was similar to *C. nigra* but growing very upright with stomata on both sides of its straight inrolled leaves (*C. nigra* has curved leaves with stomata mostly only on the upper surface and *C. trinervis* has straight inrolled leaves). Some of the female glumes were aristate at the apex rather than rounded as is usual in *C nigra*. Stephen collected some material for

sending on for confirmation and after a few weeks received a reply from Mike Porter (BSBI referee for *Carex* species), confirming that after much careful consideration our sedge was in fact a form of the very variable *Carex nigra*. However, Common Sedge does not live it up to its name in Kent and although recorded from nearby Ham Fen it hadn't been recorded in recent years from the Sandwich dunes.

Carex sp. with aristate glumes. Photo by Stephen Lemon

We saw RPR species Anagallis tenella (Bog Pimpernel) here, also Samolus valerandi Brookweed with flowering Oenothera stricta (Fragrant Evening Primrose) and nearby, the first flowers of Dactylorhiza praetermissa (Southern Marsh-orchid). There are some tall dunes beside the footpath here where we



were fortunate to catch the first flowers of *Himantoglossum hircinum* (Lizard Orchid) along with more Bedstraw Broomrape and a little *Medicago minima* (Burr Medick) with *Trifolium scabrum* (Rough Clover). At the top of the beach *Silene conica* (Sand Catchfly) was flowering on sand with *Calystegia soldanella* (Sea Bindweed), *Festuca arenaria* (Rush-leaved Fescue) and we saw the leaves of *Eryngium maritimum* (Sea Holly). Further down the beach *Crambe maritima* (Sea Kale), lovely little cushions of *Honckenya peploides* (Sea Sandwort) and *Glaucium* 



*flavum* (Yellow Horned-poppy) were all admired on the shingle which for many years now has buried the sand which once was responsible for new dune formation here.

The rain continues! Owen photographs the mystery *Carex*. Photo by Stephen Lemon

Surely the beach is the only place for a picnic at Sandwich Bay and that's where we sat and ate (although some stood) never minding the steady rain and absence of any shelter. It was understandably a brief lunch stop and we set off soon afterwards through the Sandwich Bay private estate which always has a few interesting plants on the verges and where we added Trifolium (Subterranean subterraneum Clover), Lamium amplexicaule (Henbit Dead-nettle) Erodium and moschatum (Musk Stork's-bill). Steffan led us to an area owned by the Observatory Trust and known as the Gullies. These wet hollows are the last traces of an

unsuccessful attempt by the townspeople of Sandwich to make a canal between the town and the beach in the 1550s and were known as the 'Roger's Cut'. The Haven Stream, mentioned earlier in this report, was part of that. We saw *Salix repens* var. *argentea* (Creeping Willow) and *Hippophae rhamnoides* (Sea Buckthorn) in profusion here with *Cynoglossum officinale* (Hound's-tongue) on the dry banks. Steffan showed us a wonderful colony of *Ophioglossum vulgatum* (Adder's-tongue) in one of the hollows along with *Neottia ovata* (Common Twayblade). In another we admired a colony of many tussocks of *Carex elata* (Tufted-sedge) and, close by, *Salix triandra* (Almond Willow) with characteristic peeling bark.

It certainly would have been preferable to have had a dry day to encourage more members to come and enjoy the plants of this remarkably rich area but without doubt in spite of the rain we all left feeling well satisfied with what we saw. Thanks go to Steffan for accompanying us, keeping us informed and allowing us access to little-known parts of the Sandwich estate. Also, for inviting us into the Observatory for a most welcome cup of tea before we left.

Sue Buckingham

#### HAYSDEN COUNTRY PARK, TONBRIDGE, Thursday 9 June

Haysden Country Park embraces an area of some 65 hectares in the Medway Valley and is covered by four monads with three of these forming the area covered by the field meeting. The park includes a range of habitats – the river Medway, part of a disused canal, meadows, two freshwater lakes, marshland and woodland. The field meeting managed to visit most of these on the day and added some 20 new plant species to the park's flora of over 450 species of plants and trees.

The day started as usual in a car park, with a promise of tea and biscuits to those who survived the day. After a few introductions by Alan Heyes, the Park's Volunteer Botanist, the party of 13 keen botanists set off to Stone Lock, a remnant of the failed Penhurst -Tonbridge Canal which now hosts an excellent range of plants that thrive in damp conditions. The party soon spotted *Carex pseudocyperus* (Cyperus Sedge) and *Carex remota* (Remote Sedge), *Impatiens capensis* (Orange Balsam), *Alisma plantago-aquatica* (Water-plantain), *Helosciadium nodiflorum* (Fool's-water-cress), *Moehringia trinervia* (Three-nerved Sandwort) and several excellent specimens of *Athyrium filix-femina* (Lady-fern). Sue Buckingham also spotted one specimen of *Stellaria* alsine (Bog Stitchwort) – the first sighting of the plant in the Lock. Geoffrey Kitchener also confirmed the *Callitriche* species recently found here was indeed *C. stagnalis* (Common Water-starwort).

After reluctantly leaving Stone Lock, the group headed off towards the Leigh Flood Barrier with a cursory look at the grasses and plants in the Medway Meadow. The Flood Barrier was currently closed to visitors due to



engineering works, but we had a special dispensation to cross the barrier at 11 a.m. and continue the field visit to the western half of the park. Before crossing the Barrier, the group had the opportunity to see a very large specimen of *Cardamine impatiens* (Narrow-leaved Bitter-cress) in Friendship Wood – the first sighting of this Kent rare plant in the area for at least decade. Immediately following that, the group were shown a specimen of the rare hybrid *Tragopogon x mirabilis* (the cross between Goat's-bead and Salsify) growing close to the eastern face of the Barrier. First located in 2021, the plant had been fenced off from damage by engineering work. Rather annoyingly, its flowers refused to come out and greet the group on the day, but fortunately a photograph of it had been taken a few days before by the contractors!

Tragopogon x mirabilis, in flower as it should have been!

Free from the constraint of having to meet a deadline to cross the Barrier, the group spent a rewarding hour before lunch wandering across the Water Meadow west of the Barrier. Notable of the many plants observed were: *Oenanthe pimpinelloides* (Corky-fruited Water-dropwort), *Oenanthe silaifolia* (Narrow-leaved Water-dropwort), *Carex leporina* (Oval Sedge), *Juncus acutiflorous* (Sharp-flowered Rush), *Juncus conglomeratus* (Compact Rush), *Lathyrus pratensis* (Meadow Vetchling), *Glyceria fluitans* (Floating Sweet-grass), *Gnaphalium uliginosum* (Marsh Cudweed), and several large specimens of *Heracleum mantegazzianum* (Giant Hogweed). One of the new sightings in this comprised several patches of *Azolla filiculoides* growing with *Lemna minor* in the river Medway, immediately west of the Flood Barrier gates.

Ranunculus flammula (Lesser Spearwort) in the Water Meadow. Photo by Geoffrey Kitchener



After lunch several new plants were added to the park's plant inventory including *Festuca rubra* (Red Fescue), *Poa compressa* (Flattened Meadow-grass), and *Schedonorus arundinaceus* (Tall Fescue), *Catapodium rigidum* 

(Fern-grass) and Vulpia bromoides (Squirreltail Fescue). Before leaving the Water Meadow, the group were able to observe another plant on the Kent rare plant list – *Geranium purpureum* (Little-Robin), first observed by Sue Buckingham some 12 years ago and still managing to survive on a stone gabion by the railway line.

Leaving the Water Meadow area, the group walked past the largest water feature in the park – Haysden Water. A good range of water plants were observed lining the Lake notably *Rumex hydrolapathum* (Water Dock), *Mentha aquatica* (Water Mint), *Lycopus europaeus* (Gypsywort), *Phragmites australis* (Common Reed), and



meeting with one lovely specimen in flower of *Malva setigera* (Rough Marsh-mallow), last seen 18 years ago by Sue Buckingham near the site of the present find - a further much welcomed addition to the flora of the park. Even as the group prepared to leave the park for the walk back to the car park, further finds were made including *Fumaria muralis* subsp. *boraei* (Common Ramping-fumitory) *and Lysimachia punctata* (Dotted Loosestrife).

# Bolboschoenus maritimus (Sea Club-rush).

#### Underneath the arches. Photo by Alan Heyes

The last part of the day found the group looking at the unusual range of plants growing under, and close to, the A21 road viaduct. Notable plants observed were *Beta vulgaris* subsp. *maritima* (Sea Beet), *Odonites vernus* (Red Bartsia), *Parapholis strigosa* (Hard-grass), *Plantago coronopus* (Buck's-horn Plantain), *Polypogon monspeliensis* (Annual Beard-grass), *Torilis nodosa* (Knotted Hedge-parsley), *Spergularia marina* (Lesser Sea-spurrey), *Polypogon viridis* (Water Bent) and

Rumus cristatus (Greek Dock).

The best find of the day was almost at the end of the



#### Malva setigera (Rough Marsh-mallow). Photo by Alan Heyes

The day ended with the much-welcomed tea and biscuits and the

satisfaction of locating several new plants, including roses and a few hybrids thanks to Geoffrey Kitchener's knowledge of *Rosa canina* species 'splits' and dock hybrids!

Alan Heyes

#### WANSHURST GREEN and BRIDGEHURST WOOD, near Marden, Wednesday 15 June

After a two year postponement of this meeting due to the covid-19 lockdown, it was very satisfying to finally have it take place and see the richness of the pastures, ponds and woodland of Manor Farm in the Low Weald. The group were very grateful to owners Lou and Richard Carpenter for the opportunity to explore their land which they farm sustainably to benefit the wildlife and as part of the very successful Marden Farming Cluster. The farm lies within the same shallow valley between Marden and Staplehurst which the KBRG and Kent Field Club explored in 2019 and where Marden Meadow Nature Reserve is situated. Our group now had the opportunity to explore different habitats not accessible to the public. It was also good to know we continue a tradition of natural history meetings at this farm, originally arranged by Lou's sister and former Kent Field Club member Susan Highwood back in the 1970s.

The damp shady track by a pond had *Carex remota* (Remote Sedge) and both the blue and yellow flowered varieties of *Iris foetidissima* (Stinking Iris). *Rosa canina* group *Lutetianae* (i.e. true *Rosa canina*) and *Rosa* x



subcanina were recorded along the lane and elsewhere Rosa canina group Pubescentes (now Rosa corymbifera, Hairy Dog-rose) and Rosa tomentosa (Harsh Downy-rose). During the recce for this meeting, the track was followed across the railway and a nearby pond in the corner of field was visited where Hottonia palustris (Waterviolet) was found growing in shady conditions below Typha angustifolia (Lesser Bulrush). Hottonia is now reinstated for the area, having been formerly present at Manor Farm and until recently at Marden Meadow.

#### Demonstrating rose identification. Photo by David Newman

A large meadow along the edge of the railway was visited where a good mix of common species was seen, including the dock hybrid *Rumex x pratensis* and both parent species. It was hoped to have shown *Neottia ovata* (Common Twayblade), *Dactylorhiza praetermissa* (Southern Marsh-orchid) and *Ophioglossum vulgatum* (Adder's-tongue) in this field where they were recorded in 2020, but the dry conditions put paid to that. Lou recalled this field as an

orchard in the 1960s then ploughed, so it is an example of how meadow plants are capable of resurrecting themselves from the seedbank. A turtle dove sang from the field edge, one of the other success stories of the Marden Farming Cluster whose work is helping to sustain a significant part of the Kent population of this declining migrant bird.

A damp corner in another field had an impressive number of sedges, including many fox-sedge clumps, all of which proved to be very robust examples of the False Fox-sedge, *Carex otrubae*. We made our way to the edge of the reservoir dug in the 1970s to supply water for the farm crops and now used by anglers. Some very large carp were seen sunning themselves near the surface. We pondered for a while on a water-crowfoot with very small flowers growing along the margin of the reservoir and concluded it was *Ranunculus trichophyllus* (Thread-leaved Water-crowfoot). Lou also provided some material of a water-crowfoot from a pond by Manor Farm itself which was later identified as *Ranunculus peltatus* (Pond Water-crowfoot).

#### Crataegus x media (Hybrid Hawhorn) at wood margin. Photo by David Newman

Bridgehurst Wood was next visited which, although not large, proved to be very diverse, with both ancient woodland and a large area of secondary woodland, supporting a wide variety of plants. We focused on the secondary woodland and its junction with the original wood. A significant number of both mature and young Sorbus torminalis (Wild Service-trees) were recorded; many of these Lou had helpfully marked. It was all the more interesting to know that the trees growing in the secondary woodland had arisen since the 1970s, before when it was a field which Lou remembered ploughing. We made our way to the southern end of the secondary woodland, where the ground flora included heath species Potentilla erecta (Tormentil), Veronica serpyllifolia (Thyme-leaved Speedwell), Luzula multiflora subsp. congesta (Heath Wood-rush), and Hypericum pulchrum (Slender St John's-wort). It was interesting to see these species here on poorly drained Weald Clay and to consider that a similar heathy ground flora had been recorded from most likely a different area of the wood by the Kent Field Club in the 1970s. In the poorer drained parts along the southern edge Scutellaria galericulata (Skullcap) was flowering.



Making our way through another pasture along the railway, a fine display of flowering *Dactylorhiza fuchsii* (Common Spotted-orchid) was seen on damp ground. Another notable feature of this pasture was the large amount of *Ranunculus sardous* (Hairy Buttercup), growing in one area with *Ranunculus flammula* (Lesser Spearwort), where the subtle difference in the shade of yellow of both species' flowers could be seen.



aguatica (Fine-leaved Water-dropwort), Bidens tripartita (Trifid Bur-marigold), Cardamine amara (Large Bitter-cress) and Eupatorium cannabinum (Hemp-agrimony) all noted. A colony of the rare Carex elongata (Elongated Sedge) previously discovered here was partly hidden in the growing vegetation. Elsewhere in this woodland where a more typical ancient woodland flora was present, there was the hybrid sedge Carex x pseudoaxillaris, along with one of parents, Carex remota (Remote Sedge). Also, a small patch of Carex vesicaria (Bladder-sedge) strongly representative of wet woodlands in the Weald, was seen producing its inflated utricles along the open edge of the wood. In addition to all these sedges, Carex pseudocyperus (Cyperus Sedge) was found growing at a pond by our start (and finish) location.

#### Carex pseudocyperus (Cyperus Sedge). Photo by David Newman

Stephen Lemon

#### Ranunculus sarduous and flammula. Photo by Geoffrey Kitchener

At the badly drained far end of this pasture were several large clumps of *Carex vulpina* (True Fox-sedge), growing in *Salix* scrub in lush vegetation with *Oenanthe crocata* (Hemlock Water-dropwort).

Passing into another pasture, we found a large number of *Carex* species growing, including *Carex* spicata (Spiked Sedge), *Carex* flacca (Glaucous Sedge) and different forms of *Carex* divulsa (Grey Sedge), including a form very similar to subspecies *leersii* most often found on chalk or greensand. A very interesting discovery was three patches of *Genista* tinctoria (Dyer's Greenweed), which most likely derived from green hay either spread on this pasture or fed to cattle using it, with one of the smaller clumps appearing to have seeded the larger ones.

Going into the adjacent wet woodland bordering the railway, we saw that recent activity to clear trees out of the ponds was having positive results on the ground flora, with *Oenanthe* 



#### FOLKESTONE DOWNS, Saturday 25 June

The spectacular downland scenery above Folkestone was our choice for the first of two Kent meetings to be held over a weekend and shared with members of the Wild Flower Society. Alfie Gay with his knowledge and experience there as a ranger for White Cliffs Countryside Partnership was the person to lead the meeting but a train strike whilst he was on holiday in Scotland prevented him from getting back home in time. So, the 21 people who arrived on the day were met by one of Alfie's colleagues, Bradley Foster, who very kindly gave up his day to lead us and keep us informed on the various aspects of the site's management and grazing regime along with some of its ancient and modern history from the old earthworks on Castle Hill to war-time pill boxes and the modern Channel tunnel terminal.

#### Photo by Daphne Mills

The Folkestone Downs are one of the largest areas of unimproved chalk grassland in Kent and we were soon enjoying some really good downland species, such as Asperula cynanchica (Squinancywort), Carduus nutans (Nodding Thistle), Galium verum (Lady's Bedstraw), Lithospermum officinale (Common Gromwell) and Rosa micrantha (Small-flowered Sweet-briar). Kent Rare Plant Register species were Cynoglossum officinale (Hound's-tongue) Helianthemum nummularium (Common Rock-rose), Gymnadenia conopsea (Chalk Fragrant-



orchid), *Knautia scabiosa* (Field Scabious) with *Briza media* (Quaking Grass). Other typical grasses included: *Avenula pubescens* (Downy Oat-grass), *A pratensis* (Meadow Oat-grass), and *Bromopsis erecta* (Upright Brome). Stephen Clarkson pointed out a Hawthorn with an unusual mix of leaf shapes and just a few spines, naming it *Crataegus heterophylla* (Various-leaved Hawthorn), a non-native species not previously recorded in East Kent. However, further inspection a few days later failed to provide the absolute certainty required in order to accept it as a first vice-county record.



We struggled to stay upright on near-vertical slopes above the M20 motorway admiring at our feet *Anacamptis pyramidalis* (Pyramidal Orchid), *Betonica officinalis* (Betony), *Geranium columbinum* (Long-stalked Crane's-bill), *Hippocrepis comosa* (Horseshoe Vetch), *Linum catharticum* (Fairy Flax) and *Polygala vulgaris* (Common Milkwort) as we watched the road disappearing below us into the Round Hill tunnels. After a while we were glad to climb back up to a gentler slope above where *Ophrys apifera* (Bee Orchid) was spotted and Stephen Clarkson entertained us by attempting to identify subspecies of *Pilosella officinarum* (Mouse-ear Hawkweed), from the hairs on the involucral bracts.

#### Photo by Daphne Mills

We continued further west where the herd of cattle that had been out on Castle Hill had made a very good job of eating most of the chalk plants except for a patch of *Thymus drucei* (Wild Thyme) which kept us occupied for a while as we peered at hairs on stem corners and stem faces in order to be sure we weren't looking at *Thymus pulegioides* (Large Thyme). With few flowers left to delay us we were soon on a minor road and making good progress towards Cheriton Hill and our lunch spot.

*Papaver rhoeas* (Common Poppy) and a little *Euphorbia exigua* (Dwarf Spurge) were on the edge of an arable field and a plant of *Chelidonium majus* (Greater Celandine) was admired for its unusual double flowers.

A patch of *Centaurea scabiosa* (Greater Knapweed) was attracting a large number of Marbled White butterflies to its flowers and provided plenty of photographic opportunities, whilst nearby we were delighted to find that *Ophrys fuciflora* (Late Spider-orchid) plants still had some good flowers remaining in spite of the recent prolonged period of hot dry weather. *Orchis anthropophora* (Man Orchid) also had a few flowers left. We had lunch nearby before walking down the slope to admire a cluster of *Cirsium eriophorum* (Woolly Thistle) plants which were just a little short of flowering.

We returned along the road and finally dropped down the slope to look at the small fen at Holy Well and to admire a large amount of *Juncus subnodulosus* (Blunt-flowered Rush) with *Carex paniculata* (Greater Tussock-sedge) and, hidden away beneath the vegetation, some *Chrysosplenium oppositifolium* (Opposite-leaved Golden-saxifrage). Our last spot was a little further down at dried-up cattle-poached wetland with *Glyceria notata* (Plicate Sweet-grass) and *Lotus pedunculatus* (Greater Bird's-foot-trefoil). Having climbed down from the top to the bottom of the Down, it only remained to climb all the way back up again to our parking spot.

A most enjoyable day and particular thanks are due to Bradley for keeping the party well informed and together.

Sue Buckingham



Sunday was the second day of an organised weekend trip by the Wildflower Society in partnership with the Kent Botanical Recording Group to visit the unique landscape of the Dungeness National Nature Reserve. As a result of this joint field meeting the group was swelled to 26 botanists and we met in the large car park next to the Old Lighthouse.

Dungeness Point is a private Estate and is owned by EDF, being part of the wider National Nature Reserve, and the group was led by the two Rangers/Estate Managers, Owen Leyshon and Jacques Turner-Moss, who work for the Romney Marsh Countryside Partnership.

The spring and the summer had already been hot and dry across the County and coastal landscapes like Dungeness had suffered with these extremes. As a result the landscape and the vegetation were both rather brown and frazzled already and some of the shingle specialities which we would have hoped to see had already gone over. As to be expected, the day was dry, sunny and warm with a light breeze.

From the car park the group were immediately amongst the shingle specialities like *Crambe maritima* (Sea-kale), *Glaucium flavum* (Yellow-horned Poppy), *Echium vulgare* (Viper's-bugloss) and vast swathes of *Silene nutans* 



(Nottingham Catchfly).

At the back of the Old Lighthouse, the group were able to enjoy another plant which, although on the Kent Rare Plant Register, is widespread across Dungeness on the more mature shingle ridges Jasione \_ montana (Sheep's-bit). Along with the Jasione, the group quickly found many patches of Cuscuta epithymum (Dodder) wrapped around the Nottingham Catchfly and also around the Cytisus scoparius (Broom) bushes growing prostrate in the shingle.

#### Photo by Owen Leyshon

As is usual with these events, progress was slow and in the first hour we had only moved 200 metres from the car park. At the edge of the private road near the Power Station a small parched patch of *Trifolium glomeratum* (Clustered Clover) was shown to the group by Jacques.

Moving over to the Moat and the Dungeness Bird Observatory, the group stopped to appreciate two more Kent Rare Plant Register species in the compacted brown dirt on the side of the shingle track - *Poa bulbosa* (Bulbous Meadow-grass) and *Trifolium suffocatum* (Suffocated Clover).

The group then moved slowly across the shingle trying to admire dried seedheads of *Tessdalia nudicaulis* (Shepherd's Cress) on the edge of the footpath over to a large wooded area known as the 'Trapping Area'. This route took us up to the bottom of the Long Pits, from where the group walked up the west side of the pit and had lunch sitting on the banks of the pit in the sunshine. The margin where we lunched had *Baldellia ranunculoides* 

(Lesser Water-plantain) and *Ranunculus lingua* (Greater Spearwort) and Sue threw out the trusty grapnel, brought as is customary even if we are on a droughted shingle landscape, to record *Potamogeton lucens* (Shining Pondweed).

#### Comarum palustre (Marsh Cinquefoil). Photo by Owen Leyshon

We then zigzagged over to a low-lying wet depression to the east of the Long Pits called 'the Wigwams', which had been cleared of *Salix* (Willow) scrub ten years previously under targeted scrub management. Patches of *Comarum palustre* (Marsh Cinquefoil), *Veronica scutellata* (Marsh Speedwell), *Silene flos-cuculi* (Ragged-Robin) and *Ranunculus flammula* (Lesser Spearwort) have all appeared in recent years. The cinquefoil is of particular note as it has reappeared after the last records in the early 1980s.

We continued to amble across the shingle and over the miniature Romney, Hythe and Dymchurch railway line and towards Prospect Cottage where the late Derek Jarman lived and created his famous garden. A five minute appreciation of the garden by the group was taken and then we were on our



way again, this time down the main private Estate road to a large patch of flowering *Galeopsis angustifolia* (Red Hemp-nettle). This nationally rare plant has a stronghold in the County on the shingle and it happens that some of the best patches over the decades have been next to the verges where cars frequently get stuck in soft shingle



through drivers ignoring the signs.

From the Estate road we detoured off again and walked the 'Road to Nowhere' past the T tower (or 'Mr T') and to several patches of *Lathyrus japonicus* (Sea Pea) with the New Lighthouse as a backdrop. It was also an opportunity to look out into the English Channel and across to France and also admire the feeding Porpoises just offshore.

#### Lathyrus japonicus (Sea Pea). Photo by Owen Leyshon

The pace quickened as the Old Lighthouse and the cars came into view and we finished the large circular route walking down the wooden boardwalk, past the Britannia Inn and the art galleries back to the car park for welcome refreshments. Today it was trays of tea and coffee and a wide selection of biscuits and Welsh Cakes.

After refreshments it was time to wish all the WFS members a safe journey home on what was a

successful and rewarding weekend enjoying the Kent's flora showcased by the Kent Botanical Recording Group.

#### RANSCOMBE FARM, CUXTON, Sunday 3 July

Twenty-seven of us met at Plantlife's Ranscombe Farm Reserve on a sunny Sunday morning for this joint meeting between KBRG and BSBI. Ranscombe is a large site, and we ended up completing a 3.5-mile circuit to take in various areas of arable, grassland and woodland.

We were parked on a grass in the corner of an arable field, where some unmown patches held *Filago germanica* (Common Cudweed) and *Bromus secalinus* (Rye Brome), the latter also providing interest later in the day when it was found growing alongside the very similar *Bromus racemosus* (Smooth Brome). In the same spot, a single specimen of an unusual *Orobanche*, a short plant, with a small number of large, yellowish flowers, proved more difficult, but flowers were taken by Sue Buckingham and Ian Denholm for later examination. As a result, it was determined as an atypical *Orobanche crenata* (Bean Broomrape), though in this case there were no beans or other members of the Fabaceae to be seen and it might possibly have been using *Helminthotheca echioides* (Bristly Oxtongue) as its host.



Valerianella dentata. Photo by Owen Leyshon



(Clustered Bellflower) was just coming into flower and the large hips of *Rosa spinosissima* (Burnet Rose) were starting to turn a deep purple-black.

#### Photo by Richard Moyse

Continuing uphill, we followed the path through mixed secondary woodland, where we paid a visit to a huge, two-foottall *Orchis purpurea* (Lady Orchid), one of just two flowering-sized plants in this part of the reserve; this was long past flowering but showed surprisingly good seed-set, with at least twenty seed-pods clearly swelling. Nearby, we were able to record Eventually, we set off to follow the North Downs Way into the chalky valley in the southern part of the site, passing on the way some stands of *Bromus interruptus* (Interrupted Brome). Ranscombe Farm is one of a handful of sites where this otherwise extinct English endemic has been reintroduced, with – so far – promising results. On the south-facing slopes of the chalky valley, we were able to explore a large field managed primarily for the rare annuals of arable farmland, finding large numbers of *Valerianella dentata* (Narrow-fruited Cornsalad) as well as smaller numbers of *Roemeria hispida* (Rough Poppy) and *Filago pyramidata* (Broadleaved Cudweed); much of the *V. dentata* showed the very rare gall formed in the flowerheads by the bug *Trioza centranthi*.

#### Astragalus glycphyllos. Photo by Owen Leyshon

Crossing the valley, we passed up into the small patch of relict chalk grassland at Mill Hill, where Campanula glomerata



Sanicula europaea (Sanicle) and Cephalanthera damasonium (White Helleborine), as well as some large stands of Astragalus glycyphyllos (Wild Liquorice).

Lunch was taken in Kitchen Field – the 'Cuxton Weedy Field' – where we found more *Filago pyramidata*, small numbers of *Agrostemma githago* (Corncockle) and a single, small plant of *Malva setigera* (Rough Mallow), after which we went to see *Salvia pratensis* (Meadow Clary), the plant which first put the site on the botanical map in the late 1600s, which we were pleased to find still bearing some flowers. Although we did not have time to explore properly the large block of Cobham Woods which lies within the reserve, we did skirt its southern edge and dipped into one woodland ride to examine some possible specimens of *Potentilla anglica* (Trailing Tormentil), which showed the typical three-part leaves and four-petalled flowers and looked to be developing the ripe fruit that separates this species from some very similar (but almost completely sterile) hybrids. In the same ride, a few of us went to admire the stand of *Impatiens parviflora* (Small Balsam) which may have originally arrived on the wheels of coppice-contractors' vehicles but has persisted here for nearly a decade.

From here we headed back towards the car-park, on the way taking in the margin of an arable field with a particularly large stand of *Malva setigera* (more than 300 plants, according a count made by the reserve warden), all of them good-sized plants and some still with a number of their pale-pink flowers. The day was rounded off with tea and coffee very kindly provided by Owen.

**Richard Moyse** 

#### WYE NATIONAL NATURE RESERVE, Sunday 17 July

This meeting, joint with Kent Field Club, was arranged so that members of both could enjoy the flora of Wye Downs National Nature Reserve and learn about the management, the make-up, and the history of some of the chalk vegetation types there. Alex Lockton, who had recently produced *A Flora and Vegetation of Wye and Winchcombe Downs NNR*, very kindly agreed to lead the meeting. We thought that mid-July would be a good time to enjoy the flora at its best but certainly didn't expect that on the day we would be faced with an amber weather warning for afternoon temperatures to reach the high 20°s. Not at all ideal for botany on one of the hilliest sites in Kent.

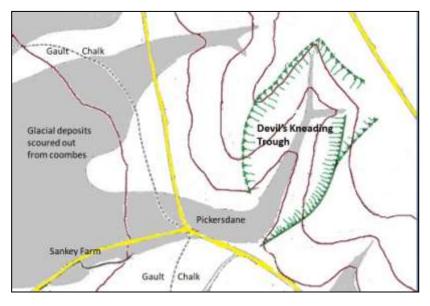


So, we were a small group of seven who met up in the NNR reserve car park, well prepared with sunhats, suntan lotion and ample supplies of water to drink. We agreed that it wasn't a day for strenuous exercise and best to

At Wye Crown. Photo by Sue Buckingham stay more or less on the level by walking a couple of kilometres out to the Crown and back. But first we strolled over to enjoy the magnificent view over the Kneading Trough and, whilst gazing out across the countryside, we learnt from Alex the story behind the formation of the seven main combes where some 10,000 years ago fragments of chalk shattered by frost were washed down into the valley below by meltwater from the northern ice (that made us feel cooler!). The debris formed two great fans which spread out over the countryside where we could see Brook village and as well as being carbon-dated to that period of time it has been calculated to be of sufficient quantity to fill the space created by the great combes themselves. Alex continued about how the vegetation on the Downs might have developed with aurochs, elk and other great animals grazing the ensuing grasslands, the arrival of people who eventually eradicated the megafauna, and the forest that grew up as a consequence. He listed species like Primrose and Early-purple Orchid whose presence in the grassland is suggestive of previous woodland cover. He asked us what kind of vegetation we should call natural there and what did we want it to look like now, an interesting question and one which can bring about conflicting ideas depending on just what species you want to conserve and even whether they are insects or plants.

#### Fans of glacial material (shown greyed) scoured out so as to form coombes including the Devil's Kneading Trough<sup>1</sup>.

We set off for Crown Field after listening to a great deal more fascinating facts and information from Alex, but not before commenting on the increase in species diversity in a field at the top of the slope which until recently had been heavilv grazed. Today it was bright with patches of Galium verum (Lady's Bedstraw) and a good range of common grasses. Campanula rotundifolia (Harebell) was in



flower and we peered at the base of a plant to look for its rounded basal leaves, very different from its narrow stem leaves.

The sheep pasture on the approach to Crown Field was brown and crispy-dry underfoot as a result of the drought and the recent very hot weather. This is outside the NNR and of much less interest, but in 2021 Alex noted that some patches of previously un-noticed species-rich grassland appeared as result of taking the sheep off during the spring. For us today there were few plants to see other than a good quantity of flowering *Carduus nutans* (Nodding Thistle). Only *Brachypodium rupestre* (Tor -grass) was looking green.

The first plant we saw in Crown Field was *Filipendula vulgaris* (Dropwort), a rare plant in Kent but abundant here though now in fruit. *Helianthemum nummularium* (Common Rock-rose) was also about and we took an opportunity to sit down by some flowering thyme to discuss just how difficult it can sometimes be to tell the two species apart. Today with the plants so dry it was hard to decide if you were seeing two opposite sides of hairless stem alternating with the other two opposite hairy sides for *Thymus drucei* (Wild Thyme) or were the hairs just on the stem angles for *T. pulegioides* (Large Thyme)? It transpired that we had both species although the best *T. pulegioides* with typical elongated flower heads wasn't seen until after lunch. Alex said he hoped we would find a new plant for his Flora, and we managed just that with a patch of the unmistakable dry stems of *Aira caryophyllea* (Silver Hair-grass) on a bare patch of dry crumbly loam. Alex mentions in his *Flora* that there are indications of chalk heath at Wye and although it can be found on a variety of soils, in Kent the Silver Hair-grass is mostly seen on heaths and sand dunes, so this was an interesting find.

The patches of short species-rich turf that we came across in the Crown Field held many other chalk specialities including *Scabiosa columbaria* (Small Scabious), *Briza media* (Quaking-grass), *Hippocrepis comosa* (Horseshoe

<sup>&</sup>lt;sup>1</sup> Derived from Kerney, M.P., Brown, E.H. & Chandler, T.J. 1964. The Late-glacial and Post-glacial History of the Chalk Escarpment near Brook, Kent. *Philosophical Transactions of the Royal Society of London*, B **248**: 135-204.

vetch) and *Cirsium acaule* (Dwarf Thistle), but Tor-grass is clearly much too dominant, and we discussed how best to bring the area back to its former glory. Several orchid species occur here and some of us could remember when there was less Tor-grass and the chalk flora spread over a greater area than now. Alex pointed out that the best patches of chalk flora are in the vicinity of the Crown itself where trampling (by people) occurs and is the only thing that holds the Tor-grass in check. Alex is keen to recommend a management plan that can get on top of Tor-grass here and as we had lunch by the Crown, we discussed how best that might be achieved, either by cutting or combined cutting then grazing.

We wandered slowly back to the car park where the temperature had reached 28° by 2.00 p.m. Alfie Gay very admirably stayed on to climb down into the Kneading Trough to look for *Herminium monorchis* (Musk Orchid) and reported later that he had found two fruiting spikes in the usual spot. We were all very grateful to Alex for a most entertaining and informative day. It was regrettable that that the heat had prevented more people from attending as well as cutting short our exploration of this very rich site.

Sue Buckingham

#### SANDHURST CROSS, near BODIAM, Thursday 28 July

A dozen botanists gathered at the Church of St. Nicholas, Sandhurst Cross, and as befitted a joint meeting with Sussex Botanical Recording Society, we were quite evenly represented as regards the two county recording groups, including a couple of 'hybrid' members.

The churchyard is on an outlier of the Tunbridge Wells Sand Formation, overlooking the valley of the Kent Ditch, some 50m below, dividing the two counties and draining down to the Rother. The meeting was led by Helen Proctor for Sussex and by me for Kent and the first thing we noted was that much of the churchyard had been strimmed since our recce a week before. It is apparently managed with the flora in mind with – *Anacamptis morio* 

(Green-winged Orchid) grows here but was well over by the time we visited - and this entails limiting the vegetation-cut to once a year. While our timing was imperfect as regards the cut, however, this did not prevent us from listing 55 plants before setting off along Church Road. Here we had to be careful as regards noting the status of some plants, since a field hedgerow contained some obvious plantings such as Hippophae rhamnoides (Sea-buckthorn), now suckering away, and a small patch of knapweeds and other species suggesting a wildflower seed-mix origin. Further down the road Sue Buckingham spotted a large specimen of Rumex x dufftii, the cross between Broadleaved and Wood Docks, in company with its parents.

> Hop-bines wih rows of *Carex hirta*. Photo by Geoffrey Kitchener



Grassland in a bend of Silveden Lane was found, to our surprise (since this was not within

its usual distributional range), to be harbouring *Pimpinella major* (Greater Burnet-saxifrage). Into Bourne Lane, we found the land levels dropping away with an interesting bank flora present: *Betonica officinalis* (Betony) always seems to be a good habitat indicator. We gave special attention to the roses and as well as *Rosa arvensis* (Field-rose) there was *Rosa corymbifera* (Hairy Dog-rose), one of the species into which *Rosa canina* (Dog-rose) has recently been split for British recording purposes, so as to accord more closely with continental practice. A shady section of lane carried a fern flora including *Dryopteris borreri* (Scaly Male-fern), plus the remains of a spotted-leaved *Hieracium* (Hawkweed), too far past flowering for identification.

A footpath into arable led us into a mass of vigorous weeds – *Chenopodium album* (Fat-hen), *Chenopodium ficifolium* (Fig-leaved Goosefoot) and disconcertingly massive *Atriplex patula* (Common Orache) and *Atriplex prostrata* (Spear-leaved Orache), which seemed to be attempting to persuade us that they were something else. The fall of land drainage down the field slopes may have had something to do with this vigour, and rows of hopbines, while separated by herbicidal treatment, were themselves covered in a dense mass of *Carex hirta* (Hairy Sedge), encouraged by what must usually be dampness, although we were in a period of prolonged drought. Between the hop-bines, we also noted *Stachys* x *ambigua* (Hybrid Woundwort, the cross between Hedge and Marsh Woundworts), its habitat perhaps covering some ambiguity between those of its parents.



#### Stachys x ambigua. Photo by Geoffrey Kitchener

We now approached the Kent Ditch, a sinuous and deep-banked watercourse, difficult to approach for any view of its flora, other than by crossing the footbridge which led us into East Sussex, vice-county 14 for recording purposes. We were then able to pass the recording mantle to Helen, togeher with the unwelcome discovery that shortly after crossing the boundary we had inadvertently crossed an Ordnance Survey gridline as

well, so that the initial records needed to be separated into a different recording unit. We ascended out of the Kent Ditch floodplain up the southern side of the valley for a lunch spot near woodland which held the

decaying remains of *Orchis mascula* (Early-purple Orchid). The Sussex part of our circuit included a range of terrain with plenty of arable margins, but the Kentish focus of this report brings us to the recrossing of the Kent Ditch and the discovery by Daphne Mills of five plants of rare plant register species *Erysimum cheiranthoides* (Treacle-mustard) in an arable field corner. This species has been in considerable decline, both nationally and in Kent, so this was a very welcome find. A range of other arable weeds was recorded in the vicinity and *Rumex x sagorskii* (the cross between Broad-leaved and Clustered Docks) was noted on a nearby grassy field margin.

#### *Erysimum cheiranthoides*. Photo by Daphne Mills

We ascended the Kent side of the valley to gain the track between Conghurst and-Bourne Farms, whose hedge line included *Rosa squarrosa* (Glandular Dog-rose), another of the *Rosa canina* 'splits'; and a Clouded Yellow flew past. Adding fewer plants to our list at this stage, we crossed the bourne of Bourne Farm and regained Bourne Lane to bring us back to our outgoing route and thence our starting point, concluding with a total of 367 records.

**Geoffrey Kitchener** 

#### SPRING PARK, WEST WICKHAM, Saturday 6 August

This well-attended joint meeting with Surrey Botanical Society (led by Caroline Bateman for Surrey and Geoffrey Kitchener for Kent) began with the sight of *Calystegia x lucana* (the cross between Hedge and Large Bindweeds) by our assembly point near Addington. We then proceeded to a somewhat dried-out grassy slope at which Caroline showed us the remains of *Rhinanthus angustifolius* (Greater Yellow-rattle) and *Hypericum x desetangsii* (Des Etang's St John's-wort). The Yellow-rattle seem to be spreading through the outer fringes of metropolitan West Kent and Surrey at least in part on mowing machinery; and we were to encounter it later in grassland in the Kent part of our excursion.

Working through Threehalfpenny Wood, we eventually came across some *Tilia cordata* (Small-leaved Lime), which was a principal objective of our meeting. Then we reached where, on an interpretation of old and current



maps, the ancient Kent/Surrey boundary lay, and it was possible to see that, although the woodland of Threehalfpenny Wood (in Surrey) and Spring Park (in Kent) was continuous, a series of old *Tilia cordata* trees marked that boundary. We spent some time mapping each tree location, with lunch taken by a huge tree partly wind-thrown and tilting at an angle with vertical shoots arising. *Tilia cordata* trees were present as ancient trees in both woods as well as the boundary, many multi-stemmed from massive stools deriving from previous coppicing, some formerly pollarded; there were recently coppiced plants and occasional maiden trees. So the limes, although rare in Kent generally, were very well represented and apparently flourishing in this ancient woodland. See p.19 of this newsletter for a further account of these trees.



# Recording limes. Photo by Stephen Lemon

Stephen Lemon kindly took on recording those trees which not yet covered, we had although regrettably this meant that we did not succeed in linking up later on. We then continued into Kent where both of the usual knapweeds were growing in grassland: Centaurea nigra (Common Knapweed) and Centaurea debeauxii (generally, but inappropriately called Chalk Knapweed, and much better called Slender Knapweed, as in Clive Stace's Concise Flora of the British Isles, 2022). At

the edge of the grassland a pond had been excavated in 1993, fed by water flowing from the hill slope of Spring Park, which carries a varied geology. Water flows from the base of the Harwich Formation where it meets the clays of the Lambeth Group and then would sink into the Thanet Sands but for its capture in this lined pond. We debated how far the pond flora would have been introduced (e.g. *Hippuris vulgaris*, Mare's-tail) or may have arrived naturally.

We ascended the wooded slope to arrive at Woodland Way, bounding the housing estates which began to swallow up the flatter parts of Springpark Wood in the first half of the twentieth century. At the woodland edge grew Agrostis vinealis (Brown Bent), and the pavement habitat provided a very varied flora including Ailanthus altissima (Tree-of-heaven) seedlings, Panicum miliaceum (Common Millet) and Polycarpon tetraphyllum (Four-leaved Allseed), the latter having shown a remarkable expansion into urban and suburban Kent (and south-eastern England generally) in the last ten years or so. The



hardier botanists then undertook a long digression into scorched Surrey heathland to a small patch of Shirley Heath where there grew *Carex binervis* (Green-ribbed Sedge), *Juncus squarrosus* (Heath Rush), *Molinia caerulea* (Purple Moor-grass) and *Potentilla erecta* (Tormentil). The return routé took in one of the wetter parts of

the Threehalfpenny Wood hill slope where a seldom-dry pond had succumbed to the hot weather and showed a scatter of *Potamogeton polygonifolius* (Bog Pondweed) on dried-up mud.

Overall, in Kent we recorded five rare plant register species, with 160 monad records, counting all the *Tilia cordata* records as though one per monad. If one looks at the full collection of *Tilia cordata* records, there were ten trees or stools in Surrey, 19 on the county boundary and 34 in Kent. Read more about limes on p.19.

Geoffrey Kitchener

#### LOWER HALSTOW, near SITTINGBOURNE, Wednesday 5 October

Nine members attended this meeting, the last on the 2022 programme, on a beautiful sunny morning. We met up in Lapwing Drive in Lower Halstow on the Medway estuary just east of Rainham and from there it's just a few steps to the site of the old brickworks which is quite a treasure chest of the sort of plants that botanists enjoy. There were lots of fruiting *Carlina vulgaris*, (Carline Thistle), *Inula conyzae* (Ploughman's-spikenard) with flowers, *Erigeron acris* (Blue Fleabane), *Blackstonia perfoliata* (Yellow-wort), a patch of *Lepidium latifolium* (Dittander) and *Carex spicata* (Spiked Sedge). The rose bushes were bearing big red hips that looked splendid against the blue sky and it was good to have Geoffrey on hand to point out and discuss the cross between true *Rosa canina* 

and *Rosa vosagiaca* which we once included in our records as *R x dumalis* and now we should record as either this or *Rosa x subcanina*. These bushes, which were *Rosa x subcanina*, had glabrous leaves with **uniserrate** margins, strong red colouring to or the stems and large hips, and no glands on rachis or petiole. *Rosa x dumalis* has leaves whose margins have a tendency to be doublyserrate and there are glands on petiole and rachis.

#### Rosa x subcanina. Photo by Geoffrey Kitchener

We must have spent an hour happily pottering around the brickworks before a brief inspection of the mud at the top of the beach



nearby where there was much *Oxybasis rubra* (Red Goosefoot), *Atriplex prostrata* (Spear-leaved Orache) and *Beta vulgaris* subsp. *maritima* (Sea beet). RPR species *Limbarda (Inula) crithmoides* (Golden-samphire) and *Artemisia maritima*, (Sea Wormwood) were admired as we set off in a north-westerly direction along the Saxon Shore Way.

On the inland slope of the sea wall, we recorded RPR species *Carex divisa* (Divided Sedge) and whilst exploring a path along the northern edge of the brickworks nature reserve Geoffrey spotted some large plants of *Genista* 



*tinctoria* (Dyer's Greenweed), still with some flowers, alongside a ditch and at the edge of a small grazing field. This is another RPR species, and we were pleased to see many more plants on the inland slope of the sea wall for at least a further 100 yards as we continued along the coast. Several of us have surveyed this stretch previously but Dyer's Greenweed hadn't been recorded here since 1999.

# Site of *Genista tinctoria*. Photo by Sue Buckingham

There was plenty of *Lotus tenuis* (Narrow-leaved Bird's-foot-trefoil) on the top of the

bank and some *Oenanthe lachenalii* (Parsley-leaved Water-dropwort) beside a ditch that I only just managed to avoid rolling into. John observed that we should consider an early stop for lunch because we had a forecast for rain, dark clouds were definitely gathering and it wouldn't be good to eat in the rain. So we sat and ate on the sea wall looking out across the saltmarsh near Twinney Wharf. There's a good stretch of saltmarsh here but it isn't very safe for walking, so we spent just long enough to see *Sarcocornia perennis* (Perennial Glasswort), *Salicornia fragilis* (Yellow Glasswort), *S. dolichostachya* (Long-spiked Glasswort) and *S ramosissima* (Purple Glasswort). Then we carried on our way with an eye on the clouds and another on the plants, finding under orchard trees *Chenopodium hybridum* (Maple-leaved Goosefoot), and on a nearby heap of soil and rubble were several introduced species including *Amaranthus hybridus* (Green Amaranth) and *Setaria verticillata* (Rough Bristle-grass), both of which were collected and taken for determination later at home.

#### Lunch above the saltmarsh. Photo by Sue Buckingham

With the threat of rain and the wind getting up it seemed wise to head off inland and take to the shelter of lanes and footpaths back to the village. That also gave us some more new plants. Cichorium intybus (Chicory) an RPR species, had a few flowers remaining and a look about it that suggested it might have been a native occurrence, and Geoffrey found Rumex x pratensis (the hybrid between Curled and Broadleaved Docks). An Ivy with leaves lobed less than half way to base was confirmed later by Geoffrey as



*Hedera hibernica* (Atlantic Ivy); we had at the time noted that we were seeing ivies with very different-sized flower clusters. We had to look first through binoculars at a carpet of pale green plants under fenced-off orchard trees to confirm *Solanum physalifolium* (Green Nightshade) and then we saw some up close with its green marbled fruits.

Unfortunately, we were caught out by the rain just about half an hour from our parking place as we struggled to find our way along little-used footpaths and where Geoffrey found *Rumex x abortivus*, the hybrid between Clustered and Broad-leaved Docks.

With a total of nine RPR species recorded and a long list from three monads we agreed this was a good day in an interesting place and might merit an earlier visit next year if only to catch the little annuals that we spotted just starting to appear as seedlings on bare ground in the old brickworks.

Sue Buckingham

# 2023 AGM

We hope to be able to resume face-to-face AGMs, with the booking of the usual room at Tyland Barn, Maidstone for the afternoon of Saturday 1 April 2023. This time the facility is no longer being provided free of charge, so we hope to cover this by a small donation per participant. Arrangements will of course be confirmed nearer the time.

#### Small-leaved Lime in Kent: recording at West Wickham

*Tilia cordata* (Small-leaved Lime) was abundant in Kent over 5,000 years ago but seems to have declined markedly over the following 2,000 years with diminishing evidence of presence since. It is currently on the rare plant register with very few sites where it could fairly be regarded as a relic native. The reasons for its early decline may be in part the clearance of woodland for land cultivation, and as regards uncleared woodland, the effect of bringing in pigs for seasonal grazing which may have begun much earlier than historical records show.

One of our native sites is on the steep wooded slopes of Spring Park and Threehalfpenny Wood, on the old boundary of Kent and Surrey (now dividing the London Boroughs of Bromley and Croydon). These slopes were in places too steep for clearance, so the ancient woodland remains and has a history of management for wood products as part of the former Wickham Court Estate.

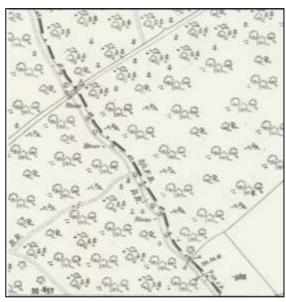


Recording on 6 August 2022 by Kent Botanical Recording Group and Surrey Botanical Society produced a spread of records as shown on the accompanying aerial view. No doubt there are other scattered trees in areas which we did not survey, but it is unlikely that there are other similar concentrations.

It looks as though there are two or three factors which may have affected this concentration. These include the geology and a possible linkage to the wood margin, but more conspicuous is the association with the ancient county boundary. It is not

possible to date the boundary, but the county of Kent was of early formation, deriving from a fifth century kingdom (albeit initially relating to East Kent).

Looking at the Surrey Ordnance Survey 25" sheet surveyed in 1911, you can see the boundary is shown as somewhat undulating through the woodland. On the accompanying extract it begins in the bottom right-hand corner alongside a rectangular field where there is a marking '3ft. FF' (= face of fence). We readily found this part of the boundary as is appears to be an ownership line which is still fenced. .North-west of what was the field corner and which is now wooded, we found a lime tree and could then link it with more along a notional line that seemed to correspond to the old boundary. Then further up the slope there was a line of coppice stools along a shallow bank and ditch towards where the map marks the old county division as '3 ft. F.B.'. The F.B. abbreviation is evidently not the current OS marking for footbridge. It looks as though it was intended for 'face of bank', and we had found the bank. Lidar mapping indicates a ground feature here.



This line of trees and stools is shown on the following aerial view, with the old county boundary superimposed. One could argue that this might be indicative of planting, to reinforce the definition of the boundary and the division of the two woods. Equally, however, it could be maintained that these are successors of ancient trees, maintained through pollarding and coppicing, where there was reluctance to remove them because of their



boundary status.

In addition to the ancient boundary, however, here must be another factor or factors at work to explain a further aspect of distribution, the presence of a broad band of trees and stools running south-west to north-east along the lower slope of the wood. Some of these records may suggest that the limes were boundary trees marking the edge of the wood if this had been higher up in the past. Not all may be explained thus, however, and it may be that the spread represents a line of geological suitability, as the Lambeth Group clays will have impeded the drainage from above, resulting in springs and seasonal streams draining down to the gravelly Thanet Formation on which many of the southern trees were located.

Looking at the character of the trees which we encountered, there was a lot of variety. Some trees were truly enormous. Many were multi-trunked, showing the influence of coppicing in the past and resulting in very wide stools; sometimes it was difficult to ascertain whether there were independent trees or a stool which had become so wide that its parts had separated. Trees leaning from wind-throw were not uncommon, perhaps due to growing on a slope. Such trees then developed vertical shoots from the leaning trunks. If trunks fell to lie horizontal on the ground, then the effect of the vertical shoots would be to give rise to a line of new trees. There were pollards on the boundary, these having been cut back in the past so as to enable regrowth to take place above the reach of grazing animals. Ann Sankey, the former Surrey vice-county recorder, says that such pollards are almost unknown in Surrey. She also remarks that the evidence of regeneration by seed is interesting – a rare occurrence, as the seeds are very prone to being predated by small mammals, woodmice in particular.

**Geoffrey Kitchener** 

Former pollards on county boundary. Photo by Alan Heyes



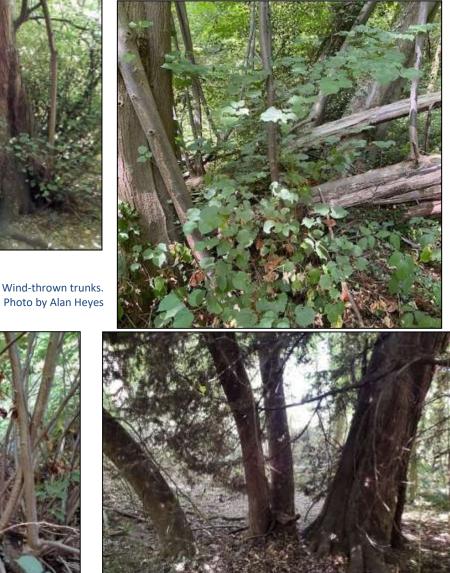


Leaning tree with vertical shoots. Photo by Geoffrey Kitchener



Wind-thrown trunks.

Mature tree. Photo by Stephen Lemon



Ancient coppice stool. Photo by Stephen Lemon



Young coppice growth. Photo by Stephen Lemon

#### **More on Kent Botanists**

Hanbury and Marshall's admirably thorough *Flora of Kent* (1899) included many biographical sketches of botanists who contributed to knowledge of our county flora. But there are some who came later or whose contributions were not recognised until later, including the following.

#### William Mount

William Mount (1545-1602) was born at Mortlake and educated at Eton and King's College, Cambridge where he was fellow 1566-69, subsequently taking holy orders and becoming chaplain to Lord Burlegh; it looks as though he was rector of Leybourne 1582-1602<sup>2</sup>. His studies involved medicine and he was Master of the Savoy Hospital at The Strand, London, 1594-98. Medical expertise and botanical knowledge went hand in hand at the time, and he knew the botanist Matthias deL'Obel, who visited him in 1597 and expressed admiration at Mount's skill in making distilled waters. (This was a subject upon Mount had written before, and he also wrote some verses said to be prefixed to L'Obel's Balsami, Opobalsami, Carpobalsami, & Xylobalsami cum suo Cortice explanationes & collectanea etc., 1598.<sup>3</sup>) His association with L'Obel was cemented by his possession of L'Obel's work, Plantarum seu Stirpium Icones (1581), which he inscribed as purchased by him, 'Gulielmus Mowntuus', for 19 shillings in 1582. Between 1582 and 1584 Mount made extensive notes in it as regards plants he knew, locating them at East Malling (where he had an orchard), Snodland, Leybourne, Addington, Wrotham, Maidstone; also Sandwich/Dover, Dover/Folkestone, Blackheath, and near Rochester. These locations seem very compatible with the identification of Mount as rector of Leybourne, albeit apparently living at Malling, as he refers to his garden there, and it is likely (but not conclusive) that those plants for which locations are not given were also local to Leybourne and Malling. Even without that assumption, however, Mount has provided evidence of the first Kentish records of a number of species, so preceding the 'first record' statements of Hanbury and Marshall (1899).

This book subsequently came into the possession of Magdalen College, Oxford and Mount's notes were published in R.T. Gunther (1922) *Early British Botanists and their gardens*. Identification of the 'first record' plants is not straightforward. In the first place, the plant names used by L'Obel are of course pre-Linnean and so comprise Latin descriptive phrases rather than binomials; in spite of being illustrated, they are not always unambiguously assignable to a modern name. Secondly, a judgement has to be formed as regards the accuracy of Mount's matching of what he found against the illustrations in L'Obel's book. Some of Gunther's interpretations might need revisiting, as David Pearman notes in *The Discovery of the Native Flora of Britain & Ireland* (2017). One place to start might be the copy of *Plantarum seu Stirpium Icones* which is in the Linnean Society library to which Liinnaeus' son added Linnean names; but this will only indicate what the illustrations were intended for, not necessarily what Mount took them for.

I've set out below some of Mount's localised plant notes together with L'Obel's illustration which he was annotating. Each entry is accompanied by Gunther' identification of the modern plant name, and to this I have added comments.

*Gramen palustre maius.* WM: 'The sharpe edge grasse flaggis be in black brookes [in Est mallinge] growing in Tuffettes, very Common'.

Gunther (for this and other identifications of the illustrations, he expresses himself reliant on Dr. Stapf): *Carex acuta* (Slender Tufted-sedge).

*Carex acuta* is indeed tufted, but *Carex nigra* (Common Sedge) can be, as well. David Pearman indicates that there is no certainty about this identification.

*Gramen aquaticum alterum.* WM: 'Ponde grasse growing in a Ponde in Snodeland, w<sup>ch</sup> ys sometyme allmoste drye'. Gunther: *Juncus acutiflorus* (Sharp-flowered Rush).



<sup>&</sup>lt;sup>2</sup> According to ACAD – A Cambridge Alumni Database.

<sup>&</sup>lt;sup>3</sup> This is the description of the verses provided by C.H. & T. Cooper's *Athenae Cantabrigienes* vol. 2 (1861); but they do not appear in L'Obel's eventual publication in 1605.

The habitat might be indicative of Scirpus sylvaticus (Wood Club-rush). David Pearman: 'This is not convincing enough'.

Gramen hirsutum nemorosum. WM: 'Hearye or hoarye Grassse in my orcharde'. Gunther: Luzula vernalis (= pilosa) (Hairy Wood-rush).

David Pearman discusses it under Luzula campestris (Field Wood-rush), a plant which would better match the orchard habitat. The polynomial is really only suitable for referring to Luzula generally; older writers tended to add more words so as to designate a particular Luzula species.

Gramen iunceum marinum dense stipatum. WM: 'Pusshye grasse: in the sandes by the Castles betweene Sandwyche and Douer (in Kent)'.

Gunther: Eleocharis uniflorus (?) (=E. uniglumis) (Slender Spike-rush) This seems unlikely, but no better identification appears to offer beyond other *Eleocharis* species; the same illustration is given by Gerard in his Herball as Sea Rush-grasse.

Gramen Canarium. WM: In all places where the writers use this worde: Gramen: It ys to be understoode yt they mean Quycke or Couche grasse, whereof there be dyverse kyndes well knowen. The best in my opynyon hathe longe greate rootes creeping in length ij yeardes greater than wheate strawes full of ioyntes agroinge [transcription error? 'agreeinge'?] wth ye shape, fol<sup>o</sup>.23. Yt groweth in Addington in Kent in the sandy drye dustie hye ways there. The same prevayleth against the straw [transcription error? stoane?], and against wormes in my experience. Gunther: Triticum (= Elymus) repens (Common Couch).

As David Pearman remarks, 'Gramen Canarium' (canary grass) 'is slightly odd'. But L'Obel used this expression in other books as well, so it must be deliberate, even though Gramen caninum (dog's-grass), used by Gerard in his Herball for couches generally, became more widely adopted.

This is the earliest evidence for occurrence of Elmyus repens in the British Isles, as well as Kent.

Gramen caninum longius radicatum marinum alterum. WM: 'Of Dogge Grasse, or Couche grasse, thus writeth Poena, and Lobell, fol.2...I have used the Grasse with ye great roote, growing in sandye wayes set downe here, fol<sup>o</sup>. 23: growinge in Addington in Kent and doe fynde yt muche better then [sic] the usuall Couche grasse. W<sup>m</sup>. Mount.' 'Gunther: ? Agropyrum junceum (=Elymus junceiformis) ( Sand Couch). Not a plausible identification; this is likely to have been just another Common Couch.

Gramen caninum alterum. WM: 'Quyche grasse growing in sandye ways the very trewe Cowche grasse whereof the Phisiciones wryte. It groweth in the sandy hie waye plentifullye between Wrothame and Addington in Addington in Kent [sic, perhaps a proofreading error in Gunther's book]. (I there fownde yt ao [15]81 and have synce often used it against wormes wth good successe and ye stoane allso euen in my selfe for ye stoane'.

Gunther: Cynodon dactylon (Bermuda-grass) or Digitaria glabra.

L'Obel's illustration was included by Thomas Johnson in his 1634 revision of Gerard's Herball, calling this instead Gramen dactiliodes radice repente (Cocks-foot Grasse with creeping roots), which he considered Gerard had earlier misidentified as a different plant from field banks near Greenhithe. It is difficult to know what to make of Mount's 'record'. Grasses with digitate inflorescences do not seem to have received special recognition by herbalists of the time as true

couch grasses, which Mount apparently thought his was. If he really saw a finger-grass, then Cynodon dactylon would match, albeit an introduction seldom seen in Kent at any time.

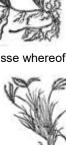
Sparganium & Butomus Theophrasti. WM: 'The sharpe edged burre flagge. It groweth in watery dytches about Leybourne in Kent, smale use thereof in Phisick or Chyrurgie'. Gunther: Sparganium ramosum (=S. erectum) (Branched Bur-reed). First Kent record.

Allium ursinum latifolium. WM: 'I thinck thys to be set for our Ramsynes, whereof there groweth great plentye about fourde in Kent in Wrotham parishe, and vs esteamyd very good against the stoane'. Gunther: Allium ursinum (Ramsons). First Kent record.



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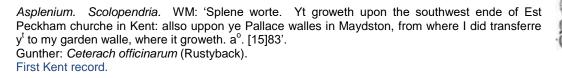






<sup>&</sup>lt;sup>4</sup> The herbalists seem to have thought highly of Common Couch, in spite of its aggression. But Robert Turner in his *Botanologia* (1664) says 'It is too plentiful both in Gardens and ploughed Fields, for the owners store; although Culpepper holds half an Acre of it to be worth five Acres of Carrots twice told over; yet if any of his Disciples be of his opinion, I will undertake to help them to five Acres of it for one Acre of Carrots... [it] cannot be gotten clear out of the ground where it hath possession'.

Pedicularis. WM: 'Lowzye weede becaus the catle feadynge thereof will become lowzye: thereof very muche groweth in black brookes in Estmallinge in Kent'. Gunther: Pedicularis palustris (Marsh Lousewort) This is the earliest evidence for occurrence of *Pedicularis palustris* in the British Isles, as well as Kent; it is also evidence of the belief that it gave lice to livestock feeding on it.



*Lunaria racemosa*. WM: 'I haue sene thys lunarie or Moneworte growe in black heathe; also nere Saynt Margaretes, nere Rochester'.

#### Gunther: Botrychium Iunaria (Moonwort).

Previously recorded by L'Obel near the King's house at Greenwich, overlooking the Thames (*Stirpium aduersaria noua*, 1571). John Edgington (in *Who Found our Ferns?*, 2013) suggests an actual find date by L'Obel of 1567. Mount's black heath (Blackheath) may be the same, perhaps found with information from L'Obel.

*Rhamnus primus Diosc. creditus.* WM: 'This Rhamnus I founde between Douer and Foulkestone by the sea syde under the Clyffes, a<sup>o</sup>. 1582, with reddish beries Orange colored'. Gunther: *Hippophae rhamnoides* (Sea-buckthorn).

This is the earliest evidence for occurrence of *Hippophae rhamnoides* in the British Isles, as well as Kent.

From these and other more lengthy notes by Mount we may see him as curious about and familiar with many plants, primarily concerned with their medicinal uses and his practical application of them.

References to worms indicate how common intestinal parasites were at the time. Mount cultivated plants such ass *Gladiolus communis* and *Colchicum autumnale* in his garden (the latter species prompting a note of a discussion wih Dr Symings, formerly President of the College of Physicians) and he would bring in plants from the wild. He also refers to interesting plants in others' gardens and how these might be passed around. It is a rare insight into plant appreciation in sixteenth century Kent.

#### John Richard Wallis

John Wallis (1917-44), a Lamberhurst botanist, died in his twenties, possibly from leukaemia, but was already acquiring a reputation as an accomplished critical botanist. We thereby lost a potential collaboration between him and Francis Rose over researching and writing the Flora of Kent. I had been puzzled by the many references to 'JRW' in Francis Rose's manuscript Flora (which may reflect use by Francis of John Wallis's card index, as this passed into his hands), and Clive Stace kindly pointed me in the direction of his identity, as well as providing information on comments made by Francis about John Wallis.

John was born at Lamberhurst and home-schooled, after which (c.1938) he became articled to a City firm of accountants. Although taking up lodgings in Cheam (he made botanical records there, 1941-3), he would return to Lamberhurst at weekends. Ted Lousley wrote that 'He never complained of his health though it must have been a severe handicap. His temperament in botanical matters was cautious, critical and careful and he was painstaking to a degree unusual in a man of his age. By the time of his death he had explored the Lamberhurst area well and was embarking on a study of wider Kent. In 1943 he experimented with germination of *Callitriche stagnalis* (Common Water-starwort) collected from Bayham Lake, the results of which were published after his death.

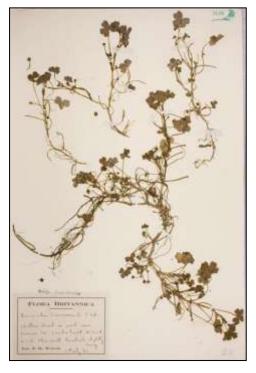
Some 1500 sheets of his Kent, Surrey and East Sussex plant gatherings went to the South London Botanical Institution, of which some may be accessed via Herbaria@Home; a few more are in other herbaria. These sheets show his collecting in Kent mainly between 1938 and June 1944 (he died in November). They include:

- Callitriche truncata (Short-leaved Water-starwort) and C. obtusangula (Blunt-fruited Water-starwort) from near Chipstead in 1943
- Carex x boenninghauseniana at Roundabout Wood, Tunbridge Wells in 1943
- *Euphrasia officinalis* subsp. *anglica* (English Eyebright), det. by Pugsley as *E. anglica*, at a field near Bayham in 1943

- *'Ranunculus lenormandii'* (this synonymises as *R. omiophyllus*, but the specimen appears to *be R. omiophyllus x tripartitus*, = *R. x novae-forestae*, given the leaf shape and slightly hairy receptacle) in a shallow dried-up pond near Furnace Farm, Lamberhurst in 1943 see illustration →.
- Viola riviniana x canina (V. x intersita) at rough ground near Weir Field Shaw, Lamberhurst, in 1941.

There are also many interesting bog plant specimens from the once remarkable site, Hawkenbury Bog, then supposed to be in vc16, West Kent (but actually in vc14, East Sussex), which appears to have been first shown to Francis Rose by John Wallis in 1944 (Francis seems to have thought that John was its discoverer, but it looks as though it was known by others at least back to 1934).

Sources for this account include: *Botanical Exchange Club report for 1943-44* (1946) **12(6)**: 654 (obituaries by E.C. Wallace and J.E. Lousley) and 677-678 (note on *Callitriche* by J.E. Lousley). D.H. Kent & D.E. Allen (1984), *British and Irish Herbaria*. C.A. Stace pers. comm. and (2002), The Field Section of the Tunbridge Wells Natural History and Philosophical Society, *Bulletin of the Kent Field Club* **47**: 61-67.



**Geoffrey Kitchener** 

### Kent biodiversity strategy species reports

#### Polygala amarella Kentish Milkwort in Kent, 2022

Both Godmersham and Magpie Bottom sites were surveyed in 2022; plans for a Purple Hill survey did not come to fruition.

#### Godmersham

A total of 162 plants was recorded on 30 May 2022 by Alfie Gay, Sue Buckingham and Dan Tuson, in broadly the same parts of Godmersham Downs as in previous surveys. This compares with 49 in 2021 and 196 in 2019, confirming that considerable annual fluctuations may be expected year-on-year. This might indicate that many plants are behaving as annuals, which was surmised in last year's report.

Godmersham, 2022: *Polygala amarella* (Kentish Milkwort) is the small, dull flower at the bottom of this photo, below the three larger flowers of *Polygala vulgaris* (Common Milkwort). The rabbit dropping suggests the importance of grazing for keeping the turf short, so as to reduce competition. A degree of protection for *Polygala amarella* may be afforded by amarelloside, a very bitter compound present in it and reflected in its name (*amarella* being a dimimutive of *amara*, =bitter). Photo by Alfie Gay.





#### Kentish Milkwort 2022 records



Kentish Milkwort 2021 records for comparison

The apparent spread of records in the main aerial view above needs

some qualification. One hundred plants were recorded in a very small area, shown by a yellow triangle in the aerial view on the right.

#### Concentration of Kentish Milkwort 2022 records



This area computes at c.40 square metres and so indicates that, other than in the context of a very thorough survey (which both 2021 and 2022 surveys were considered to be), it would be possible to miss quite substantial numbers of plants. This area appears to relate very nearly to a faint line running northwest-southeast across the downs on the aerial view, presumably a slight depression, but no field boundaries are given

here on ordnance survey maps at least as far back as the first survey drawing of 1789.



Godmersham 2022 survey: milkwort hotspot. Photo by Alfie Gay.

Our survey data were split into three parts:

- Survey Part A: 100 plants within the area of the following 3 grid references, TR 05838 50095, TR 05832 50088 and TR 05830 50100.
- Survey Part B: (1) TR 05839 50089 one plant, (2) TR 05843 50080 seven plants, (3) TR 05850 50087 three plants, (4) TR 05857 50084 seven plants, (5) TR 05858 38 out of grand total of 162.

Survey Part C. (1) TR 05882 50188 four plants, (2) TR 05903 50207 ten plants, (3) TR 05907 50234 one plant, (4) TR 05898 50237 one plant, (5) TR 05892 50237 one plant, (6) TR 05891 50240 one plant, (7) TR 05885 50242 five plants, (8) TR 05881 50243 one plant.

#### Magpie Bottom

This site, in a remote chalk-sided valley on the downs dip-slope above Otford and Shoreham, was visited by Geoffrey Kitchener on 1 June and Joyce Pitt on 4 June. After 2015, which was a bumper year, few plants have been found and it is not always encountered. This time, three flowering plants were found at TQ 54403 61216 in the vicinity of the 'usual' area, at most 60cm apart, and Joyce's subsequent record of a plant buried in vegetation just above a large rabbit scrape is likely to have been in addition to these. There seemed to be more evidence of rabbit activity this year, which is probably beneficial for the milkwort; its main threat may be scrub encroachment from the northwest.

#### Magpie Bottom, 2022. Photo by Geoffrey Kitchener

A list of associated species was taken, showing good quality chalk grassland: Avenula pubescens (Downy Oat-grass), Blackstonia perfoliata (Yellow-wort), Brachypodium sylvaticum (False-brome), Briza media (Quaking-grass), Bromopsis erecta (Upright Brome), Carex flacca

(Glaucous Sedge), *Cirsium acaule* (Dwarf Thistle), *Cornus sanguinea* (Dogwood), *Crataegus monogyna* (Hawthorn) seedling, *Euphrasia nem*orosa (Common Eyebright), *Euphrasia nemorosa* x *pseudokerneri* (Hybrid Eyebright), *Fagus sylvatica* (Beech) seedling, *Festuca ovina* (Sheep's-fescue), *Leucanthemum vulgare* (Oxeye Daisy), Linum catharticum (*Fairy Flax*), *Lotus corniculatus* (Common Bird's-foot-trefoil), *Pilosella officinarum* (Mouse-ear-hawkweed), *Polygala vulgaris* (Common Milkwort), *Poterium sanguisorba* (Salad Burnet), *Rosa* sp. (a rose) seedling, *Succisa pratensis* (Devil's-bit Scabious), *Thymus drucei* (Wild Thyme).

Geoffrey Kitchener

#### Orchis purpurea Lady Orchid in Kent, 2022

2022 was the third year of Lady Orchid monitoring and next year will be the last of the four-year period in which we initially agreed to carry this out for the Kent Biodiversity Strategy Partnership. Where sites had been visited in 2020 or 2021 (and especially in East Kent), 2022 was clearly a good year for Lady Orchid and almost every site had more flowering plants than in the two previous years. Jack Lowe who monitors Pitt, Woodlands and Well Woods near Adisham, said that 2022 produced the highest number of plants he had ever recorded and an unprecedented number of flowering ones. This may relate to the very mild winter of 2021/22. I didn't notice that the dry spring of 2022 had any noticeable effect on the height of flowering spikes, except maybe for those in very open dry situations; seed production seemed to be just as in previous years; and some recorders commented that there was less slug damage.

#### A pale Lady at Yockletts, 2022. Photo by Sue Buckingham

Moving from west to east across the county, Geoffrey Kitchener reported that the single Lady Orchid last recorded in 2012 at One Tree Hill was no longer present, considering that being a single plant and

unable to reproduce, it would have reached its life-span. At Greenhill Wood, Otford he found 15 plants at the same location where back in 1949, Francis Rose listed 12 stems and 5 inflorescences. Rose had similar counts there in the 1950s, showing considerable continuity at this site with the colony remaining more or less the same size over the course of 73 years! In Red Wood where Lady Orchid is known, Geoffrey came across a new





location much further north than those previously known, whilst at a listed site to the east no plants were found and the location possibly had changed in suitability as a result of nearby coppicing.



Richard Moyse and Kathy Friend revisited the Ranscombe Farm sites both north and south of the railway line. The figures are similar to those reported in 2021. Later on in the summer they revisited the colonies and made a study of seed-set. On the south of the railway, mean percentage of flowers setting seed (based on sample of 8 plants and with a total of 591 flowers) was just 5.4%. North of the railway line in a shaded spot under trees a single plant had 93 flowers and 21 swollen pods, calculated at 22% seedset. This particular plant was admired later on in early July by those of us who attended the joint KBRG/BSBI field meeting and we wondered at how a solitary plant under tree cover and a good distance away from any other flowering Lady Orchid could have reached such a good level of seed-set, for a Lady Orchid, that is.

#### Lyoak Wood, 2022; good seed-set. Photo by Sue Buckingham

At the Great Wood colony, Richard and Kathy found seed-set based on seven plants with a total of 235 flowers, ranging from 7.1% to 63.9%; and at Clay Pond, seed-set based on five plants with a total of 274 flowers was 16.1% to 58.9%. Lady Orchid is said to have poor seed-set which would seem to be a disadvantage and so it is useful to look at how this varies between plants and colonies.

Lady Orchid flowers are said to have no nectar with which to reward visiting insects and thus are regarded as 'deceptive' species because their flower shape and colouring tricks pollinators into believing that food is available. It is noted that such deceptive species have lower fruit set than nectar-rewarding ones. There is a mountain of online information on the mysteries of Lady Orchids and I came across a paper in the Journal of Ecology '**Higher seed number compensates for lower fruit set in deceptive orchids**' (by Sonkoly, J. *et al.*, and first published 9 November 2015 at <a href="https://doi.org/10.1111/1365-2745.12511">https://doi.org/10.1111/1365-2745.12511</a>). The study concludes that although seed production in deceptive species may be low, that doesn't necessarily equal low reproductive success because there are more seeds per fruit. This suggests that Lady Orchids may not be at a disadvantage after all and certainly in the right conditions they are capable of producing many seedling plants as our studies indicate.

By a footpath in Great Crabbles Wood, Higham, David Johnson located the spot where he and Eric Philp had found a non-flowering Lady Orchid rosette in 1997. Unfortunately, David didn't find any plants this year, but the 1997 discovery was a re-find of one of Francis Rose's old records and from the same area where Lady Orchid

was first recorded in Kent by Christopher Merrett in 1666 as "*Orchis* militaris polyanthus, On *Gads-hill*".

Daphne and I searched out one of David's 2012 Lady Orchid records in Stock Wood near Frinsted and found one flowering plant where ten years earlier, David had recorded two. There are more small populations like this one that require up-to-date confirmation of presence and I welcome any offers of help for next year and I've plenty of information to assist.

Sladden, 2022; Alfie Gay pollinating the only flowering plant present. Photo by Sue Buckingham



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Numbers were well up at Ospringe, mostly in

a glade in woodland where interestingly the reason for not opening up the glade is to prevent possible hybridisation with *Orchis simia* Monkey Orchid which is nearby. Lady Orchid numbers remained stable on the Wye Downs sites but Alfie Gay noted a lot of bramble growth in one spot where they usually are. Under the beech plantation in Covet Wood, flowering was well up this year with the larger clusters of Lady Orchids on bare leaf litter and scattered plants in among brambles. Most had only two or three capsules swelling. The one flowering plant in Sladden Wood had Alfie as pollinator at a KFC meeting. Alfie monitors the Lady Orchids in Lyoak and Canon Woods and manages the site during the winter months with the help of volunteers from the Whitecliffs Partnership. Creating glades there benefits the orchids but it also encourages a lot of bramble growth. One particular plant had a very healthy number of swollen capsules.

The colony on a bank below Warren Wood had twice the number of flowering spikes since my last visit in 2020 and a new site was found inside the wood thanks to a lot of glade widening and general but sensitive opening up of the wood. Flowering was earlier this year at Yockletts Bank with 68% more flowering plants than in 2021. This

was particularly noticeable amid the large *Mercurialis peren*nis carpet on the North Bank and might relate to increased light levels from dead ash in the canopy. On the south bank were some remarkably tall and robust specimens more than 65 cms high. At Bonsai Bank I counted more than 2,000 flowering spikes and there were very many small plants that were too young to flower and too numerous to count. They were clearly clustered around flowering plants and often on the bareish areas of old bonfire sites.

#### Gorsley, 2022. Photo by Sue Buckingham

robust h. At 2,000 e very young count. around h the ngham of a population of at least 300 flowering spikes can be viewed from a distance

On private land near Gorsley Wood a population of at least 300 flowering spikes can be viewed from a distance. They don't appear to have been planted and aren't gardened but the site is kept open and clear of trees and shrubs for the benefit of the orchids. In Woodlands Wood, Jack noted slug damage to 16 plants nearest the bridleway and added that those larger plants deeper in the wood were unaffected. Altogether there were fewer reports of slug damage this year.

My thanks to all who reported on Lady Orchids in 2022. There's just one year to go although I think I will want to carry on and at least make it a 5-year survey. Please let me know if you would like to help and I will send details of sites to visit.

Thanks also to all who look after our Lady Orchids.

#### Sue Buckingham

Orchis purpurea counts					
Tetrad	Site	No. of plants 2020	No. of plants 2021	No. of plants 2022	recorded highest counts since 1970
TQ46Q	Rushmore Hill	0			Last records 1991 & 1987-99
TQ55R	Bitchet Common- One Tree Hill			0	single plant 2012
TQ56F	Otford-Greenhill Wood			12 flowering + 3 blind	10 plants in 2016
TQ66T	Henley Street- Cobhambury Wood			0	2 plants 2015
TQ66Y	Red Wood west			6 flowering + 1 blind	new site
TQ66Y	Red Wood east			0	1 plant 2010 - habitat changed
TQ76D	Ranscombe west	38 flowering + 21 blind	58 flowering + 67 blind	60 flowering + 49 blind	71 flowering in 2013

TQ76E	Great Wood	11 flowering	8 flowering + 7	11 + 3 blind	17 in 2016
TQ76E	Clay Pond Wood		blind 7 flowering + 10 blind	9 + 1 blind	13 flowering (2013)
TQ76G	Burham Downs	168 flowering + 139 blind	late visit: 5 swollen capsules		285 (2013)
TQ77A	Great Crabbles Wood			0	first record Merrett (1666), last 1997
TQ85Y	Frinsted, Stock Wood			1 flowering + 3 blind	2 plants in 2004
TQ86A	Bredhurst Woods		1 flowering, at 2 locations		50 spikes recorded in 2011
TQ86F	Stockbury Hill		105 flowering + 16 blind		299 in 2019
TQ86G	Queendown Warren		2 flowering + 1 blind		few records
TQ96V	Ospringe		10 flowering + 24 blind	19 flowering + 32 blind	35 flowering (2013)
TR04	Wye Downs		34 flowering	32 flowering	34 flowering
TR04U	Warren Wood east	18 flowering + 10 blind		36 flowering + 20 blind	Small colony
TR04U	Warren Wood west	4 flowering + 10 blind		9 flowering + 6 blind	Scattered colonies
TR05K	Cutlers Wood		20 flowering + 300-500 blind or bitten		Estimated 300 flowering (KBRG 2016)
TR05L	Park Wood	1 flowering	1 flowering		
TR05V	Down Wood		6 flowering + 7 blind		10 flowering in 2010
TR05V	Eggringe Wood		7 flowering		3 flowering, 2 blind (2014)
TR05V	Thruxted		6 flowering		15 flowering (2011)
TR14H	Spong Wood	7 flowering			
TR14H	Little Profit (private)		90 flowering (estimate)		estimate 90 flowering
TR14I	Yockletts Bank	320 flowering + >100 blind	376 flowering	548 flowering	505 flowering 2013
TR14N	Fryarne Park & Lynsore Bottom	54 flowering + 9 blind	35 flowering by KWT RNR		similar numbers
TR14T	Parkgate Down	biind	1 flowering	1 flowering	
TR14T	Elhampark Wood		1 flowering		
TR14U	Covet Wood	361 flowering	124 flowering + approx 70 blind	213 flowering + 60 blind	Up to 3,000 in 1990s
TR14U	Quilters Wood		2 flowering, probably more		
TR14Z	Jumping Down		3 flowering + 5 blind		5 plants(2013)
TR14Z	Long Ruffet Wood		40 flowering + 80 blind		24 flowering (2011)
TR15A	Bonsai Bank	1550 flowering + > 2,000 blind	1224 flowering + >2,000 blind	2,066 flowering	3,481 (2013)
TR15B	Denge Wood (Woodland Trust)	34 flowering + >20 blind	,		
TR15H	Larkey Valley		32 flowering + 3 blind		29 flowering (2013)
TR15Q	Gorsley Wood west			3 flowering + 3 blind	2 in 2018
TR15Q	Gorsley Wood garden population.			at least 300 flowering	known as game-keepers' cottage
TR15Q	Bursted Wood			5 flowering	remains of plants seen 2011
TR15R	Whitehill Wood	4 flowering + 10 blind			8 flowering (2011)
TR15V	Knowle Wood	-	13 flowering + 20 blind		12 (2011)

TR24L	Sladden Wood		1 flowering and 2 blind	1 flowering + 1 blind	
TR24M	Cannon (& Lyoak) Woods	33 flowering + 17 blind	53 flowering	68 flowering + 66 blind	400 flowering (2003)
TR24R	Gorsehill Wood			0	2 in 2013
TR25A	lleden Wood		3 blind	2 flowering + 1 blind	1 in 2013
TR25B	Woodlands, Pitt and Well Woods	33 flowering + 15 blind	36 flowering + 160 blind	124 flowering + 81 blind	133 flowering (2012)
		TOTAL flowering: 2,636	TOTAL flowering - 2,243	TOTAL flowering 3,529	
		TOTAL non- flowering: 2,351	TOTAL non- flowering - 3,473		

#### Carex vulpina True Fox-sedge in Kent, 2022

We have few records for True Fox-sedge in 2022. The prolonged dry spell was not conducive for recording the plant at its seasonally wet sites which dried up much sooner than usual. Where the plant was re-found at Headcorn and Moorden, growth was notably reduced. At Staplehurst, a ditch site has been dry and the plant absent when visited in the spring over the last few years. However, large plants were seen this year during the KBRG meeting on 15 June which reviewed the Marden site (Wanshurst Green, TQ 7605 4474) discovered in 2011 when three tussocks were recorded. Eight plants had been counted by Lou Carpenter over the 2021-22 winter; the meeting found a further one by *Salix cinerea* (Grey Willow) in tall grass and rushes of a damp meadow, distinctly winter-wet, which appears promising for the future of this species here.



Carex vulpina wih KBRG members at Wanshurst Green. Photo by Geoffrey Kitchener

Other updates were made by Stephen Lemon:

- It is still present at Water Lane, south-west of Headcorn (TQ 8235 4327), but the finding of a single sparse patch on the bed of an open damp ditch is less than had been recorded in 2014, although there is still continuity from the original record by Ray Clarke (died 1982).
- A poplar plantation at The Grove, Moorden, in the River Eden floodplain (TQ 5174 4551) held seven grazed clumps in dry marshland where five were found in 2014 and 2020.
- The well-known area in the Medway floodplain north of the railway and east of Leigh (TQ 555 461) was found still to carry plants all around the swamp edge, but no count was attempted.

Geoffrey Kitchener & Stephen Lemon

#### Plants to look out for

**Deschampsia parviflora** has been suggested as worthy of recognition as a species, although normally treated as subsp. *parviflora* of *Deschampsia cespitosa* (Tufted Hair-grass). We have 677 records of *Deschampsia cespitosa* on the BSBI database for 2010 onwards (as of 2 November 2022). Of these, 24 are labelled subsp.

*cespitosa*, four are labelled subsp. *parviflora* (and one of these may actually have been in vc17, Surrey). So, how many of the species records might have been *D. parviflora*? It may be expected to be in the minority, but we should be looking out in shady woodland for a plant with bright green (not bluish-, dark- or mid-green) leaves and small spikelets (2.5-3mm, occasionally to 3.5mm, as distinct from subsp. *cespitosa*, generally 3.5mm or more) there are also some more technical distinctions (see Stace). The latest review of *Deschampsia*<sup>5</sup> is at: https://britishandirishbotany.org/index.php/bib/article/view/126/162

*Atriplex littoralis* **x** *A. prostrata* (the cross between Grass-leaved Orache and Spear-leaved Orache) has received some attention recently<sup>6</sup>, with teeth or lobes on *A. littoralis*-like plants being taken as evidence of introgression or segregation. See at <u>https://britishandirishbotany.org/index.php/bib/article/view/122/153</u>. It may be worth looking next year for Kent plants showing such variation in leaves, although I suspect that the effect of growing in richer soils than the usual coastal margin habitats may induce something similar.

The differences between escaped *Muscari* species have been given an airing in a recent BSBI News article<sup>7</sup>. We have both *Muscari neglectum* (Grape-hyacinth) and *M. armeniacum* (Garden Grape-hyacinth) as garden escapes in Kent and I have usually looked to distinguish them by flower colour: bright blue in *M. armeniacum* and variable in *M. neglectum* so that the lower fertile flowers become blackish-violet with age. The article also draws attention to *M. neglectum* having its longest leaf with a cross-section at the middle curled into a slender cylinder grooved on one side, whereas that of *M. armeniacum* is flattened, more of a shallow 'c' shape. The veins on the leaves also differ (ten or less in *M. neglectum*; more than ten in *M. armeniacum*). These differences may help us spot the hybrid, if these species are found together, which Alan Leslie (*Flora of Cambridgeshire*, 2019) describes as often having large, more elongated spikes than *M. neglectum*, of a paler but still dark blue (much darker than *M. armeniacum*), the perianth tips often pure white not stained with colour and with a gradual not sudden transition between sterile and fertile flowers. Something to look out for next spring!

Readers who have access to BSBI News may care to note that there is an excellent up-to-date key to **roses** by Roger Maskew<sup>8</sup>. I wrote in KBRG newsletter no.12 about the splitting of *Rosa canina* into three species and the widespread presence of hybrids involving the northern rose, *Rosa vosagiaca* (Glaucous Dog-rose). This key spells out in more detail the means of separating them. The basic approach is to separate those roses with hairy undersides to the leaflets (for us in Kent, this will take away *R. corymbifera* and *R. tomentosa* plus the fruit-scented roses, *R. rubiginosa* and *R. micrantha*). Then one takes the non-hairy *canina*-like roses and separates them into those with glandular leafstalks and those without. The former will include *R. squarrosa* and *R. squarrosa* and *R. subcanina*). One cannot claim that this is easy in practice, and the division into species may in the field be complicated by introgression, but it is a great help to have this sort of strategy in seeking to identify what we have in Kent.

#### Web version 1

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

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

<sup>&</sup>lt;sup>5</sup> McAllister, H.A. & Andy Amphlett, A. (2022). The *Deschampsia cespitosa* (Poaceae) complex in Great Britain and Ireland. *British & Irish Botany* **4(3)**: 314-346

<sup>&</sup>lt;sup>6</sup> Wilcox, M. (2022). Notes on *Atriplex* (Amaranthaceae) species and hybrids, particularly *A. littoralis* and the hybrid *A. littoralis* x *A. prostrata* (*A.* x *hulmeana*). *British & Irish Botany* **4(2)**: 140-144.

<sup>&</sup>lt;sup>1</sup> Moore, T. & H. (2022). Simpler ways of differentiating *Muscari neglectum* and *Muscari armeniacum* in the field. *BSBI News* **151**: 45-49.

<sup>&</sup>lt;sup>8</sup> Maskew, R. (2022). A revised dichotomous key to native and alien species of *Rosa* L. *BSBI News* **150**: 31-33.