Hampshire & Isle of Wight Wildlife Trust

Flora News

Newsletter of the Hampshire & Isle of Wight Wildlife Trust's Flora Group

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In This Issue

Dear Flora Group member

The Flora Group committee hope that you have enjoyed botanising during 2023 and we hope to see you at some of the forthcoming events. Please note that booking is essential for the Flora Group events advertised in this edition of *Flora News*. Thank you.

We look forward to welcoming Flora Group members to our winter get-together at Testwood Lakes Education Centre on Saturday 2 December 2023 when we will hold our brief Annual General Meeting. Details can be found on page 3 of this newsletter.

At the Flora Group AGM in 2022, Sarah Ball stepped down from the committee after many years as Chairman; since then, committee members are chairing committee meetings on rotation until someone is willing to take on this role. We are therefore asking Flora Group members to consider whether anyone might be willing to join the committee and take on the role of Chairman. If you are interested or would like to find out more about what is involved, please contact Catherine Chatters (whose contact details are at the end of this newsletter).

This edition of *Flora News* provides details of events scheduled between December 2023 and August 2024. Field trips will include an opportunity for a joint visit with the Sussex Botanical Recording Society and a visit to heathland habitats with the aim of attracting people from Hampshire and Surrey. Tony Mundell has arranged visits to Micheldever Spoil Heaps Site of Special Scientific Interest (SSSI) to explore this location at different times of the year and Martin Rand will be leading a trip to Boscombe to see the intriguing mix of native and naturalised coastal plants growing on the soft cliffs and suburban fringes of eastern Bournemouth (further details about this visit will be provided in the Spring 2024 edition of *Flora News*).

We are pleased to include articles/reports by Phil Collier and Bob Lord, Sue Bell, Claire Wickens, Dave Pearson and Tristan Norton in this edition of *Flora News* as well as features by our regular contributors. As always, we would like to encourage more people to provide contributions to *Flora News* on relevant botanical topics. If you have enjoyed any Flora Group event and would like to write a report, we would be very pleased to receive it. Please send your articles, notes or reports to Catherine Chatters (contact details at end of this newsletter).

As you will see from the note on page 62 of this newsletter, by the end of 2023 Martin Rand will have been South Hampshire Vice-county Recorder for the Botanical Society of Britain and Ireland for 20 years. The Flora Group committee would like to thank Martin for all his help and for the hard work, time and enthusiasm that he has devoted to this role over the past two decades. Earlier this year Tristan Norton was confirmed as a joint Recorder for 2023 and in the new year he will 'take over the reins entirely' when Martin steps down from his responsibilities as Vice-county Recorder. We are grateful to Tristan for agreeing to take on this important role.

Would you like to share transport to Flora Group events? Rob Still has set up a WhatsApp group so that people can contact each other and arrange lifts to Flora Group events. If you would like to participate, please send a text to Rob on 07702 737456 saying you wish to join the HFG WhatsApp group.

We are grateful to everyone who helps to organise Flora Group events and we welcome your suggestions for future Flora Group activities. Please raise your ideas with any of the current Committee members: Catherine Chatters, Clive Chatters, Andy Cross, Isobel Girvan, Gareth Knass, Tony Mundell, John Norton, Martin Rand, Neil Sanderson and Cathy Wilson.

Edited and produced by Catherine Chatters (Flora Group Secretary) and John Norton

***Cover photo:* Lizard Orchid *Himantoglossum hircinum*, South Hampshire (VC11), June 2023.** *Tristan Norton*
This recently established colony has doubled in size since its discovery in 2022, with 34 plants counted on 10 June.
See also VC12 records, p. 63.

Forthcoming Events

The events listed here will only take place if they are compatible with relevant Government guidance and Hampshire & Isle of Wight Wildlife Trust (HIWWT) advice regarding COVID-19. You must register with the leader in advance and provide contact details in case of late cancellation.

Bring a packed lunch, plenty to drink and suitable footwear to all field meetings. Bring waterproofs if it is likely to be wet.

Saturday 2 December 2023, 10.30am–4pm
Flora Group/BSBI Exhibition Meeting, with Flora Group AGM
Testwood Lakes Education Centre, Totton
Contact: Catherine Chatters

We look forward to holding our traditional winter get-together/social event at Testwood Lakes Education Centre. Please bring along cakes or savouries for us to share, plus your specimens, photos, materials for display boards and any other botanical talking point. This is a splendid informal event for meeting others interested in Hampshire's wildflowers.

We will hold our Flora Group Annual General Meeting (AGM) at 1pm.

A digital projector will be available and you are welcome to bring a few (fewer than 30) photos to show us in PowerPoint format, but only British plants and preferably species found in Hampshire. Please bring your PowerPoint presentation on a memory stick.

Meet at Testwood Lakes Education Centre, Totton (grid reference SU 3441 1558, Lat. & Long. 50.9387 –1.5117). The venue is reached from Brunel Road, a turning off the A36 at a roundabout between Totton and Ower. After entering Brunel Road, look for a turning on the left after a block of industrial units. Go along this track, ignoring the first (public) car park and the Sea Scouts' building on your right, until the Testwood Lakes Education Centre comes into view at the top of the hill. There is plenty of parking.

We are grateful to Tony Mundell and Martin Rand for their help in organising this event.

Main contact: Catherine Chatters. If you would like to attend, you will need to book your place with Catherine, whose contact details are on the last page of this newsletter.

Saturday 11 May 2024
Boscombe, Bournemouth
Leader: Martin Rand

A trip to the soft cliffs and suburban fringes of eastern Bournemouth to see the intriguing mix of native and naturalised coastal plants. More details will be provided in the Spring 2024 edition of *Flora News*.

Saturday 18 May 2024
Visit to South Holt: Hampshire/West Sussex border
Leader: Clive Chatters

We have been invited to join the Sussex Botanical Recording Society in a visit to South Holt, a private estate which straddles the county boundary and which is centred on grid reference SU 746 130. The estate includes significant areas of ancient woodland recently cleared of conifers, semi-natural ancient woodlands including steep slopes of Beech/Yew with Lime, chalk grassland, parkland and reverting arable. The soils range from chalk to heavy clay with extensive screes of flint cobbles.

The size of the estate means that participants will need to be able to walk for much of the day as cars will be left in the estate yard. Expect some of the ground to be steep and uneven so stout footwear will be needed. Be prepared for any weather; there are few places without some tree cover.

To enable us to manage the day, please book a place with Clive Chatters on *Clive.Chatters@hiwwt.org.uk* (making sure you put 'South Holt' in the topic line) and you will be sent joining instructions.

Saturday 8 June 2024, 10.30am–4pm
Visit to Micheldever Spoil Heaps SSSI – early visit.
Leader: Tony Mundell

Micheldever Spoil Heaps Site of Special Scientific Interest (SSSI) is so rich botanically that two visits are planned this year, an 'early visit' and a 'late visit', in order to maximise the number of species seen. You can book for either or both visits. The habitat is unusual as it comprises huge heaps of bare chalk spoil. This spoil arose in the nineteenth century during construction of the railway, when deep cuttings and a tunnel were excavated in 1838-1839.

We have been invited by the landowner and will record the plants found on both the east and west sides of the railway. During this early visit we will see huge numbers of the very attractive Spring Cinquefoil, *Potentilla verna* (still called *P. tabernaemontani* in some books). We should also find a few Fly Orchids *Ophrys insectifera* and hopefully the last one or two Lesser Butterfly Orchids *Platanthera bifolia* surviving in North Hampshire. Moonwort *Botrychium lunaria*, Fine-leaved Sandwort *Sabulina tenuifolia* and Mat-grass Fescue *Vulpia unilateralis* are also possible as they have been recorded there in the past. Apart from the rarities we will see a good selection of plants typical of calcareous grassland, making the visit also suitable for relative beginners to botany, as all the plants found will be pointed out.

There is ample parking and details of where to park will be sent to those who book a place. The total distance to be walked is very moderate, only about 1½ miles (2½ km) but with some very steep slopes and dense scrub to push through in places. So, we will potter slowly all day. Numbers will be limited. Please book your place by contacting Tony Mundell.

Contact: Tony Mundell (details on last page).

Saturday 6 July 2024, 10.30am–4pm
Visit to Aldershot heathland at Long Bottom and Caesar's Camp
Leaders: Tony Mundell & Isobel Girvan

This meeting aims to attract people interested in wildflowers from both Hampshire and Surrey, as the route will be partly in North Hampshire VC12 and partly in Surrey VC17. The habitat is a mixture of dry sandy heathland and some wetter boggy places giving a good range of plants that require acidic conditions. We last had a HFG visit here on 23 Jul 2017 and recorded over 200 species then, including Lesser Centaury *Centaurium pulchellum*, Dodder *Cuscuta epithymum*, Oblong-leaved Sundew *Drosera intermedia*, Round-leaved Sundew *Drosera rotundifolia*, Bog Asphodel *Narthecium ossifragum*, Fringed Water-lily *Nymphoides peltata*, Trailing Tormentil *Potentilla anglica*, White Beak-sedge *Rhynchospora alba*, Lesser skullcap *Scutellaria minor*, Goldenrod *Solidago virgaurea* and Marsh Speedwell *Veronica scutellata*. I particularly want to see if we can re-find Marsh Clubmoss *Lycopodiella inundata* and Ivy-leaved Bellflower *Wahlenbergia hederacea* as both are in steep decline in North Hampshire.

People of all botanical knowledge from complete beginners to seasoned experts will be very welcome and very common species as well as the more unusual ones will be pointed out. Note that it will be quite a long walk of about 4 miles (6½ km) round trip with some steep slopes.

Meet and park in the car park at SU8534 5113 by the Wellington Statue. **Note** that there is no access to the car park directly off the A325. Instead, access is via the junction on Bourley Road at SU 8486 5109. Numbers will be limited. Please book your place by contacting Tony Mundell.

Contact: Tony Mundell (details on last page).

Saturday 3 August 2024, 10.30am–4pm
Visit to Micheldever Spoil Heaps SSSI – late visit
Leader: Tony Mundell

This is the second of two visits to this area at the invitation of the landowner, and we will again record any plants seen on the chalk spoil heaps on both sides of the railway. The rarities we expect to find at this season are Red Hemp-nettle *Galeopsis angustifolia*, Cut-leaved Germander *Teucrium botrys* and hopefully Yellow Bird's-

nest *Hypopitys monotropa*. As for the 'early visit', apart from the rarities, we will also see a good selection of plants typical of calcareous grassland, making the visit also suitable for relative beginners to botany, as all the plants found will be pointed out.

There is ample parking and details of where to park will be sent to those who book a place. The total distance to be walked is very moderate, only about 1½ miles (2½ km) but with some very steep slopes and dense scrub to push through in places. So, we will potter slowly all day. Numbers will be limited. Please book your place by contacting Tony Mundell.

Contact: Tony Mundell (details on last page).

Reports of Recent Events

Stokes Bay, Browndown and Lee-on-the-Solent, Gosport – Sunday 23 April 2023

A report by John Norton

About 15 people came along to this meeting, billed as covering 'winter annuals and early spring flowers'. The weather throughout the winter and early spring in Gosport, as in other parts of the county, had been relatively cold without much sunshine, so most of the winter annuals were at least a month behind their normal development and a week before the meeting were still not flowering. However, just prior to the meeting things warmed up a bit and plants thankfully begun to bloom just in time, although it was hard work finding some of the tinier annuals. On the day of the meeting overnight rain was clearing at the start, and we were lucky to experience some sunny spells later.

We started out at the eastern end of the Stokes Bay coastal area, having a look along the grassy banks on either side of the road leading up to the lifeboat station and Gilkicker car park. Here we looked at a sown strip of 'wild' flowers, which included well grown leaves of Fodder Burnet *Poterium sanguisorba* subsp. *balearicum*, along with basal leaves of Purple Viper's-bugloss *Echium plantagineum*, the cultivated variety of Bird's-foot-trefoil *Lotus corniculatus* var. *sativus* and a possible candidate for Hard Fescue *Festuca trachyphylla*. On the other side of the road I showed the party a collection of different Alliums, none of which were in flower, but including a distinctive plant of Babington's Leek *Allium ampeloprasum* var. *babingtonii* (which could well have been an escape from Eric Clement's garden just up the road). Other bulbiferous species of garden origin which were Garden Grape-hyacinth *Muscari armeniacum* and Hybrid Bluebell *Hyacinthoides* × *massartiana*, which were in flower. Our first flowering winter annuals for the day were Keel-fruited Cornsalad *Valerianella carinata* and Red Dead-nettle *Lamium purpureum*.

Some of the Stokes Bay group get busy. *Tony Mundell*

A little further up, at the entrance to the Gilkicker car park, I was pleased to spot a flowering plant of Toothed Medick *Medicago polymorpha* on the kerb, which was 3.5km east of our only other known colony in Gosport, at Elmore (which we visited at the end of the day). We then looked at a show of flowering Common Ramping-fumitory *Fumaria muralis* next to the lifeboat station and walked slowly over the amenity grassland to the north of the car park, stopping to look at patches of acid grassland on areas of trampled shingle and gravelly mounds on our hands and knees. We looked hard for Bulbous Meadow-grass *Poa bulbosa* which I knew occurred, but we couldn't find any definite plants. We did see Early Meadow-grass *Poa infirma* and Lesser Chickweed *Stellaria pallida* in flower but other annuals not quite in flower included Upright Chickweed *Moenchia erecta*, Early Hair-grass *Aira praecox* and Suffocated Clover *Trifolium suffocatum*. We also managed to locate some small, stunted basal leaves of Sheep's-bit *Jasione montana* on the mounds (a tiny colony persists here but unfortunately is always mown off and never gets a chance to flower).

Blinks *Montia fontana*, Stokes Bay. *Debbie Allan*

By this time we had walked a route of less than 1km and although it was still before 1pm the sun was coming out and it seemed a good time to pause and have our lunch on the seafront benches. We then looked at a sorry-looking plant of Sea Spurge *Euphorbia paralias* on the shingle beach which Debbie Allan and I had discovered during our recce a week before. This may now be the only plant in Gosport borough, since a much larger colony on Lee-on-the-Solent beach appears to have disappeared. We continued north-west along the beach past the café where some Eastern Rocket *Sisymbrium orientale* was flowering. We then came to another area of coastal acid grassland with worn stony areas, where Bob Wardell finally found some Bulbous Meadow-grass. Here there was also plentiful Musk Stork's-bill *Erodium moschatum*, Sea Mouse-ear *Cerastium diffusum* and some succulent looking patches of Blinks *Montia fontana*. This area supports a good range of coastal clovers and medicks but it was too early for most to be flowering.

Bulbous Meadow-grass *Poa bulbosa*, Stokes Bay. *Tony Mundell*

Heath Dog-violet *Viola canina*, Browndown SSSI. *Debbie Allan*

Although at the start of the day it was not my intention to visit Browndown SSSI, since this would have required too much time to do justice, we decided that it was too good a spot to miss out, so we moved some of the cars to the Battery No. 2 car park and walked in at the eastern end. Here there is a species rich area of acid grassland on the shingle beach, just inside the entrance, where we quickly found Spring Vetch *Vicia lathyroides*, growing with Little Mouse-ear *Cerastium semidecandrum*, Early Forget-me-not *Myosotis ramosissima*, Slender Parsley-piert *Aphanes australis* and others. We proceeded a little further on to a short rabbit-grazed area of brackish grassland behind the beach where the brightly coloured flowers of Heath Dog-violet *Viola canina* were much admired.

We could have spent the remainder of the afternoon at Browndown, but I had promised to show some of the party one final plant of interest a little further along the coast at Elmore (at the eastern end of Lee-on-the-

Solent). Here, there is a narrow shingle beach, partly compacted through trampling next to the promenade where Early Medick *Medicago praecox* (classed as a non-native species) that has persisted here since I first discovered it in 2004. It also occurs on the adjacent grassy embankment, in company with Toothed Medick, both of which flowering and fruiting, allowing comparison of the distinctive pods to be compared. We also saw Spotted Medick *M. arabica* in flower and lots more Upright Chickweed on the bank. Later in the spring I noticed that Early Medick has now spread several hundred metres west along Lee-on-the-Solent beach. Previously only occasional plants were seen, but there are now relatively large patches.

Fruits of Toothed Medick *Medicago polymorpha* (left) and Early Medick *M. praecox* (right), Elmore, Lee-on-the-Solent. *Tony Mundell*

We ended the day with a good haul of winter annuals, many of which were in flower, and a nice selection of other species. I think all of the less experienced botanists who came along found it enjoyable and I hope I have converted some people to the pleasures of rooting around on one's hands in unpromising patches of coastal acid grassland to search out the tiny clovers and other plants of interest.

Workshop: Threatened Plants Recording – Sunday 30 April 2023

A report by Martin Rand

The purpose of this workshop was to encourage and help more Flora Group members to make a detailed survey of threatened plant populations in their area. This is something that follows on from a national BSBI Project (the Threatened Plants Project or 'TPP' for short) that resulted in the publication of a book *Threatened Plants in Britain and Ireland,* published in 2017 that analysed national trends for a limited number of species. Tony and I were both keen to promote more activity along the same lines at a county level, not to produce the sort of formal analysis that the TPP had as its aim, but simply to build a repository of detailed knowledge about sample populations and the condition of their localities which we and others could draw on in the future. Detailed survey sheets from the TPP and similar previous projects are already available on the Hants Plants website, and over the winter we shall add the new ones collected by the current activities.

In preparation for this we produced a list of priority target species for survey, rather longer than the ones chosen for the TPP. This is also available on the Hants Plants website. But in fact, we are happy to receive survey sheets for any of the nationally or locally rare or threatened species on the Hampshire Notables list, which (as you will have guessed by now) is also available through Hants Plants. Not everything on these lists is rare, but

the commoner ones are often those for which people supply the least detail in their normal recording activities, so it is good to have at least exemplars of these recorded in more detail.

A dozen people signed up for the workshop, and we assembled at the Wildlife Trust's Testwood Lakes Education Centre for a morning's indoor session. The BSBI TPP form, which we want participants to use, is a lengthy and rather formidable document, and we spent this time working through it to explain how to fill in the various sections. Tony and I were keen to emphasise that if recorders found any aspects too challenging or time-consuming then some parts could be left uncompleted, as some information is always better than none!

After lunch we went off to a site on National Trust land in a nearby part of the New Forest, where we split the group into two teams to work on opposite sides of a small hill. Their challenge was first, to locate populations of Marsh Clubmoss *Lycopodiella inundata*; then, to practise filling in a recording card and resolve how the observations should best be recorded. As I expected, the biggest challenge for 'Team South', under Tony, was in actually finding the small muddy population on their end. 'Team North' had much less difficulty in finding theirs, but then had to decide how to tackle a population split into two geographically close but rather different locations and vegetation communities, and how best to assess the magnitude of a population of entwined creeping plants with almost no sporing spikes showing. The setting was beautiful, the weather was kind, and I'd like to think that participants were entertained as well as instructed.

Since the workshop, Tony and I have had many people helping us with our surveys, and a few brave souls have launched out on their own recording (in South Hampshire, with exemplary results that put my rather scruffy documents to shame). Although neither of us quite managed to complete all the days out we had planned, we have scores of forms to process over the winter that will all contribute to giving us a more in-depth picture of the county's flagship plant species, some of which have not been recorded in all sites for a while.

If you missed the workshop but would like to help with this project, please speak to Tony or me for information and guidance.

Sims Wood and Beaulieu River Estuary – Sunday 14 May 2023

A report by Dave Pearson

On 14 May, a dozen members of the Flora Group eagerly assembled at the meeting point in Sims Wood for the field trip organised by Martin Rand.

Sims Wood and neighbouring Steerleys Copse are ancient woodland (with some conifers) on the lime-rich Headon and Osborne Beds, running down into a narrow fringe of coastal grassland and saltmarsh along the eastern side of the Beaulieu Estuary. Sims Wood is part of the North Solent National Nature Reserve and although some areas have been planted with conifers in the past, particularly on the Steerleys Copse side, it includes extensive semi-natural woodland. Some areas are being restored to native hardwoods by replanting. There are glades and long open rides that are particularly attractive and important for the flora, and a long stretch of the woodland runs down into saltmarsh and flats along the Beaulieu Estuary, making it particularly important for this transitional and increasingly rare habitat.

After the usual introductions and safety briefing, we all set off along a wide ride in the direction of Spearbed Copse. After admiring the young shoots of Butcher's Broom *Ruscus aculeatus*, a good patch of Southern Wood-rush *Luzula forsteri* was found at the side of the ride. This wood-rush is characterised by narrow basal leaves; inflorescences with erect or ascending branches in fruit; and a short appendage to the fruit. Further along, the leaves of Corky-fruited Water-dropwort *Oenanthe pimpinelloides* were identified by Martin. This umbellifer is locally abundant in the area. The bright-green leaves of Narrow Buckler Fern *Dryopteris carthusiana* were also seen at the edge of the woodland. We then found Smooth-stalked Sedge *Carex laevigata* in the ditch at the side of the ride and several Pale Sedge *Carex pallescens* in the centre of the ride.

Three large Wild Service Trees *Sorbus torminalis* were noted in Spearbed Copse. Other interesting trees were *Betula* × *aurata* (the hybrid between Silver Birch *B. pendula* and Downy *Birch B. pubescens*), Eared Willow *Salix aurita* and *S.* × *multinervis* (the hybrid between Eared Willow *S. aurita* and Grey Willow *S. cinerea*).

Pale Sedge *Carex pallescens*, Spearbed Copse. *Tony Mundell*

Narrow-leaved Lungwort *Pulmonaria longifolia*, Spearbed Copse. *Dave Pearson*

The group then split into two teams, marshalled by Martin Rand and Tony Mundell, to survey the glades in Spearbed Copse. The highlight of these surveys was finding good numbers of the dark-green lanceolate leaves with some silvery-white spotting of Narrow-leaved Lungwort *Pulmonaria longifolia*. Some plants even had their blue flowers on show.

Lunch was then taken in a shady spot at the edge of a glade where the relative merits of common names for plants was discussed with some enthusiasm!

Both teams then took on the task of surveying the long wide ride that leads down to the Beaulieu Estuary, each team tackling one side of the ride. About half-way along the ride, a Narrow-bordered Bee Hawk-moth *Hemaris tityus* was spotted by Tony Mundell's team. This moth has clear veined wings and two blackish bands on its abdomen, closely resembling a bumblebee. However, it is usually a much more active flyer than any bee. A few minutes later two more Narrow-bordered Bee Hawk-moths were found in the grass, possibly having just hatched. The caterpillars of these rare moths feed on Devil's-bit Scabious *Succisa pratensis* plants, a lot of which were located nearby.

Two of the Narrow-bordered Bee Hawk-moths *Hemaris tityus*. *Dave Pearson* (left), *Tony Mundell* (right).

In the meantime, Martin Rand's team had disappeared into the woodland to survey a small pond. The only plant found that was of note was Blunt-leaved Pondweed *Potamogeton obtusifolius,* so named because of its grass-like leaves ending in a blunt or rounded tip.

At the end of the wide ride, a small belt of woodland gave way to saltmarsh and a fine sward of Divided Sedge *Carex divisa*. On the higher areas of the saltmarsh, there were a few patches of English Scurvy-grass *Cochlearia anglica,* distinguished by its larger flowers and rounded flattened fruits. As we continued across the saltmarsh there were some early flowering Thrift *Armeria maritima*, plenty of Sea Arrow-grass *Triglochin maritima* in flower and one solitary Long-bracted Sedge *Carex extensa*.

A rare lichen, Golden-eye *Teloschistes chrysophthalmus,* was found on a small tree at the edge of the saltmarsh. This lichen was previously considered extinct in the UK having disappeared because of high sulphur dioxide levels through the 1900s.

Golden-eye *Teloschistes chrysophthalmus.* *Dave Pearson*

Nearby, the basal leaves of Parsley Water-dropwort *Oenanthe lachenalii* allowed comparison with those of its congener found at the start of the walk. Finally, a small patch of Marsh Mallow *Althaea officinalis* was located although it was not yet in flower. We then walked back to the meeting point very pleased with the day's outing. Thanks must be extended to Martin Rand for organising and leading a walk in such an interesting and rewarding location.

Warblington Farm – Saturday 10 June 2023

A report by Tristan Norton

On a sweltering Saturday morning that only got warmer, a dozen Flora Group members met in the car park by Warblington Church. Without too much of a car park botany delay we slowly headed east towards the most productive areas, although with a brief stop to admire a Bryony Mining-bee *Andrena florea* spotted by John Norton visiting a nice patch of White Bryony *Bryonia dioica* on the church wall.

Our first proper stop was at the eastern edge of Warblington Farm, where a ribbon of grazed Site of Importance for Nature Conservation (SINC) grassland blends gradually north-to-south from neutral through to saline and contains many mouth-watering species. The more neutral, streamside grassland held plenty of Ragged-Robin

Coastal grazing marsh at Warblington Farm, looking towards the sea wall embankment. *John Norton*

Silene flos-cuculi plus Hairy Buttercup *Ranunculus sardous* and the narrow-leaved subspecies of Common Vetch *Vicia sativa* subsp. *nigra*.

Sea Clover Trifolium squamosum. *Tristan Norton*

The southern end of this area is easily the richest and the gradation from neutral meadow to saltmarsh supports a wonderful array of interesting plants. The less grazed areas were full of patches of Meadow Barley *Hordeum secalinum* and Distant Sedge *Carex distans*, whereas further south in the tighter grazed sections we found an abundance of *Trifolium* species: sheets of flowering Subterranean Clover *Trifolium subterraneum* and gone-over Knotted Clover *T. striatum* as well as abundant Strawberry Clover *T. fragiferum.* The undoubted star plant here was Sea Clover *T. squamosum*, with several sizeable flowering patches recorded on the main pasture but also on the adjacent sea wall embankment. The embankment gave us some interesting grasses, including Borrer's Saltmarsh-grass *Puccinellia fasciculata* and Hard-grass *Parapholis strigosa*. We were too early for the Slender Hare's-ear *Bupleurum tenuissimum* that grows plentifully here.

Looking at *Puccinellia* species on the embankment. *Tony Mundell*

A small brackish lagoon was fascinating, with abundant Celery-leaved Buttercup *Ranunculus sceleratus*, Long-bracted Sedge *Carex extensa*, Sea Milkwort *Lysimachia maritima*, Greater and Lesser Sea-spurrey *Spergularia media* and *S. marina*, and Brookweed *Samolus valerandi.*

We then moved onto the foreshore, and after a quick look at a patch of well-developed saltmarsh, we trudged westwards in building heat and humidity to the next grassland area. This area is a Site of Special Scientific Interest (SSSI) but in my opinion is not actually as good as the previous SINC site. Once we'd navigated a fence and a herd of bemused cattle, we soon found interest in the mosaic of brackish pools and channels, brackish swamp and dry banks. Here we added Rough Clover *Trifolium scabrum*, more Brookweed, Wild Celery *Apium*



Left to right: **Borrer's Saltmarsh-grass *Puccinellia fasciculata***, *Debbie Allan*; **Long-bracted Sedge *Carex extensa***, *Debbie Allan*; **Hard-grass *Parapholis strigosa***, *Tony Mundell*.

graveolens, and Stiff Saltmarsh-grass *P. rupestris*. We decided that we were all flagging in the heat so headed back to the vehicles and some shade. Our thanks go to Havant Borough Council for allowing us access to the site. Special thanks from me go to Helen Boyce for being so very helpful throughout the visit and ensuring that everyone was gathered up and got to see everything.

Broughton Down Farm – Sunday 11 June 2023

A report by Tristan Norton

With some blessed rain overnight, it was a cooler group of a dozen botanists who arrived in the yard at Broughton Down Farm on Sunday morning for a delve into arable plants. The farm is a typical chalky arable site, nestled under Broughton Down, with areas specifically managed for arable 'weeds'.

After a quick use of the very posh WC facilities and a spot of Small Toadflax *Chaenorhinum minus* by the yard, we spent ten minutes debating a Crane's-bill by the cars. We worked out that we had a lovely pale form of Cut-leaved Crane's-bill *Geranium dissectum*. I'm sure I recall a car park Geranium delay on last year's arable plant trip…

Our route to the main arable plant area took us along a wonderfully overgrown farm track festooned with roses. I think the consensus from those in the know (mostly Tony and Martin) was that we had various hybrids: I'm afraid I didn't take notes!

Upon entering the first large crop field we were soon encountering our first arable species: Fumitories. The overwhelming majority of plants were Common Fumitory *Fumaria officinalis* but Tony, having moved away from the main group, soon came up trumps with a very pale, small fumitory with tiny sepals. Martin was able to measure a sample of sepals and these all came out at less than 0.7mm: this plant was looking very good for Few-flowered Fumitory *F. vaillantii*, perhaps South Hampshire's rarest plant. I was later able to get some images to Tim Rich, the BSBI referee, and he was happy to confirm the identification. Buoyed up by this super find, we made our way to the field corner and found Dense-flowered Fumitory *F. densiflora* and more Small Toadflax.

Few-flowered Fumitory *Fumaria vaillantii*. *Tristan Norton*

Exploring the arable weed area. *Tristan Norton*

Left to right: **Prickly Poppy *Roemeria argemone*,** *John Norton*; **Venus's-looking-glass *Legousia hybrida*,** *Debbie Allan*; **Fine-leaved Fumitory *Fumaria parviflora*,** *John Norton*.

Walking south along tramlines we soon arrived at the main site, an area of approximately two hectares rich in arable species. The abundance of good quality arable plants here is something to behold and we were soon finding both Rough Poppy *Roemeria hispida* and Prickly Poppy *R. argemone* frequently amongst the abundant fumitories. It became apparent that there was a large amount of the delightful Venus's-looking-glass *Legousia hybrida* here too, although most were extremely tiny. We also found Narrow-fruited Cornsalad *Valerianella dentata* to be very locally frequent.

Our lunch break was taken by a lovely margin of abundant fumitories, mostly Common and Dense-flowered, but we found four plants of Fine-leaved Fumitory *Fumaria parviflora*, easily told by its ivory white flowers. After a brief visit to the adjacent estate where the farm is entirely organic grassland with lovely rich wildlife corridors, we called it a day in the gathering heat. It was fantastic to spend time looking at such a rich arable site and all four arable fumitories in one place is about as good as it gets for arable plant hunting!

Our thanks go to the estate manager Simon Gent for allowing access and for ensuring that management is right for so many great plants.

Avon Heath Country Park – Saturday 24 June 2023

A report by Martin Rand

I was afraid that the hot dry weather was going to leave us very little to look at on the day, but the meagre amount of rain that fell earlier in the week was enough to freshen things up a bit. We spent the morning on the northern part of this popular country park. After admiring a basking Sand Lizard in the enclosure near the visitor centre, we set out across the parched acid grassland where several good species were soon located, including Yellow Bartsia *Parentucellia viscosa*, Smooth Cat's-ear *Hypochaeris glabra*, Suffocated Clover *Trifolium suffocatum* and Hairy Bird's-foot-trefoil *Lotus subbiflorus*. An oddity on this stretch was an almost perfectly circular patch of Galingale *Cyperus longus*, growing in what appeared to be a dry spot but was perhaps the former site of a small pool.



Left to right: **Yellow Bartsia *Parentucellia viscosa*, Hairy Bird's-foot-trefoil *Lotus subbiflorus*** and **Galingale *Cyperus longus***. *Tony Mundell*

As we headed farther east, grassland gave way to heath and Bracken, relieved mainly by wayside plants along the sandy tracks such as Sand Spurrey *Spergularia rubra* and Common Cudweed *Filago germanica,* and the welcome shade of a few Maritime Pine *Pinus pinaster* from a large planting now largely removed from the site. A grassy transition zone on the margins of an expanse of Bracken had us hunting for Small Adder's-tongue *Ophioglossum azoricum* at one of its known sites, but without success. As we went up one sandy slope a bog runnel produced several typical plants including Sundews *Drosera rotundifolia* and *D. intermedia*, White Beak-sedge *Rhynchospora alba*, Bog Asphodel *Narthecium ossifragum* and Common Cotton-grass *Eriophorum angustifolium*.

At this point our destination was an area of enclosed grassland towards the eastern end of the park, where a fine colony of Deptford Pink *Dianthus armeria* was being maintained by occasional soil disturbance interventions (but exclusion of grazing animals). Luckily for the photographers, the plants were coming nicely into flower and 53 flowering stems were counted.

After lunch sitting on a grassy bank we returned to the visitor centre through the welcome shade of the wooded southern fringe of this part of the park. Here were several new things to note, but the most exciting was a colony of what appeared to be Green-flowered Helleborine *Epipactis phyllanthes*; but as they were just coming into bud a firm judgement was difficult and they will need to be confirmed next year.

Deptford Pink *Dianthus armeria*. *Tony Mundell*

Flora Group party recording in an area of wet heath at Avon Heath Country Park. *Tony Mundell*

At this point several participants decided that they had been roasted well enough for one day, leaving a small band of stalwarts to continue to the detached southern part of the Country Park in the afternoon. This is much quieter and rather more scenic. We crossed a couple of sloping parched grass fields that until quite recently were heavily horse-grazed but were now harbouring a small troupe of cattle. Plenty more Yellow Bartsia was in evidence but in general the interest was limited, although a couple of seepage points over outcrops of ironstone yielded a rather different flora including Common Yellow-sedge *Carex demissa* and Common Sedge *C. nigra*.

We now headed for another site for Deptford Pink known to the leader from visits some years ago, but none could be found and the vegetation was much less open than before. It was agreed that some disturbance in this area might revive the plant's fortunes. Returning along a route close to the western boundary of the Country Park we climbed through more diverse heathland than that seen in the morning. There were spectacular stands of Sheep's-bit *Jasione montana,* and two common Hawkweed species *Hieracium trichocaulon* and *H. umbellatum* were recorded. There was no sign of the Maiden Pink *Dianthus deltoides* formerly recorded in this area, although there is a good population on private land not far away. The luxuriance of a Bent species on the heathland led some of us to think we had found Brown Bent *Agrostis vinealis*, but this turned out to be very robust Bristle Bent *A. curtisii*, of a size rarely seen on the Forest. However, we did find some *A. vinealis* shortly afterwards, finishing the day with our honour intact.

Sheep's-bit *Jasione montana*. *Tony Mundell*

To sum up, the day proved productive and satisfying despite my fears. Thanks go to the staff at the Avon Heath Country Park for their help and for arranging free parking for all participants, and to my co-leaders Jon Crewe and Rob Sharp from Dorset Flora Group for their support beforehand and on the day.

Southwood Country Park – Saturday 1 July 2023

A report by Isobel Girvan (morning session) and Tony Mundell (afternoon session)

Tony met up with a mixed group of botanists of both the experienced and budding kind for a gentle walk around Southwood Country Park. Located just north of Farnborough Airport, it is a former golf course, now a SANG (Suitable Alternative Natural Greenspace) that has been left to its own devices and now grows 'wild'. Before we had even entered the site, we had a discussion about what could have been Sea Couch *Elymus athericus* with its blueish-green leaves. However, this was quickly dismissed as Common Couch *E. repens*, as its leaves do also appear glaucous at times. Another identification point is the presence of hairs on the sheaths (for *E. athericus*) or no hairs (for *E. repens*). Of course, the fact that we were in North Hampshire would mean *E. athericus* was less likely and a quick look at Plant Atlas 2020 online (*plantatlas2020.org*) does show an obvious preference for the coast, but you never know. We were also alerted to the two different forms of *E. repens*, those with no awns *f. repens* and those with small awns *f. aristatus*.

Given that the whole site is being left relatively unmanaged at present by Rushmoor Borough Council (mainly because of the presence of contractors installing the new Esso Southampton to Heathrow pipeline across the site), this allows species that do not appreciate being mown or grazed a chance to thrive – such as Prickly Lettuce *Lactuca serriola*. Tony mentioned that the leaves are held flat-on to face the sun (so not edge-on as most plants) and they even move slowly to follow the sun. When the stem is broken it exudes a milky-white, viscous latex liquid, possibly as an anti-herbivore agent.

Also on the edge of the path was Wild Teasel *Dipsacus fullonum*, not rare or exciting per se, but some research in 2011 suggested that where the leaf bases come together and catch rain it also accumulates dead dipteran larvae that can cause a 30% increase in seed set and the seed mass : biomass ratio. Apparently, this study provides the first empirical evidence for reproductive benefit from carnivory in *D. fullonum* (Shaw & Shackleton 2011).

Given its history as a former golf course there are plenty of planted trees or shrubs such as Broad-leaved Cockspurthorn *Crataegus persimilis*, Pissard's Plum *Prunus cerasifera* var. *pissardii*, and a variety of poplars including mature Hybrid Black Poplar *Populus* × *canadensis*, Grey Poplar *P.* × *canescens* and thickets of White Poplar *P. alba*. There are also several abandoned golf bunkers where plenty of acid grassland indicator species were noted including Bird's-foot *Ornithopus perpusillus*, Sand Spurrey *Spergula rubra* and Early Hair-grass *Aira praecox*. The golf tee areas that years ago were kept closely cropped also had a different flora with both Squirreltail Fescue *Vulpia bromoides* and Rat's-tail Fescue *V. myuros*. Another tee area had a group of Heath Groundsel *Senecio sylvaticus*.

The site is on a floodplain and several damp-loving species turned up including Lesser Spearwort *Ranunculus flammula*, Greater Bird's-foot-trefoil *Lotus pedunculatus* and Marsh Foxtail *Alopecurus geniculatus*, as well as a number of species of *Juncus*. For newer members and as a refresher Tony clambered into a ditch and pulled out *Juncus effusus* (Soft Rush), opening up the stem and showing the continuous soft pith. The was followed by the similar looking Compact Rush *J. conglomeratus* with a ridged stem, and the crooked top part of the stem jutting out at around 90 degrees. Then there was some Jointed Rush *J. articulatus* which, along with several other species, have septa (horizontal partitions) in the leaves. Clement & Poland (2020) observe that the distance between these septa can be used to assist species identification. In *J. articulatus* there are more than one septum per cm whereas Sharp-flowered Rush *J. acutiflorus* has fewer than one septum per cm. However, this depends on where on the plant you take the leaf; the older, mature leaves are best.

After having our lunch, we set out again, but on the eastern half of the Country Park. This gave us many plants more typical of marshy conditions, including Skullcap *Scutellaria galericulata*, Hairy Sedge *Carex hirta*, Purple Loosestrife *Lythrum salicaria*, Gypsywort *Lycopus europaeus* and Orange Balsam *Impatiens capensis*. We compared Creeping Forget-me-not *Myosotis laxa* (all its stem hairs adpressed, calyx teeth an isosceles triangle shape, and very small flowers) with Water Forget-me-not *M. scorpioides* (lower stem with patent hairs, calyx teeth equilateral triangle shape and larger flowers).

We also compared several Dock species, Clustered Dock *Rumex conglomeratus*, Broad-leaved Dock *R. obtusifolius*, Water Dock *R. hydrolapathum*, Curled Dock *R. crispus* and Wood Dock *R. sanguineus*. In Cove Brook we saw Greater Spearwort *Ranunculus lingua* that I am sure is native there.

Brown Sedge *Carex disticha* was found in two places and Narrow Buckler-fern *Dryopteris carthusiana* was a good find, but the Ragged Robin *Lychnis flos-cuculi* had gone to seed since I checked out the route. Sadly, there was no sign of the Great Burnet *Sanguisorba officinalis* that I used to know, as it had recently been bulldozed away to install the new Esso pipeline.

We finished with a few impressively tall spikes of Southern Marsh-orchid *Dactylorhiza praetermissa*, though most of the flowers had gone over.

References

Poland, J. & Clement, E.J. 2020. *The Vegetative Key to the British Flora* (2nd edn). John Poland, Southampton.
Shaw, P.J.A. & Shackleton, K. 2011. *Carnivory in the Teasel Dipsacus fullonum — The effect of experimental feeding on growth and seed set*. PLoS ONE 6(3): e17935. doi:10.1371/journal.pone.0017935

Plant Families workshop – Saturday and Sunday 22 and 23 July 2023

A report by Martin Rand

Unfortunately, this workshop did not attract many participants in the first place; and after several cancellations near the time, the event no longer remained viable. It was therefore cancelled. I will see whether more support can be found in 2024. Meanwhile, for those who missed out and for other potentially interested people, the workshop notes are now installed on the Hants Plants website as Module 5, under 'Plant Group Workshops' on the 'Workshop and ID notes' page: *hantsplants.uk/workshopnotes.php*.

Notes and Features

The Spring 2016 edition of *Flora News* (available at *hantsplants.uk*) includes a note by Martin Rand titled '*Vicia orobus* (Wood Bitter-vetch) in Hampshire: where was it found?' In it, Martin refers to a letter dated 27 June 1904 to Rev. John Kelsall from a Ruth Jones who lived in Lyndhurst. Her letter, which describes the precise location of Wood Bitter-vetch, was found in Rev. Kelsall's copy of Townsend's Flora of Hampshire and is reproduced in Martin's note for *Flora News*. In his note, Martin wrote: 'So far I have found no other details of her life and interests…If anyone has more information on Ruth Jones and her botanical correspondence, I would much appreciate it'.

Martin's comments prompted Flora Group member Clive Chatters to ask local historian Claire Wickens whether she could discover any information about Ruth Jones. Claire gladly took up the challenge and kindly agreed to write up the results of her research as an article for this edition of *Flora News*.

Ruth Jones – an undiscovered botanist?

An article by Claire Wickens

On 15 June 1904 a group of about ninety girls and women, all members or associates of the Minstead and Lyndhurst branch of the Girls' Friendly Society, gathered at the Rufus Stone for their annual festival. From there they walked to Canterton Manor where, at the invitation of Mr and Mrs Jeffreys, they were able to stroll in the gardens and play games until tea was served. 'After tea,' says a newspaper report of the event, 'prizes were given for the prettiest bunch of wild flowers, containing the greatest number of different specimens'. It continues:

"The eighteen bunches sent in for competition were all good, some of them remarkably so, and Mrs Jeffreys (the judge) found it hard to decide on the winners of the second and third prizes, though Ruth Jones of Lyndhurst, with 128 different flowers in her bunch, was easily first."

The report doesn't say if the flowers were all freshly picked. Perhaps not, since at a Girls' Friendly Society meeting earlier in the year *"prizes having been offered for the best collection of wild flowers dried and named, it was decided to form a 'Ramblers Club' to make monthly excursions in search of flowers"*.

It was a fortnight after this festival that Ruth Jones wrote from her parents' home in Lyndhurst to the Rev. John Kelsall – the letter quoted by Martin Rand in his note on *Vicia orobus* (*Flora News* no. 50, January 2016). Ruth clearly had a keen interest in botany and, from what she says in her letter, had been discussing plant identification both with Kelsall and with some of the New Forest woodmen. (It is possible that Kelsall was a guest at the Girls' Friendly Society event, bearing in mind the Society's links with the Church and his enthusiasm for botany.) Ruth also wanted to learn more, saying she wished he would include a 'course of instruction for lovers of Nature' in the parish magazine (of which he was editor).

Given her evident knowledge of the subject, and the self-confidence with which she expressed herself, you may find Ruth's background surprising. She was born in Lyndhurst in 1864, one of a family of eight children. Their parents, George and Jane (née Soffe), were both originally from Minstead. George and his two youngest sons were all woodmen, working for Woods and Forests. The family initially lived in the Clay Hill area of Lyndhurst but by 1901 George had retired and moved to Elsham Cottage in Queens Road, the address from which Ruth's letter was written.

George, who was born in 1824, is unlikely to have been to school and was possibly illiterate – he signed his will with an X. Ruth, however, attended Lyndhurst's C of E school which had opened in about 1850. The education was basic: for girls it consisted mainly of the 'Three Rs', sewing and scripture, although the children were also taught drawing and singing.

Ruth must have been one of the more able pupils as in 1876 the log book records that she had been acting, possibly for some months, as Monitor in the Infants' section. Her formal education probably came to an end in May 1878 when her mother requested leave of absence for her 'for the greater part of every week'. No reason is given but it is likely that a job had been found for her. Certainly by 1881 she was working away from home as

a nursemaid in the Rectory at Little Bookham, Surrey, and later with a wealthy family in Eastbourne, Sussex. The remainder of her working life was spent in domestic service, apart from some time keeping house for her recently widowed brother in Frome, Somerset. She eventually returned to Lyndhurst to live with her older sister and died in 1953, aged 88. She is buried with her parents in Lyndhurst cemetery.

The question remains as to where and how Ruth acquired her knowledge of wild flowers. John Stevens Henslow, who was both a clergyman and a Professor of Botany, had in the early 1850s pioneered the teaching of botany to school children. His ideas were taken up by the Department of Science and Art for use throughout the country but it may be that they did not appeal to the clergy in Lyndhurst. There is no evidence – at least, not in the rather cursory notes made by the headmistress in the Girls' School log book – that botany featured in the curriculum during Ruth's time at the school. Outside school she would have learned from those around her, including the woodmen mentioned in her letter. She also says that 'I have learnt most I know about plants from The Rev. C.A. Johns' *Flowers of the Field* and a most delightful study I have found it' – although she did feel the book could have been 'improved upon' in some respects!

If the Lyndhurst clergy were lukewarm about botany, the Rev. Kelsall was certainly an enthusiast and keen to communicate his enthusiasm to others. Apart from his parish duties in East Boldre and later in [New] Milton, he was also the editor of the *New Forest Magazine* and wrote 'charming articles on Natural History' for it. (Articles which were being quoted by the author of a natural history column for children in the *Derbyshire Courier*.) In August 1901 the *Hampshire Advertiser* reported on 'a series of botanical rambles in the New Forest', organised by Essex County Council for some of its teachers. Kelsall was among those leading the rambles, guiding the party across Holmsley bog and also giving them a 'lecturette' on the birds of the New Forest. In May 1903 the *Berkshire Chronicle* commented on an article by Kelsall that had been published in that month's issue of the Selborne Society's *Nature Notes*, saying that he showed:

"what a vast amount of influence a country rector can exercise in favour of nature study amongst his parishioners. His garden at Lymington [i.e. Milton Rectory] *is full of natural curiosities in the animal and vegetable world, which are freely shown to the scholars at the National Schools."*

His article mentions a competition at the flower show in Milton, similar to that won by Ruth, where the winning girl had 140 different specimens and the winning boy 100. Did Kelsall perhaps have a hand in organising the competition at the Girls' Friendly Society Festival?

In her letter, Ruth mentions the parish magazine and so she would no doubt have read Kelsall's articles on natural history. It would be very interesting to know if their correspondence extended beyond this one letter, and whether their previous discussion about flower identification had happened face to face.

The Girls' Friendly Society, which presumably played quite a large role in Ruth's life, was set up to provide both practical support and moral guidance for girls such as her, who were often sent some distance from home to work as servants. It also provided educational opportunities for its members and, going by the reports quoted above, it seems that the study of botany was encouraged. Is it just coincidence that the Society's founder, Mary Elizabeth Townsend, was married to Frederick Townsend the author of *Flora of Hampshire*?

For those who are interested, there is more about the Society on its website at *girlsfriendlysociety.org.uk/about-gfs/our-history*.

BSBI's *Plant Atlas 2020*: the latest Domesday Book of our wild plants

A note by Martin Rand

In spring of 2023 The BSBI published *Plant Atlas 2020* (Stroh et al. 2023), its third distribution atlas for the nations of Britain and Ireland, after its most extensive fieldwork programme ever and a great deal of subsequent labour behind the scenes to collate, analyse and present the data. There are two major products of this effort: a conventional printed atlas showing the distribution of native and naturalised plants with supporting commentary and graphs, and an online atlas providing all the information found in the printed books together with more background information, an analysis of trends and phenology, and a gallery of photographs. The understandably expensive printed *Atlas* now runs to two volumes, in a slightly smaller format than its predecessors but each almost as thick as the previous single-volume one. Alongside these is a 32-page publication, *Britain's Changing Flora,* which documents the findings for a general readership.

1962: *Atlas of the British Flora*

The original *Atlas of the British Flora* published in 1962 dealt with 1,706 native and introduced taxa, leaving coverage (often partial) of critical groups like Brambles and Hawkweeds to a separate *Critical Supplement* published in 1968. The main *Atlas* was simply a book of maps showing occurrences of a plant at 10km × 10km resolution. In some cases, known introductions were distinguished from presumed natives on the maps, and in some cases pre-1930 records were distinguished from more recent records. The *Critical Supplement* added brief useful commentary to the maps.

2002: *New Atlas of the British and Irish Flora*

The second incarnation was the *New Atlas of the British and Irish Flora*, published in 2002 and incorporating fieldwork data up to 1999, and usually referred to as '*Atlas 2000*'. (The first *Atlas* also dealt with Ireland, but somewhere in the intervening years someone presumably remembered that most of Ireland was not part of Britain politically and none of it geographically.) The number of taxa treated in the book rose to 2,412; but this was supplemented with a CD-ROM included with the book dealing with rare non-natives, casuals and hybrids that took this up to 3,354 taxa. The maps themselves were now supplemented by more extensive introductory material and a brief account for each taxon covering its biology, its history, and its biogeographical placement defining its native distribution pattern. It was now possible to make some assessment of trends since the first *Atlas*, and these were presented as textual commentary and as a rather arcane 'change index' which corrected for bias arising from differences in recording effort over the two recording periods. The easily interpreted aspect of this was that a negative number indicated a decline, a positive number an increase and the bigger the absolute value, the larger the recorded change and therefore the more reliable the overall indication.

2023: *Plant Atlas 2020 vols 1-2*

The scope of *Plant Atlas 2020* further raises the number of taxa more modestly to 2,863 in the printed book and 3,445 in the online version. For the first time, Stoneworts (Characeae) have been included. If we consider first what the book has to offer, there is another increase in the introductory material. It provides several useful summarisations, a fuller discussion of methodology and a general analysis of change that includes related factors considered to contribute to increases or declines. Like the taxon entries, these sections benefit from being produced in full colour (Figure 1).

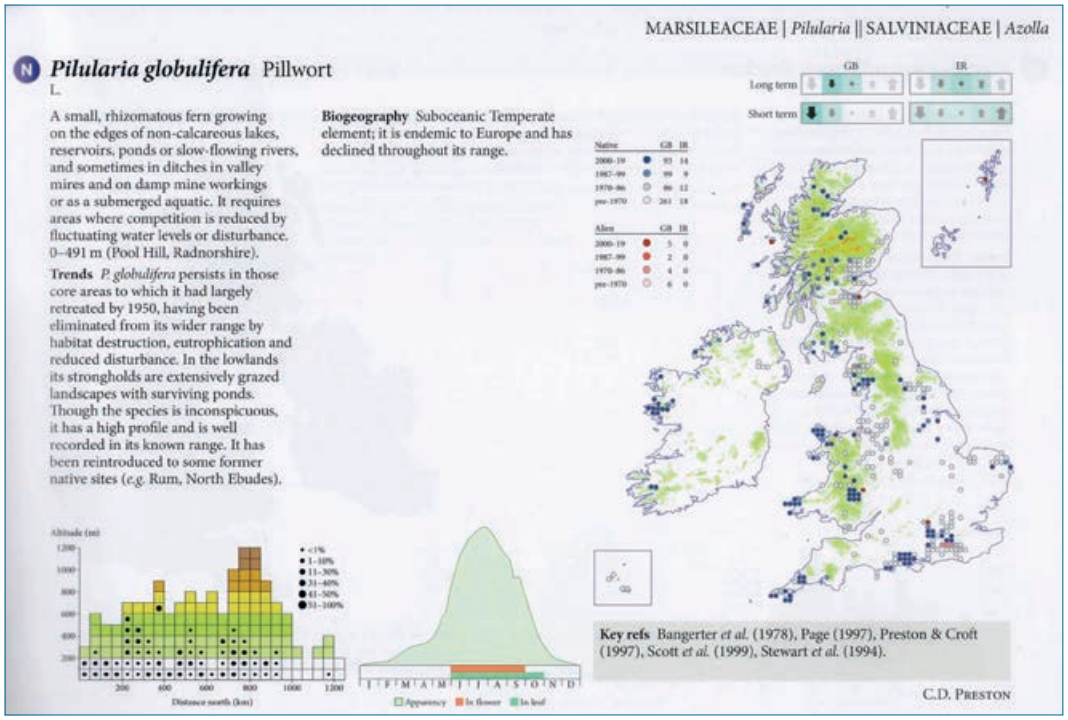


Figure 1. Printed Atlas 2020 entry

When we turn to the individual taxon accounts, the distribution maps have not changed hugely from the *New Atlas*, except that colour is exploited to show relief in the upland parts of Britain and to give a more precise age-banding of the most recent record for a 10km × 10km square, giving a more nuanced view of change for declining species. The latter is supplemented by some small graphics showing rates of change for both the longer term (1930-1969 vs. 2000-2019) and the shorter term (1987-1999 vs. 2000-2019). These are more intuitive to read than the change index that they replace. Depressingly, in the case of native plants they too often show that decline has not simply continued but sharpened in recent years. The textual commentary continues to cover biology, history, trends, and biogeography, but two new graphics are included. The first is a schematic showing altitudinal range of the species against latitude, an innovation found in the 2014 *Atlas of British and Irish Bryophytes*. This is a particularly nice visualisation to have in assessing possible impacts of climate change. The other graph shows phenology (leafing and flowering times) and 'apparency' (a smoothed plot of numbers of times a plant has been recorded on given days of the year).

Apart from an extensive bibliography, this concludes the offering for the printed *Atlas 2020*. Given the high price attached to this, you may be wondering what you will lose by using the entirely free online version, accessible to all. The good news is that you get more, not less! The introductory chapters and references are downloadable as separate documents from the Plant Atlas 2020 website, as is a summary of the main findings that was produced in booklet form for conservation bodies, the media and interested non-specialist members of the public. The differences, however, are in the supporting detail and the interactivity of the individual maps and taxon accounts.

2023: *Plant Atlas 2020 online*

The maps themselves look very much like their printed versions as first presented, but you have options for the following:

- to differentiate between native and non-native occurrences by colour;
- to show or suppress land elevation or use an alternative colour scheme;
- to show or suppress Ordnance Survey 100km grid lines, country boundaries and vice-county boundaries;
- to alter where the outlying UK and Channel Island archipelagos are shown on the map;
- to substitute a two-way division of records into a single year range and records earlier than that range, rather than the five date classes shown by default (this is useful if you want to show a time series of maps);

- to show a map in terms of gain, 'no change' or loss in each hectad using the change periods for assessing trends in the longer and shorter terms;
- to show where a given taxon is more or less widespread, based on the number of tetrads (2km × 2km squares) where it is recorded in each hectad (10km × 10km square);
- to hover the cursor over a hectad with a record and display the hectad's grid reference and further information about the taxon's occurrence there.

The last option is to switch between 'Overview' (book image, or as modified above) and 'Zoomable' maps (Figure 2). The latter allows you to zoom in to a particular region and will display topographic (OpenStreetMap) mapping beneath the atlas dots. In this mode one can also switch between displaying data at hectad and tetrad resolution. Be aware, though, that data coverage will not be as consistent across the country as for hectads; and one can only download data at hectad resolution. The map is accompanied by the trend graphics and the full text of the taxon account as found in the printed *Atlas*.

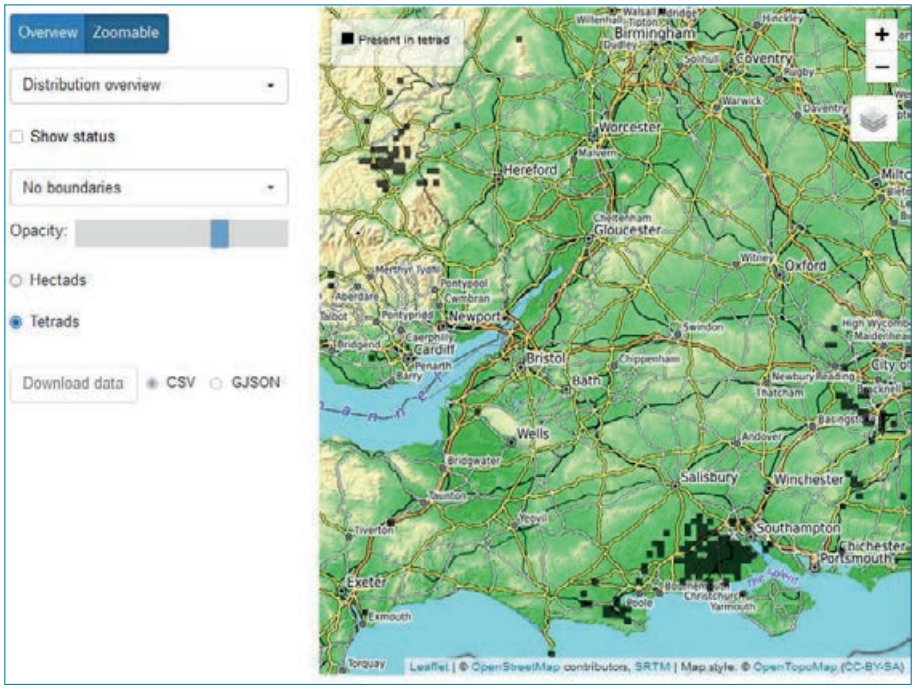


Figure 2. Online Atlas 2020 zoomable map

One can download the Atlas map image as either a compressed bitmap Portable Networks Graphic file (PNG) or as a structured vector graphic (SVG). For most purposes the latter gives much better results when scaling the image but may not be supported by all software apps. The Firefox browser seems to have trouble saving the PNG file format properly but handles SVG correctly; other modern mainstream browsers like Microsoft Edge and Chrome seem to have no problems.

One can also download the underlying data either as a CSV file (for import into spreadsheets, databases, etc.) or as a GeoJSON file for import into GIS (Geographic Information Systems) packages, the latter providing a much wider range of options for displaying the data against other geographic data sets available in GIS packages, such as geology, waterways, urban areas and communications routes. Data downloads only work for the 'Distribution overview' showing the data within the five date classes.

So far we have only covered the 'Summary' tab of the *Plant Atlas 2020* web page, but further tabs provide background or additional information for each taxon.

Conservation lists rarity status, IUCN threat status, and conservation designations for the taxon (Figure 3).

Gallery provides photographs for many, but far from all, taxa. Pictures are often not particularly useful for identification and there are some that don't appear correct. This is one part of the site that can be, and hopefully will be, improved over time.

Pillwort *Pilularia globulifera* L.

Rarity	Categories	Links
Rare or scarce Great Britain (revised 2022)[1]	scarce	
Rare or scarce Ireland (revised 2022)[2]	scarce	
Threat[3]		
Great Britain Red List (revised Feb 2021)	NT	https://hub.jncc.gov.uk/assets/cc1e96f8-b105-4dd0-bd87-4a4f6044990/ (revised Feb 2021 https://bsbi.org/taxon-lists)
England Red List (2014)	VU	https://bsbi.org/england
Wales Red List (2008)	LC	https://www.plantlife.org.uk/wp-content/uploads/2023/04/A-Vascular-Plant-Red-Data-List-for-Wales.pdf
Ireland Red List (2015)	VU	https://www.npws.ie/publications/red-lists
Conservation designation		
Schedule 8 (Great Britain)	-	https://www.legislation.gov.uk/ukpga/1981/69/schedule/8
Schedule 8 (Northern Ireland)	-	https://www.legislation.gov.uk/nisi/1985/171/contents
Irish Flora (Protection) Order (revised 2022)	yes	https://cedrec.com/legislation/56058/56059/fulltext
England NERC list (Section 41)	yes	http://publications.naturalengland.org.uk/publication/4958719460769792
Wales NERC list (Section 7)	yes	https://www.biodiversitywales.org.uk/Section-7

[1] Rare - species recorded in 15 or fewer hectads in GB 2000-2019; scarce - species recorded in 16-100 hectads in GB 2000-2019.
[2] Rare - species recorded in 10 or fewer hectads in Ireland 2000-2019; scarce - species recorded in 11-25 hectads in Ireland 2000-2019.
[3] EX – extinct, EW – extinct in the wild, RE – regionally extinct, CR – critically endangered, EN – endangered, VU – vulnerable, NT – near threatened, LC – least concern; WL – waiting list; PL – parking list.

Figure 3. Online Atlas 2020 conservation listings

Trends presents more statistical illustration that helps to clarify the confidence one can have in the estimate of change for each taxon, with an explanation of the methodology and its limitations (Figure 4).

Phenology presents the graph that appears with each map in the printed book, accompanied by notes on the three traits (flowering time, 'in leaf' time and apparency). It also has an interesting stacked graph showing date variations in apparency over the latitude range of Britain and Ireland (Figure 5).

Altitude presents the other main graph appearing with each map in the printed book, showing the altitudinal range of the taxon as inferred at different distance intervals northwards in Britain. There is an explanation of how this information was extracted and why it may differ from the altitude at actual spot readings for an individual recorded site (Figure 6).

The bottom line

As you will probably be aware, the key message from the analysis is not a happy one. Demonstrable declines have occurred in over 50% of our native flora, and archaeophytes (ancient introductions such as arable plants that arrived with prehistoric farmers) have fared even worse. On the other hand, nearly 60% of more recently introduced species have expanded their ranges. The expansion of an introduced plant is not automatically to be assumed a bad thing, but the overall trend highlights the decline of a significant part of our natural heritage of plant communities.

I would like to think that when *Plant Atlas 2040* (or *2050*?) is published, declines will at least have been halted, if not reversed. There is plenty of fine talk and, at least in the case of some of the bigger things that fly around or run around, some individual successes. Yet the political commitment to effective action remains low; and civic action continues to rest on the shoulders of a tiny proportion of people who have limited influence over the behaviour of the rest. Meanwhile, climate change will almost certainly eliminate some of our native montane flora and affect many other species; nothing we do in the next couple of decades will change that. But one thing is certain: without the hard evidence that publications like *Plant Atlas 2020* supply, nothing can begin to be achieved.

Pillwort *Pilularia globulifera* L.

Post-1930 effort-adjusted 10 km distribution trends for **Britain**

Figure 1. Smoothed time trend.

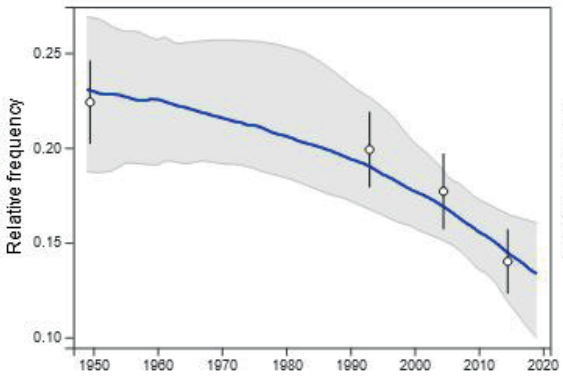


Figure 2. 100 compatible linear trends.

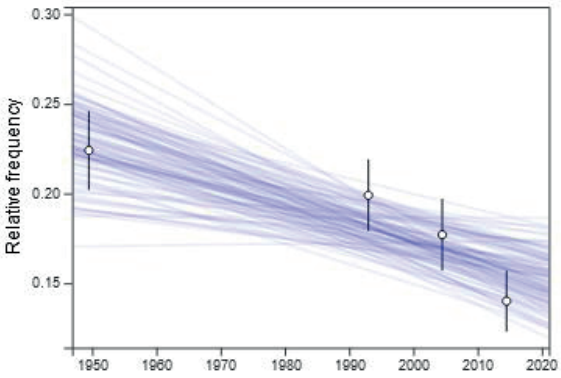


Figure 3. Distribution of linear slope estimates.

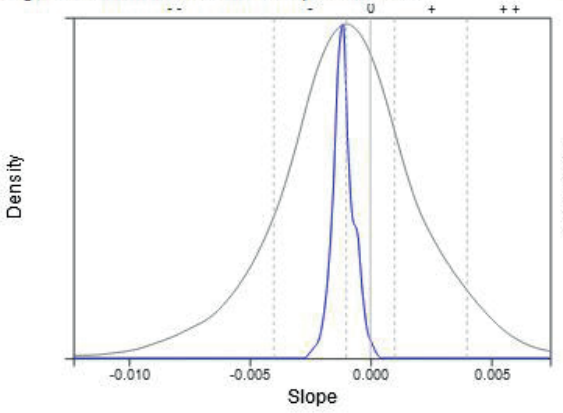
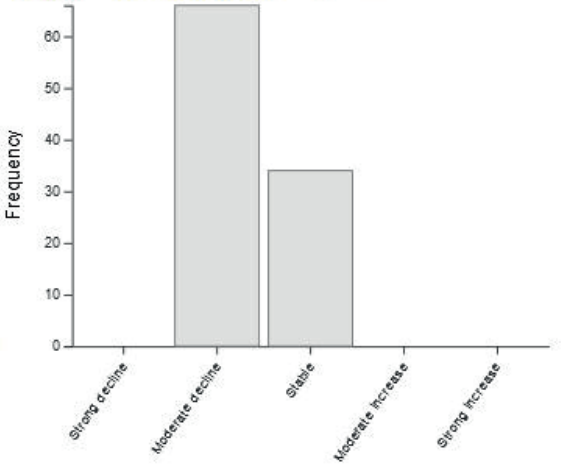


Figure 4. Classification of slope estimates.



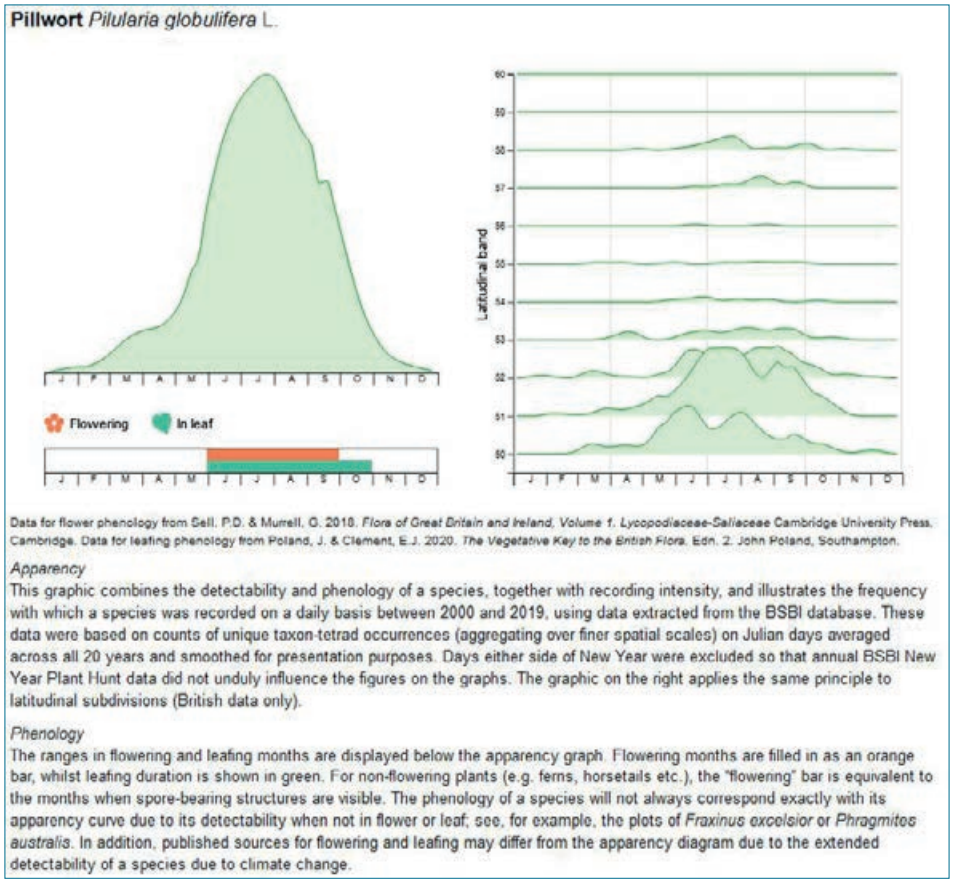
Trends, "effort" adjustments and residual bias

The trends above are ultimately based on the FREquency SCAling LOcal ("Frescalo") approach of Hill (2012). The method was designed to adjust for locally variable recording effort across time periods, and has been used on many distribution datasets. Here, we apply Frescalo to vascular plant data gridded at the 10 km scale across the following time periods: 1930–69; 1987–99; 2000–09; and 2010–19. These are a subset of the "date-classes" used by the BSBI to organise their data, and roughly designate multi-year periods within which specific national recording projects occurred. Readers should keep in mind that Frescalo only adjusts for variable overall recording effort between times and places, and not for systematic biases in the relative attention paid to species. There is a strong argument for creating formal "risk-of-bias" assessments for every modelled trend presented here; unfortunately we have not had the resources to achieve this fully to date, although it remains a longer-term aim. See Chapters 6 and 7 of Stroh *et al.* (2023) and the references below for more information.

Figure 4. Online Atlas 2020 trend statistics

References

Stroh, P.A., Walker, K.J., Humphrey, T.A., Pescott, O.L. & Burkmar, R.J. 2023. *Plant Atlas 2020: mapping changes in the distribution of the British and Irish flora.* Princeton University Press. *https://plantatlas2020.org*



Data for flower phenology from Sell, P.D. & Murrell, G. 2018. *Flora of Great Britain and Ireland, Volume 1. Lycopodiaceae-Salicaceae* Cambridge University Press, Cambridge. Data for leafing phenology from Poland, J. & Clement, E.J. 2020. *The Vegetative Key to the British Flora*. Edn. 2. John Poland, Southampton.

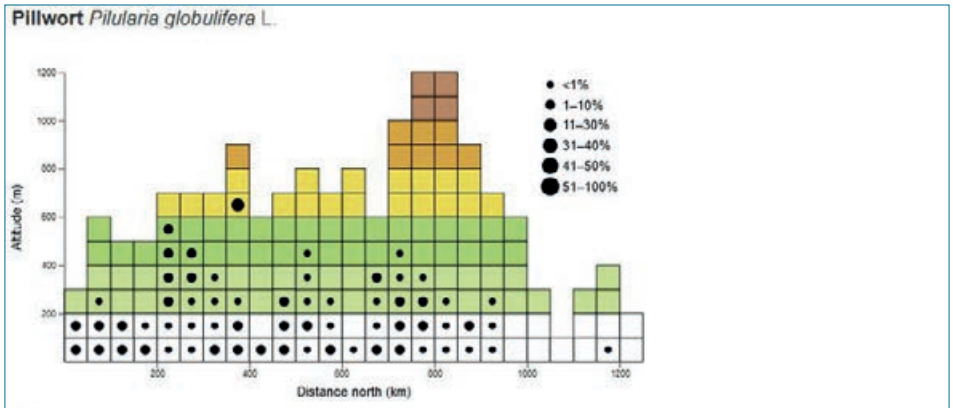
Apparency

This graphic combines the detectability and phenology of a species, together with recording intensity, and illustrates the frequency with which a species was recorded on a daily basis between 2000 and 2019, using data extracted from the BSBI database. These data were based on counts of unique taxon-tetrad occurrences (aggregating over finer spatial scales) on Julian days averaged across all 20 years and smoothed for presentation purposes. Days either side of New Year were excluded so that annual BSBI New Year Plant Hunt data did not unduly influence the figures on the graphs. The graphic on the right applies the same principle to latitudinal subdivisions (British data only).

Phenology

The ranges in flowering and leafing months are displayed below the apparency graph. Flowering months are filled in as an orange bar, whilst leafing duration is shown in green. For non-flowering plants (e.g. ferns, horsetails etc.), the "flowering" bar is equivalent to the months when spore-bearing structures are visible. The phenology of a species will not always correspond exactly with its apparency curve due to its detectability when not in flower or leaf; see, for example, the plots of *Fraxinus excelsior* or *Phragmites australis*. In addition, published sources for flowering and leafing may differ from the apparency diagram due to the extended detectability of a species due to climate change.

Figure 5. Online Atlas 2020 phenology details



Altitude diagram

Following Blockeel *et al.* (2014), this displays the distribution of a taxon within 50 km latitudinal by 100 m altitudinal bands in Britain. Note that the diagrams do not cover Ireland. These plots are based on data across all time periods, and show the proportion of all available tetrads in each latitude/altitude cell in which the taxon has been reported. Tetrads were assigned to cells based on their means as calculated from the digital terrain dataset produced by Intermap Technologies (2009). Percentage tetrad occupancies within cells were rounded to the nearest 0.1%.

For many species there are discrepancies between the altitude diagram and the altitude range of the species given in the text on the Summary tab of this website. There are several reasons for this. The most important is that the altitudinal range in the text gives the precise (i.e. record precision 100 m or better) altitude at which the plant has been recorded, whereas the altitude diagram here gives the mean altitude of the tetrads within which it grows. The choice of the digital terrain model (DTM) used to calculate these mean altitudes, and the method of averaging, will both influence this disparity. There are also some altitude records cited in the text on the Summary tab that are not represented by records in the database. For some native species, the altitudinal range within the diagram falls outside the altitudinal ranges stated in the Summary tab text because it includes tetrads where a species has been introduced.

Blockeel, T.L., Bosanquet, S.D.S., Hill, M.O. and Preston, C.D. (eds) 2014. *Atlas of British & Irish Bryophytes*, 2 vols. Pisces Publications, Newbury.

Intermap Technologies. 2009. *NEXTMap British Digital Terrain 50m resolution (DTM10) Model Data by Intermap*. NERC Earth Observation Data Centre. https://catalogue.ceda.ac.uk/uuid/f5d41db1170f41019497d15dd0052ad2

Figure 6. Online Atlas 2020 altitudinal range details

Three? new dandelions for Hampshire

An article by John Norton

Back in 2014 I decided, with help from Debbie Allan, to make an effort to look at some dandelions (*Taraxacum* spp.) in our home territory of Gosport. I'd deliberately ignored these for many years for being too difficult, so made the decision to look only at section *Erythrosperma*, which I knew were frequent on the predominantly acidic soils of the borough and might be more manageable as a group than the very large section *Ruderalia* (now section *Taraxacum*). I was also interested in this group due to their potential to be used as indicators of other high quality grassland habitats, including chalk grassland.

That spring we collected 26 specimens from three main sites (Browndown SSSI, Gilkicker Point and Haslar Royal Naval Cemetery). Notes were taken for each specimen whilst fresh and a few were also photographed in situ; they were then pressed and sent to the BSBI Referee, John Richards (AJR), for determination and we exhibited them at the December Flora Group meeting that year. AJR determined most of the specimens and we ended up with eight or possibly nine different species of 29 covered in the first edition of his handbook (Dudman & Richards 1997), which was very encouraging. However, they were by no means an easy group to get to grips with, being rather variable in characters such as leaf-lobing, and consequently my enthusiasm quickly waned and I have done very little on them since.

Nonetheless, our finds included two (or maybe only one*) new dandelions for Hampshire, details of which are given in this article, together with an account of a third new species (though not in section *Erythrosperma*) found later that year in the lawn of my father's front garden in Fareham.

In preparation for this article I also looked again at the specimen of another potentially new county record of a dandelion originally collected on 15 April 2014 from Gilkicker Point, determined by AJR as *T. falcatum*. I had been able to find it again at the same spot in 2017 and take some photographs. Looking at these again I realised that some features were not quite right so I contacted John earlier this year and he agreed that his original determination was incorrect – though he didn't know what it was. It is an interesting and unusual-looking species, so I have included some photographs and a description of this as well.

At the time of writing, and much to my embarrassment, the records have not been sent to Martin Rand for incorporation into the Hampshire plant records dataset, but this will hopefully happen soon.

Taraxacum arenastrum, section *Erythrosperma*

This diminutive species was discovered along both sides of a gravel track at the eastern end of the firing range on Browndown SSSI, where it occurs in short rabbit-grazed acid grassland (also home to one of only two colonies of Heath Pearlwort *Sagina subulata* in Gosport). It was seen on a couple of occasions here during April 2014 and the identity suspected due to the distinctive shape of the leaf lobes. However, ripe achenes needed for confirmation were initially not present. Two specimens with mature achenes were eventually collected on 3 May 2014 (JAN herb. nos. T0023 and T0025) from SZ 5813 9921/22). (Finding Erythrosperm dandelions with both open flowers and pappus proved very difficult generally during this period, as it seemed that often pappus would only develop some time after all the flowers had gone over).

In addition to the small size and distinctive leaves, the achenes of this species are 'deep reddish' according to the handbook and the exterior bracts are erect with a whitish margin. I noted that the achenes were distinctly dark compared to other species also at this location, being 'chestnut brown with slight violet tinge' and 'chestnut-purple' according to my descriptions. John Richards annotated one of the specimens: 'Achenes unusually dark', and in a covering letter (June 2014) also said: 'I am slightly worried about the material named *T. arenastrum*'. 'In one in particular (and I am sure they are the same) the achenes are not really red enough, but the colour may have oxidised. In some ways they resemble largeish *T. parnassicum*, but the bracts suggested *T. arenastrum*.' This initially caused me to retain a little doubt over the ID, but I looked at the plants again in later years and I think the determination must be correct.

*As I was putting this article together I also started to have doubts over John Richard's identification of one of the other two new species, but rather than omit from this article altogether I thought it was worth including to illustrate just how tricky section *Erythrosperma* can be.

***Taraxacum arenastrum* at Browndown SSSI, Gosport (photographed in 2014 and 2020).** *John Norton*

The mapped distribution of *T. arenastrum* in the 1997 handbook shows it to have been scattered around the west and east coasts of Britain with no records at all along the south coast of England. There is one dot in western Ireland. The habitat is described as 'sand-dunes and chalk and limestone grassland, usually near the sea', which fits quite well with the situation at Browndown, where some of the acid grassland on gravel near the coast probably has a bit of base rich shell sand mixed in. In the more recent *Field Handbook* (Richards 2021) a dot is shown on the eastern point of the Isle of Wight, which the BSBI Distribution Database (DDb) gives as St Helens Duver (a sandy promontory) recorded in April 2001 by Geoff Toone. There are no other more recent records for VC11 or Hampshire on the DDb as far as I am aware.

It would worth looking out for this at other coastal sites in the vice-county, especially on sandy areas such as Hayling Island or Hengistbury Head. However, it is not an easy species to identify and although the leaf lobes are distinctive on younger and smaller leaves, on better grown leaves they start to resemble other species such as *T. lacistophyllum* (with which our plants were growing).

Taraxacum proximum (?), section *Erythrosperma*

Martin Rand and Eric Clement joined me for a visit to Haslar Cemetery on 22 April 2014, where at least three species were seen, including what John Richard's later determined as *T. proximum*. The location was just east of the chapel (SZ 6092 9859; JAN herb. no. T0014). My notes read 'Probably similar to T0013 [*Taraxacum fulviforme*], collected as ripe achenes were present; these are light brown with a violet tinge, body 2.5-2.7mm, cone 0.5mm or slightly longer'. On looking at the specimen again it can be seen that even though relatively tiny it does match the fairly distinctive leaf shape and neat-looking lobing of *T. proximum* as shown in the two handbooks. However, the 1997 handbook states that the colour of the achenes is 'dark brown to purple-brown (puce)' and is 'unique among British species'. In the photo of the specimen it can be seen that the loose achenes collected remained light brown but those that have ripened in the flower are a cinnamon colour, but definitely not dark, purplish brown. In view of this discrepancy I am reluctant to record this as a definite determination and new for the county. The material collected is quite poor. I now wonder if it is *T. fulviforme* as originally suspected.

2014 specimen from Haslar Cemetery, Gosport, determined as *Taraxacum proximum*.

Taraxacum, unknown (original det. as *T. falcatum*), section *Erythrosperma*

As noted in the introduction a dandelion collected from Gilkicker Point in 2014 was originally determined by John Richards as *Taraxacum falcatum*. It was collected on 15 April 2014 (JAN herb. no. T0012) on the north side of the fort at the base of the fence to the adjacent golf course, SZ 6064 9758. It was photographed at exactly the same spot on 22 April 2017, but I don't think I saw it again in later years. My description reads 'Heads 2.5cm dia, mid- or perhaps slightly pale yellow; ripe achenes pale brown, c.3-3.2mm body, 0.7mm cone; outer bracts not pruinose, patent to recurved, short, 4 × 2.5mm or 7 × 1.5mm, not or slightly corniculate, bordered, green; ligules grey below; styles slightly discoloured, pollen present; scapes pale or tinged purple, slightly hairy; petioles ± unwinged, pinkish; lvs glabrous.' It has long, almost linear, leaf lobes, cut to the midrib and these are very irregular in size and shape, and are distinctively twisted and contorted (making a neat pressing impossible).

When I examined the specimen again in 2023 I realised that it wasn't quite right for *T. falcatum*, even though the colour of the achenes seemed correct (they should be a 'warm, straw-brown'). I thought, maybe, that it was a reasonable match for *T. commixtum*, which I had also found during the 2014 visit on the grassland on the north-east side of the fort, just 50m away (a huge plant which AJR was pleased with since he hadn't had a record for 'many years' – this species had only previously been recorded in Hampshire from Hayling Island). However, *T. commixtum* has dark red achenes. I contacted AJR by email on 8 April 2023 with these thoughts and received the following reply the next day: 'I think this is a distinctly problematic plant. It does key down to *T. commixtum*, but I cannot ever consider the achenes to be 'dark red'. It is not *T. falcatum* which also does not have pollen. The striking thing about the achenes is the proportion that have not set seed [visible in the photo] which makes me wonder if it is sexual (sexuals are self-incompatible, so seed-set is often characteristically poor) so it might be a sexual chance introduction from southern Europe. I have no better suggestion at this point. If you can return to the locality and find a population all the same, we might progress further.'

The area where this and the *T. commixtum* were found has now been cleared of vegetation as part of the works to develop Gilkicker fort into luxury accommodation, so the chances of finding a larger population are quite small. Thus, this one will probably have to remain unidentifiable.

An unusual looking plant from Gilkicker Point, Gosport, photographed in 2017, with specimen from 2014 (originally determined as *Taraxacum falcatum*, but currently not identifiable). *John Norton*

Taraxacum ronae (section *Naevosa*)

From my dabbling with the keys to the Erythrosperms and other groups I knew that a few species of dandelions had purple blotches on the leaves, which was a useful identification character, so I was interested to see a dandelion with purple spotting in my father's front lawn in Fareham (SU 5682 0506) when I visited on Christmas Day 2014. Surprisingly, it had been flowering, but I could only find a single plant, so I collected two leaves and one scape with a closed-up flowerhead (JAN herb. no. T0027). I tried to identify it using the handbook, but to no avail. I then forgot about it but during another brief period of interest in dandelions I found it again in the same spot in April 2017 and took some photographs. I seem to remember there was still only a single individual, so I didn't collect it. I tried again to put a name to it using the section keys and multi-access key in the 1997 handbook, but again without reaching any firm identification. I decided that it was nearest to section *Hamata* but realised that none of that group are supposed to have purple spotting. The main group with purple spots or blotches on the leaves is section *Naevosa* but it didn't fit any of the species in the handbook. I sent some photos to Martin Rand but didn't receive a reply (he may have been away or indisposed) and, due to the impending start of my ecology fieldwork season, I forgot about it again for another four years!

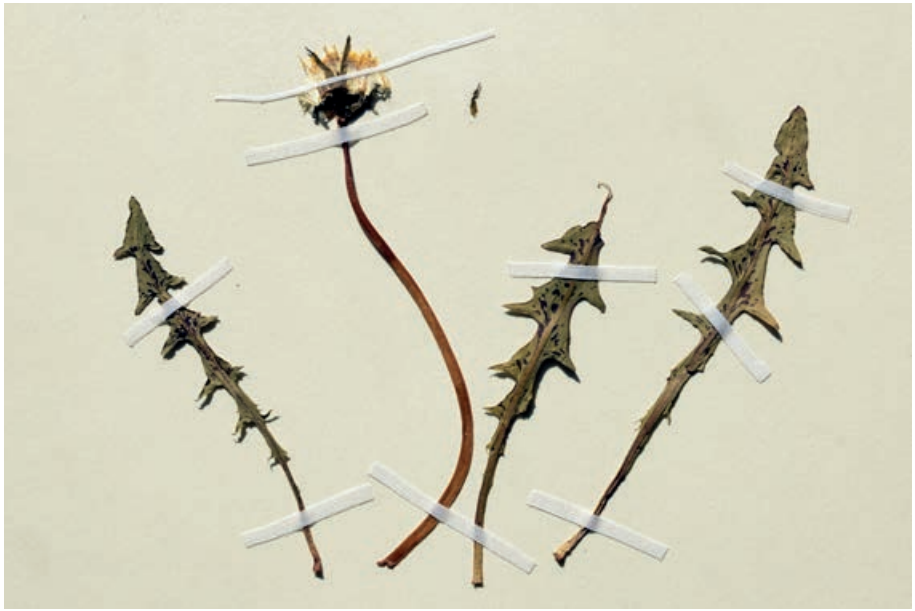
Eventually, in 2021, with the publication of the *Field Handbook* my interest in dandelions was once again briefly renewed, so I dug out the photos and put a few on the dandelions of Britain and Ireland Facebook group which had started up a few years previously. The answer came back from Alex Prendergast and confirmed by Tim Rich that it looked like *T. ronae*, a fairly recently described species which was not included in the 1997 handbook. That is when the penny dropped, because I'd remembered reading the *Watsonia* paper on this species (Margetts 2007). It had been named by Cornish botanist Len Margetts after his wife, Rona.

Following the Facebook post I sent the photos to John Richards, who also confirmed the ID. In his email of 21 April 2021 John commented 'Yes this is indeed *T. ronae*. It is a remarkable record, well away from the usual

haunts in Devon, Cornwall and Ireland. The suspicion would be that it results from an accidental introduction, possibly in grass seed, although it is I suppose possible that it grows further east than we thought.' I replied to say that the lawn hadn't been reseeded at all and was unimproved. In fact, my father bought the house in 1967 and has done very little to the lawn apart from mow it regularly. Over the years it has slowly reduced in fertility and is now turned into quite a nice herb rich acid grassland, with colonies of Common Dog-violet *Viola riviniana* (apparently appearing from nowhere) and about four species of waxcaps present. In winter it becomes completely dominated by the moss *Rhytidiadelphus squarrosus*. I therefore suspect that the *T. ronae* has simply colonised naturally.

Now that I had a firm identification I returned on 5 May 2021 to collect a voucher specimen (JAN herb. no. T0031), this time taking three nice leaves and a single flower. Annoyingly, some time prior to this date, I am fairly certain I saw another dandelion with purple-spotted leaves, possibly at Browndown SSSI, but ignored it as 'similar to the one in my Dad's garden and not identifiable'.

A check of the BSBI Distribution Database shows that Ted Pratt recorded *T. ronae* from a garden in Swanage on 27 March 2012 (one of the duplicate records appears to have been misdated 27/3/2020 though could mean that he returned on that date and recorded it again in the same spot). This record and mine do appear to indicate that the species does occur further east than originally thought. I suggest that *Flora News* readers should look out for this distinctive species next spring. However, it is worth checking the *Field Handbook* if you do find any purple-spotted or blotched dandelions as there are three other taxa in section *Naevosa* which occur in either Dorset, Hampshire or the Isle of Wight.



***Taraxacum ronae*, photographed from a front garden lawn in Fareham in 2017 and specimen collected in 2021.** *John Norton*

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Margetts, L.J. 2007. A new species of *Taraxacum* Wigg. (Asteraceae) from southwest England and Ireland. *Watsonia* 26: 481–484.

Richards, A.J. 2021. *Field Handbook to British and Irish Dandelions.* BSBI Handbook No. 23. Botanical Society of Britain and Ireland, Durham.

Manifestations of Mudwort

A note by Clive Chatters

The reappearance of Mudwort *Limosella aquatica* in the New Forest (*Flora News* No. 60 Spring 2021) has provided an opportunity to get better acquainted with this enigmatic species.

The Mudwort's habitat at Bramshaw Telegraph is tiny, just a few square metres of an ephemeral pool, but the microtopography of the site is complex and subject to continuous change. Over the course of summer 2023 I witnessed the plasticity of growth forms as the season shifted from early summer droughts (when the pond turned into a dustbowl) and subsequent re-wetting through the rainy weeks of July and early August.

In its submerged form, Mudwort rosettes are simple, with almost rush-like, leafless columnar stems which eventually develop into the petioles of leafier plants. Where found in 'deeper water' (c.10cm) the plants grow at sufficient densities to develop a distinct sward. There was no sign of flower-bud formation in these swards and so this growth-form may represent an immature stage of development. Occasionally, a plant is disturbed by wandering stock and breaks free to reveal a relatively large root system. It would be easy to mistake this growth-form for something far less charismatic (Photo 1).

Photo 1. Aquatic, immature Mudwort lacks the characteristic spoon-shaped leaves of the terrestrial form. *Clive Chatters*

In time these aquatic specimens mature to produce an open raft of floating leaves, reminiscent of the Water Plantain family, but without the boxy venation. I did not see any of these plants in flower, but this may have been due to the turbidity of the water at the time of my visits. The ability of Mudworts to self-pollinate, whilst their flowers are submerged, is well known. Once learnt, the shape of floating Mudwort leaves is distinctive and would be difficult to overlook (Photo 2).

The typical illustration of Mudwort, as found in guidebooks, is of a terrestrial form where sparse prostrate rosettes leave the flowers unobscured by foliage. The position of these 'typical' rosettes around the pond edge at Bramshaw suggests they germinate as the pond recedes and go on to develop in a wholly terrestrial environment (Photo 3). These 'typical' slender plants are dwarfed by specimens growing at the water's edge which are rooted in saturated soil but are otherwise terrestrial. Particularly fine specimens were growing at

Bramshaw where cattle had poached the margins of the pond, leaving pools and ridges of exposed silt and clay. In these circumstances the rosette takes the form of many robust upright stems with fleshy leaves where the flowers are tucked deep into the foliage (Photo 4).

It is possible that atypical forms of Mudwort have been overlooked by botanists. It is beyond me to suggest characteristics which would help separate aquatic, immature specimens from other leafless rosettes. If in doubt, it is always worth popping back, later in the season, to see what develops.

Photo 2 (left). The distinctive floating leaves of the aquatic form of Mudwort. Photo 3 (right). Typical specimens of Mudwort. *Clive Chatters*

Photo 4. Robust plants of Mudwort where cattle have poached divots into the bed of the pool. *Clive Chatters*

Flora of Barton Common

An article by Phil Collier and Bob Lord

Barton Common, located in the tetrad SZ29L on the fringe of the New Milton township, resembles a mini-New Forest. Local residents continue the long tradition of access to Common Land, albeit turning out their dogs and not their livestock in recent times. We report on a comprehensive flora survey which confirms that distinctive habitats and flora species are present. Ongoing interest and land management by community volunteers provides strong impetus for re-classification of Barton Common as a Local Nature Reserve.

Location and habitat

Barton Common is located towards the south of the Parish of New Milton, and a few hundred metres north of a sea cliff, see Figure 1. The tithe map of 1841 and associated inventory shows Barton Common (land parcel 176) as 49 acres (19.8 ha), being owned and occupied by John Bursey Esq (and others). Today Barton Common is the larger remaining part of this parcel at 30 acres (12 ha), with two smaller sections having been alienated. The contemporary Barton Common is mostly enclosed by fencing and scrub; with two small areas of woodland to the west being unfenced.

Underlying the Common are late Eocene deposits of the New Forest (Barton and Headon beds), comprising sand and clay layers, overlain by more recent fluvio-glacial Pleistocene terraced gravels. The gravel is close to the surface over much of the site, and the free draining soils support heath/dry grassland, a relict woodland strip showing the characteristics and ground flora indicators of ancient semi-natural woodland, secondary woodland, isolated/small clumps of trees, and stands (or breaks) of gorse, bramble and bracken.

The Common is bisected by a shallow valley oriented roughly north-east to south-west and a seasonal stream. Elsewhere, rainwater percolating through the gravel and sand layers is impeded on meeting impervious clay layers, which forces the water to move laterally. In several places on the upper slopes of the valley, water can discharge at the surface, seep downslope and then disappear back into the ground or into the stream. Seepages tend to support a distinctive wet heath vegetation, which varies locally according to the quantity and duration of the 'average' seasonal flows and by shading (if any) from the woodland canopy above.

History

During the early part of the last millennium, six manors were situated within the Milton Parish, including Barton Manor, which is first traceable in the 1559 will of John Dowce. The land subsequently changed hands several times until August 1903, at which time the Manor and the land known as Barton Common was sold to Mr Alexander Paris. It appears that Milton Parish Council had at that time repaired paths and fencing, although the Common was not enclosed. It was generally accepted that local people had free access for various activities, including cutting vegetation and turning out livestock either by right or never having been challenged.

After a lengthy dispute about public access, which was only resolved in 1910 by the High Court in London, Mr Paris died in 1925. Thereafter his successor, Mr Leonard Farmer Paris, sold the land in 1935 to Lymington Borough Council for public recreation. In 1970 Barton Common was registered as Common Land under the Commons Registration Act 1965. The land was later acquired by New Milton Town Council (NMTC) and now provides for Open Access under the Countryside and Rights of Way Act 2000.

There appears to be no documentary evidence that describes how Barton Common was 'managed' in the past. By all accounts, the land had been subjected to ad-hoc grazing for many years, with historic maps and aerial photographs showing the area to be open rough ground until at least the early 1960s. It is likely that there was some mowing of easily accessible and flatter (plateau) areas of dry grassland/heath. However, woodland and scrub has recently spread from once isolated blocks, possibly quite rapidly within the last 25 to 50 years, and this has also encroached significantly on the open areas of seepage/wet heath (HBIC 2011).

Recent management

Based on information gathered during initial surveys undertaken by amateur naturalists and the Hampshire Biodiversity Information Centre (HBIC) ecologists during the 1980s, Barton Common was classified a Site of Importance for Nature Conservation (SINC) by Hampshire County Council. Formal HBIC surveys were

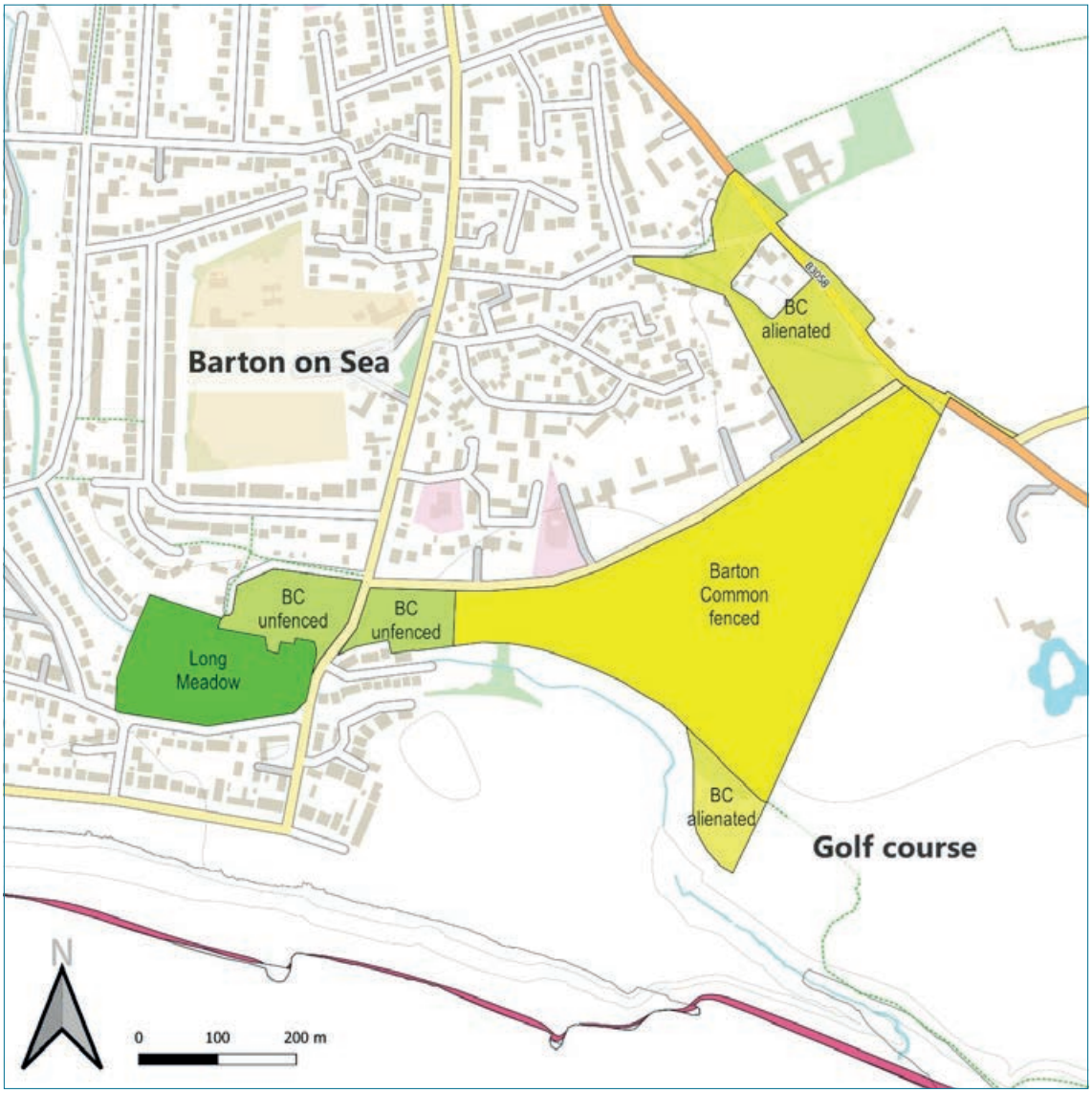

Figure 1. Location of Barton Common. The fenced area was surveyed in 2020–22 and reported here. The fenced area and one adjacent unfenced area to the west were the subject of HBIC surveys. The 1841 tithe map shows a larger Barton Common, of which two sections are now alienated. Long Meadow was contained within 3 separate titles in 1841, which were not then part of the Common. *Contains Ordnance Survey data © Crown copyright and database right 2023.*

conducted and documented in 1984, 2000 and 2011. In 2013, NMTC successfully applied for funding to assist management, through Natural England's Higher Level Stewardship Scheme (HLS). The scheme funded the installation of a water trough, stockproof fencing and both vehicle and pedestrian access gates. In conjunction with Natural England and the New Forest Land Advice Service, NMTC appointed an HLS Project Officer. Soon after, in 2016, large areas were cut, removing some scrub and trees to expose more of the heath/dry grasslands and some areas with groundwater seepage. Grazing by ponies was re-introduced, in line with the general prescriptions set out by Natural England, although they have not been present continuously since then. Mowing of selected sections of the dry heath/grassland areas has taken place in autumn.

In early 2022, BL was appointed by NMTC to be the volunteer ranger at Barton Common. As an initial contribution, BL has authored a draft management plan, some of which has been adapted for use in the preceding sections of this paper. This plan also summarises the extant knowledge of the habitats and wildlife known to be resident and/or using the habitats at Barton Common. The management plan aims to sustain Barton Common as a SINC, by preserving and regenerating the priority habitats and species, whilst also encouraging the return of previously recorded species. As a result of this effort, BL has proposed to the NMTC that the Common be designated as a Local Nature Reserve.

Higher plant surveys

BL's management plan summarises the prior knowledge of various wildlife groups at Barton Common. For the higher plants several sources are listed including:

- Phase II habitat surveys Sep 1984, Oct 2000, Sep 2011 (kindly supplied by HBIC)
- Detailed species list of ferns and allies and flowering plants (kindly supplied by PC)

In addition, there are many records in the BSBI's Distribution Database (DDb). The three sources have varying origins and properties:

- HBIC surveys (HBIC 1984, 2000, 2011) covered the fenced and adjacent unfenced area of Barton Common (Figure 1) and focused mostly on the higher plants and communities. The survey dates were all in September or October, which is a significant limitation to recording all the taxa present. All appear to have been conducted on a single day each time, with the October 2000 survey being conducted in 3 hours on site.
- The BSBI's DDb is an aggregation of many casual records and more focused efforts over many years from the whole of Britain and Ireland. Because many DDb records refer to a grid square and not a point, we have used the location description to select relevant records from the DDb. Any record that mentions 'Barton Common' explicitly is included. The resulting collection of records is filtered to eliminate records from Barton Common Road, and 'near' Barton Common. Taxa that are mentioned in the remaining records are retained, but these are likely to include records from the historic (wider) Barton Common, and not the current Common, or the smaller enclosed area.
- PC was a local resident at the time of the survey with 40+ years' experience of field botany, albeit mostly in Tasmania, Australia. Surveys were conducted regularly throughout the seasons in 2020 to 2022, with an aim to cover all species present within the fenced area of Barton Common. Flora observations were recorded in iRecord (*irecord.org.uk*) including at least one image and are mostly verified by expert botanists. A few records were also created and/or verified by more experienced visiting botanists.

In order to compare lists of taxa from different sources/times, it is necessary to make some minor changes to the taxa recorded. For example, some taxa are recorded *sensu lato* (s.l.) and/or *sensu stricto* (s.s.), and sometimes subspecies are recorded or not recorded. Minimal changes have been made to align records and make them comparable.

2020-2022 survey

Table 1 (p. 38) lists all taxa that were recorded in the enclosed Barton Common during surveys by PC in 2020-2022. The main limitations on this list are (1) there has been no attempt to determine to species level for taxa in *Taraxacum* and *Rubus fruticosus* agg., and (2) there has been only a limited effort to determine to species level for taxa in *Rosa*, *Narcissus* and *Crocus*. *Hieracium* are determined using Shaw (2020) to three relatively common and distinctive species, which remarkably all co-exist within a few metres of each other at one site, and *Euphrasia* spp. have been determined by VC11 recorder Martin Rand. These eyebrights are an attractive, albeit small feature of the Common in summer, often in showy dense patches. Surprisingly the patches seem to appear in different places in different years, possibly influenced in part by more open sites created by recent mowing.

While there are no significant national rarities listed, there are some notable taxa present. Perhaps the most spectacular is *Viola riviniana* × *canina* = *V.* × *intersita* (Photo 1), which is a large rambling floriferous plant that fails to produce any seed, as illustrated in Porter & Foley (2017). In 2022 the plant was mowed, but it remains alive, hopefully to produce a similar display in future. *Viola riviniana* × *lactea* plants (Photo 2) are also present as part of a hybrid swarm with its two parents. These plants struggle amongst a dense turf and are not similarly spectacular.

Photo 1. A hybrid violet *Viola riviniana* × *canina* = *V.* × *intersita*, Barton Common, 23 May 2021. *Phil Collier*

They flower during a short season and are easy to miss, especially in a dry spring.

One seepage area supports distinctive mire vegetation, including locally abundant *Lysimachia tenella* (Photo 3), *Myrica gale and Carex demissa*. There is also a small population of *Pinguicula lusitanica* near the southern edge of the upper part of the mire, which was previously recorded for SZ29L in *The Flora of Hampshire* (1996) (Photo 4). There are several wet-loving sedges in the downstream dispersal area of the seepage, and *Viola* × *intersita* enjoys the lower slope of the same seepage. Meanwhile, some seepages under woodland support scattered stems of *Equisetum fluviatile* × *arvense* = *E.* × *litorale*.

Photo 2. *Viola riviniana* × *lactea* growing in a hybrid swarm with both parent species Heath Dog-violet and Pale Dog-violet, Barton Common, 9 May 2021. *Phil Collier*

As with many public open spaces, during the Covid lockdowns the Common was much more heavily used by people seeking recreation, mostly walking with their dogs and this increased level of use continues. The resultant wide tracks and areas near seats are subject to invasion by alien taxa. *Cotula sessilis* was a notable record at this time (Photo 5), likely imported from one of the New Forest campsites, although apparently only a temporary resident at the Common. Edges are also vulnerable to aliens, in particular near the golf course works area, with *Tulipa gesneriana, Hyacinthus orientalis* and several *Narcissus*. It is likely that some deliberate 'beautification' plantings also occur judging by the large number and variety of *Narcissus* present. Lastly any landscaping work that includes importation of soil can bring with it new temporary taxa like *Atriplex patula*.

Photo 3. Bog Pimpernel *Lysimachia tenella*, Barton Common, 2 June 2020. *Phil Collier*

Perhaps unsurprisingly, there are stark contrasts in taxa present between the fenced and unfenced Barton Common and the roadside on the northern boundary. This is barely revealed by the species list in Table 1, but a more detailed study and comparison of population sizes would show that nearby common taxa like *Anthriscus sylvestris, Heracleum sphondylium* and *Carex pendula* are absent to very scarce on the fenced Common. Whether this is related to the habitat, history or recent grazing by ponies is difficult to determine.

Comparisons of recorded taxa

Table 1 includes 277 taxa that were recorded from the enclosed Barton Common in 2020-2022; 98 of these taxa are indicated as being new records for the Common. As might be expected, the proportion of neophytes amongst the new taxa (28%) is nearly double the proportion (15%) for those taxa previously recorded.

Table 2 (p. 43) lists the 76 taxa previously recorded for Barton Common in either the HBIC reports or the DDb, but not recorded in 2020-2022. These taxa may never have been present in the enclosed Common, so this comparison is very approximate at best, especially those records from the DDb. Perhaps the most sought after species previously recorded from 'Barton Common' is *Scandix pecten-veneris*, but it seems possible that this was recorded from Long Meadow. When examining the status of the 'lost' taxa, it is the archaeophytes that have disappeared disproportionately.

Conclusions

Unsurprisingly, a concerted effort to survey a defined area reveals more taxa than previously recorded, even accounting for the very approximate statistics presented above. Table 1 (and Table 2) now provides a valuable resource for anyone who wants to set up transect or quadrat monitoring of the Barton Common SINC. It is likely that most taxa present have now been recorded. Table 1 could also form the baseline for any future efforts to record comprehensively. All of the taxa listed are recorded publicly, mostly in iRecord, so anyone interested can find at least one location for each taxon, subject to the recent history of mowing.

Photo 4. Pale Butterwort *Pinguicula lusitanica*, flowers and their distinctive leaf rosettes, Barton Common, 21 June 2020. *Phil Collier*

Photo 5. Jo-jo-weed *Cotula sessilis*, Barton Common, 15 May 2020. *Phil Collier*

Table 1 was created voluntarily as a 'labour of love', so there was no economic consideration. It would be interesting to investigate how many visits, the seasonality and duration of visits that are desirable to achieve an adequate list of taxa. Use of PC's iRecord data to investigate this question is confounded by the relative inexperience of PC in 2020, the removal of ponies for most of 2021, plus seasonal mowing of different places in different seasons.

Of course there are likely to be errors and omissions in any recording effort. And there still remains the challenge of recording *Taraxacum* and *Rubus fruticosus* agg. etc. The final word is yet to be uttered, if ever it can be!

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Table 1. Taxa recorded at Barton Common by PC, 2020–2022; nomenclature from Stace (2019). * denotes taxon not previously recorded.

	Taxon	Common name	Native status
	Acer pseudoplatanus	Sycamore	neophyte
	Achillea millefolium	Yarrow	native
	Aegopodium podagraria	Ground-elder	archaeophyte
*	*Aesculus hippocastanum*	Horse-chestnut	neophyte
	Agrimonia procera	Fragrant Agrimony	native
	Agrostis canina	Velvet Bent	native
	Agrostis capillaris	Common Bent	native
	Agrostis curtisii	Bristle Bent	native
	Agrostis stolonifera	Creeping Bent	native
	Aira praecox	Early Hair-grass	native
	Alliaria petiolata	Garlic Mustard	native
*	*Allium triquetrum*	Three-cornered Garlic	neophyte
	Allium vineale	Wild Onion	native
*	*Amelanchier lamarckii*	Juneberry	neophyte
	Angelica sylvestris	Wild Angelica	native
	Anisantha sterilis	Barren Brome	archaeophyte
	Anthoxanthum odoratum	Sweet Vernal-grass	native
	Anthriscus sylvestris	Cow Parsley	native
*	*Aphanes australis*	Slender Parsley-piert	native
	Arrhenatherum elatius	False Oat-grass	native
*	*Arum italicum* subsp. *italicum*	Italian Lords-and-Ladies	neophyte
	Arum maculatum	Lords-and-Ladies	native
	Athyrium filix-femina	Lady-fern	native
*	*Atriplex patula*	Common Orache	native
*	*Atriplex prostrata*	Spear-leaved Orache	native
	Bellis perennis	Daisy	native
	Betula pendula	Silver Birch	native
	Betula pubescens	Downy Birch	native
	Brachypodium sylvaticum	False Brome	native
	Bromus hordeaceus	Soft-brome	native
	Buddleja davidii	Butterfly-bush	neophyte
	Calluna vulgaris	Heather	native
	Caltha palustris	Marsh-marigold	native
	Calystegia sepium	Hedge Bindweed	native
	Calystegia silvatica	Large Bindweed	neophyte
	Capsella bursa-pastoris	Shepherd's-purse	archaeophyte
	Cardamine flexuosa	Wavy Bitter-cress	native
	Cardamine hirsuta	Hairy Bitter-cress	native
	Carex binervis	Green-ribbed Sedge	native
*	*Carex flacca*	Glaucous Sedge	native
	Carex hirta	Hairy Sedge	native
*	*Carex leporina*	Oval Sedge	native
	Carex panicea	Carnation Sedge	native
*	*Carex pendula*	Pendulous Sedge	native
	Carex pilulifera	Pill Sedge	native
	Carex remota	Remote Sedge	native
*	*Carex demissa*	Common Yellow-sedge	native
	Centaurea nigra s.l.	Common Knapweed	native
*	*Centaurium erythraea*	Common Centaury	native
	Cerastium fontanum	Common Mouse-ear	native
	Cerastium glomeratum	Sticky Mouse-ear	native
*	*Cerastium semidecandrum*	Little Mouse-ear	native
*	*Chamaemelum nobile*	Chamomile	native

	Taxon	Common name	Native status
	Chamaenerion angustifolium	Rosebay Willowherb	native
	Chenopodium album	Fat-hen	native
*	*Chenopodium ficifolium*	Fig-leaved Goosefoot	archaeophyte
	Circaea lutetiana	Enchanter's-nightshade	native
	Cirsium arvense	Creeping Thistle	native
	Cirsium dissectum	Meadow Thistle	native
	Cirsium palustre	Marsh Thistle	native
	Cirsium vulgare	Spear Thistle	native
*	*Conopodium majus*	Pignut	native
	Corylus avellana	Hazel	native
*	*Cotoneaster simonsii*	Himalayan Cotoneaster	neophyte
*	*Cotula sessilis*	Jo-jo-weed	neophyte
	Crataegus monogyna	Hawthorn	native
	Crepis capillaris	Smooth Hawk's-beard	native
*	*Crocosmia pottsii* × *aurea* = *C.* × *crocosmiiflora*	Montbretia	neophyte
*	*Crocus angustifolius* × *flavus* = *C.* × *luteus*	Yellow Crocus	neophyte
*	*Crocus tommasinianus*	Early Crocus	neophyte
	Dactylis glomerata	Cock's-foot	native
	Dactylorhiza maculata	Heath Spotted-orchid	native
	Danthonia decumbens	Heath-grass	native
	Digitalis purpurea	Foxglove	native
	Tamus communis	Black Bryony	native
	Dryopteris affinis s.l.	Golden-scaled Male-fern	native
	Dryopteris dilatata	Broad Buckler-fern	native
	Dryopteris filix-mas	Male-fern	native
*	*Echinochloa crus-galli*	Cockspur	neophyte
*	*Eleocharis multicaulis*	Many-stalked Spike-rush	native
*	*Elymus repens*	Common Couch	native
*	*Epilobium montanum*	Broad-leaved Willowherb	native
	Epilobium obscurum	Short-fruited Willowherb	native
*	*Epilobium parviflorum*	Hoary Willowherb	native
*	*Epilobium tetragonum*	Square-stalked Willowherb	native
*	*Equisetum fluviatile* × *arvense* = *E.* × *litorale*	Shore Horsetail	native
	Erica cinerea	Bell Heather	native
	Erica tetralix	Cross-leaved Heath	native
*	*Ervilia hirsuta*	Hairy Tare	native
	Eupatorium cannabinum	Hemp-agrimony	native
	Euphorbia lathyris	Caper Spurge	archaeophyte
	Euphorbia peplus	Petty Spurge	archaeophyte
*	*Euphrasia nemorosa*	Common Eyebright	native
*	*Euphrasia tetraquetra*	Western Eyebright	native
*	*Euphrasia tetraquetra* × *nemorosa*	Eyebright	native
	Festuca filiformis	Fine-leaved Sheep's-fescue	native
	Festuca rubra	Red Fescue	native
	Ficaria verna	Lesser Celandine	native
	Frangula alnus	Alder Buckthorn	native
	Fraxinus excelsior	Ash	native
*	*Fumaria muralis*	Common Ramping-fumitory	native
	Galium album	Hedge Bedstraw	native
	Galium aparine	Cleavers	native
	Galium palustre	Common Marsh-bedstraw	native
	Galium saxatile	Heath Bedstraw	native
	Geranium dissectum	Cut-leaved Crane's-bill	archaeophyte
*	*Geranium endressii* × *versicolor* = *G.* × *oxonianum*	Druce's Crane's-bill	neophyte
*	*Geranium molle*	Dove's-foot Crane's-bill	native
	Geranium robertianum	Herb-Robert	native

	Taxon	Common name	Native status
	Geum urbanum	Wood Avens	native
	Glechoma hederacea	Ground-ivy	native
	Glyceria fluitans	Floating Sweet-grass	native
*	*Gnaphalium uliginosum*	Marsh Cudweed	native
	Hedera helix	Common Ivy	native
	Heracleum sphondylium	Hogweed	native
*	*Hieracium sabaudum*	Hawkweed	native
	Hieracium trichocaulon	Hawkweed	native
	Hieracium umbellatum	Hawkweed	native
	Holcus lanatus	Yorkshire-fog	native
	Holcus mollis	Creeping Soft-grass	native
	Hordeum murinum	Wall Barley	archaeophyte
	Hyacinthoides non-scripta	Bluebell	native
	Hyacinthoides non-scripta × hispanica = H. × massartiana	Hybrid Bluebell	neophyte
*	*Hyacinthus orientalis*	Hyacinth	neophyte
	Hydrocotyle vulgaris	Marsh Pennywort	native
*	*Hypericum androsaemum*	Tutsan	native
*	*Hypericum humifusum*	Trailing St John's-wort	native
	Hypericum perforatum	Perforate St John's-wort	native
	Hypericum pulchrum	Slender St John's-wort	native
	Hypochaeris radicata	Cat's-ear	native
	Ilex aquifolium	Holly	native
	Iris foetidissima	Stinking Iris	native
*	*Isolepis cernua*	Slender Club-rush	native
*	*Isolepis setacea*	Bristle Club-rush	native
*	*Jacobaea erucifolia*	Hoary Ragwort	native
	Jacobaea vulgaris	Common Ragwort	native
	Juncus acutiflorus	Sharp-flowered Rush	native
	Juncus articulatus	Jointed Rush	native
*	*Juncus bufonius*	Toad Rush	native
*	*Juncus bulbosus*	Bulbous Rush	native
*	*Juncus conglomeratus*	Compact Rush	native
	Juncus effusus	Soft-rush	native
*	*Lamiastrum galeobdolon subsp. argentatum*	Yellow Archangel	neophyte
*	*Lamium purpureum*	Red Dead-nettle	archaeophyte
	Lapsana communis	Nipplewort	native or alien
*	*Leontodon saxatilis*	Lesser Hawkbit	native
	Lepidium didymum	Lesser Swine-cress	neophyte
	Ligustrum ovalifolium	Garden Privet	neophyte
	Linaria purpurea	Purple Toadflax	neophyte
	Lolium perenne	Perennial Rye-grass	native
*	*Lonicera japonica*	Japanese Honeysuckle	neophyte
	Lonicera periclymenum	Honeysuckle	native
*	*Lotus pedunculatus*	Greater Bird's-foot-trefoil	native
	Lunaria annua	Honesty	neophyte
	Luzula campestris	Field Wood-rush	native
	Luzula multiflora subsp. *congesta*	Heath Wood-rush	native
	Luzula multiflora subsp. *multiflora*	Heath Wood-rush	native
	Lycopus europaeus	Gypsywort	native
*	*Lysimachia tenella*	Bog Pimpernel	native
	Malus domestica	Apple	archaeophyte
*	*Malus sylvestris*	Crab Apple	native
*	*Malva moschata*	Musk-mallow	native
	Matricaria discoidea	Pineappleweed	neophyte
*	*Medicago lupulina*	Black Medick	native
	Mentha aquatica	Water Mint	native

	Taxon	Common name	Native status
	Moehringia trinervia	Three-nerved Sandwort	native
	Molinia caerulea	Purple Moor-grass	native
*	*Montia fontana subsp. chondrosperma*	Blinks	native
	Muscari armeniacum	Garden Grape-hyacinth	neophyte
*	*Myosotis sylvatica*	Wood Forget-me-not	native
	Myrica gale	Bog-myrtle	native
	Narcissus	Daffodil	native
*	*Narcissus poeticus*	Pheasant's-eye Daffodil	neophyte
*	*Narcissus poeticus × pseudonarcissus = N. × incomparabilis*	Nonesuch Daffodil	neophyte
*	*Narcissus hispanicus*	Spanish Daffodil	neophyte
*	*Narcissus pseudonarcissus*	Daffodil	native
*	*Narcissus tazetta × jonquilla = N. × intermedius*	Intermediate Jonquil	neophyte
	Nasturtium officinale	Water-cress	native
	Oenanthe crocata	Hemlock Water-dropwort	native
*	*Oxalis exilis*	Least Yellow-sorrel	neophyte
*	*Parthenocissus quinquefolia*	Virginia-creeper	neophyte
*	*Pedicularis sylvatica*	Lousewort	native
*	*Pentaglottis sempervirens*	Green Alkanet	neophyte
*	*Phleum bertolonii*	Smaller Cat's-tail	native
*	*Asplenium scolopendrium*	Hart's-tongue	native
*	*Pilosella officinarum*	Mouse-ear-hawkweed	native
*	*Pinguicula lusitanica*	Pale Butterwort	native
*	*Pinus nigra*	Corsican Pine	neophyte
*	*Pinus sylvestris*	Scots Pine	native
	Plantago coronopus	Buck's-horn Plantain	native
	Plantago lanceolata	Ribwort Plantain	native
	Plantago major	Greater Plantain	native
	Poa annua	Annual Meadow-grass	native
	Poa pratensis	Smooth Meadow-grass	native
	Poa trivialis	Rough Meadow-grass	native
	Polygala serpyllifolia	Heath Milkwort	native
*	*Polygonatum multiflorum × odoratum = P. × hybridum*	Garden Solomon's-seal	neophyte
*	*Polygonum aviculare*	Knotgrass	native
	Polygonum depressum	Equal-leaved Knotgrass	neophyte
	Polystichum setiferum	Soft Shield-fern	native
*	*Populus alba × tremula = P. × canescens*	Grey Poplar	neophyte
	Potentilla erecta	Tormentil	native
	Potentilla reptans	Creeping Cinquefoil	native
*	*Primula vulgaris*	Primrose	native
	Prunella vulgaris	Selfheal	native
*	*Prunus laurocerasus*	Cherry Laurel	neophyte
	Prunus spinosa	Blackthorn	native
	Pteridium aquilinum	Bracken	native
	Quercus ilex	Holm Oak	neophyte
	Quercus robur	Pedunculate Oak	native
	Ranunculus acris	Meadow Buttercup	native
*	*Ranunculus bulbosus*	Bulbous Buttercup	native
*	*Ranunculus flammula*	Lesser Spearwort	native
	Ranunculus repens	Creeping Buttercup	native
*	*Ranunculus sardous*	Hairy Buttercup	native or alien
	Rhododendron ponticum	Rhododendron	neophyte
	Ribes nigrum	Black Currant	neophyte
	Ribes rubrum	Red Currant	native
	Rosa arvensis	Field-rose	native
	Rosa canina	Dog-rose	native
*	*Rosa tomentella*	Round-leaved Dog-rose	native

	Taxon	Common name	Native status
	Rubus fruticosus agg.	Bramble	native
	Rumex acetosa	Common Sorrel	native
	Rumex acetosella	Sheep's Sorrel	native
	Rumex crispus	Curled Dock	native
	Rumex obtusifolius	Broad-leaved Dock	native
	Rumex sanguineus	Wood Dock	native
	Sagina procumbens	Procumbent Pearlwort	native
	Salix cinerea subsp. *oleifolia*	Grey Willow	native
	Salix repens	Creeping Willow	native
	Sambucus nigra	Elder	native
*	*Schedonorus arundinaceus*	Tall Fescue	native
	Scorzoneroides autumnalis	Autumn Hawkbit	native
*	*Scutellaria minor*	Lesser Skullcap	native
*	*Senecio sylvaticus*	Heath Groundsel	native
	Senecio vulgaris	Groundsel	native
	Serratula tinctoria	Saw-wort	native
	Silene dioica	Red Campion	native
*	*Sisymbrium officinale*	Hedge Mustard	archaeophyte
	Solanum dulcamara	Bittersweet	native
*	*Sonchus asper*	Prickly Sowthistle	native
	Sonchus oleraceus	Smooth Sowthistle	native
	Sorbus aucuparia	Rowan	native
*	*Spergularia rubra*	Sand Spurrey	native
*	*Spiraea douglasii* subsp. *douglasii*	Steeple-bush	neophyte
	Stachys sylvatica	Hedge Woundwort	native
	Stellaria graminea	Lesser Stitchwort	native
	Stellaria holostea	Greater Stitchwort	native
	Stellaria media	Common Chickweed	native
*	*Stellaria pallida*	Lesser Chickweed	native
	Taraxacum	Common Dandelion	native
*	*Taxus baccata*	Yew	native
	Teucrium scorodonia	Wood Sage	native
	Trifolium dubium	Lesser Trefoil	native
	Trifolium pratense	Red Clover	native
	Trifolium repens	White Clover	native
*	*Trifolium striatum*	Knotted Clover	native
*	*Trifolium subterraneum*	Subterranean Clover	native
	Tripleurospermum inodorum	Scentless Mayweed	archaeophyte
*	*Tulipa gesneriana*	Garden Tulip	neophyte
	Tussilago farfara	Colt's-foot	native
	Ulex europaeus	Gorse	native
	Ulex minor	Dwarf Gorse	native
	Urtica dioica	Common Nettle	native
*	*Veronica arvensis*	Wall Speedwell	native
	Veronica beccabunga	Brooklime	native
	Veronica chamaedrys	Germander Speedwell	native
	Veronica hederifolia	Ivy-leaved Speedwell	archaeophyte
*	*Veronica officinalis*	Heath Speedwell	native
*	*Veronica serpyllifolia*	Thyme-leaved Speedwell	native
	Vicia sativa	Common Vetch	native
	Viola canina	Heath Dog-violet	native
	Viola lactea	Pale Dog-violet	native
	Viola riviniana	Common Dog-violet	native
*	*Viola riviniana* × *canina* = *V.* × *intersita*	Hybrid Violet	native
	Viola riviniana × *lactea*	Hybrid Violet	native
*	*Vulpia bromoides*	Squirreltail Fescue	native

Table 2. Taxa recorded at 'Barton Common' by HBIC or in the DDb, but not recorded by PC, 2020-2022; nomenclature from Stace (2019).

Taxon	Common name	Native status
Agrimonia eupatoria	Agrimony	native
Alopecurus pratensis	Meadow Foxtail	native
Arabidopsis thaliana	Thale Cress	native
Arctium minus	Lesser Burdock	native
Arenaria serpyllifolia subsp. *serpyllifolia*	Thyme-leaved Sandwort	native
Artemisia vulgaris	Mugwort	archaeophyte
Blackstonia perfoliata	Yellow-wort	native
Bromopsis ramosa	Hairy-brome	native
Calamagrostis epigejos	Wood Small-reed	native
Callitriche stagnalis s.l.	Common Water-starwort	native
Campanula persicifolia	Peach-leaved Bellflower	neophyte
Cardamine pratensis	Cuckooflower	native
Carex sylvatica	Wood Sedge	native
Clematis vitalba	Traveller's-joy	native
Convolvulus arvensis	Field Bindweed	native
Damasonium alisma	Starfruit	native
Dryopteris carthusiana	Narrow Buckler-fern	native
Epilobium hirsutum	Great Willowherb	native
Eschscholzia californica	Californian Poppy	neophyte
Fallopia baldschuanica	Russian-vine	neophyte
Festuca ovina	Sheep's-fescue	native
Filipendula ulmaria	Meadowsweet	native
Foeniculum vulgare	Fennel	archaeophyte
Geranium lucidum	Shining Crane's-bill	native
Glyceria declinata	Small Sweet-grass	native
Helosciadium nodiflorum	Fools-water-cress	native
Humulus lupulus	Hop	native
Iris pseudacorus	Yellow Iris	native
Lamium album	White Dead-nettle	archaeophyte
Lamium amplexicaule	Henbit Dead-nettle	archaeophyte
Lamium maculatum	Spotted Dead-nettle	neophyte
Lathyrus pratensis	Meadow Vetchling	native
Leontodon hispidus	Rough Hawkbit	native
Leucanthemum lacustre × *maximum* = *L.* × *superbum*	Shasta Daisy	neophyte
Leucanthemum vulgare	Oxeye Daisy	native
Linaria repens × *vulgaris* = *L.* × *sepium*		mixed hybrid
Linaria vulgaris	Common Toadflax	native
Lotus corniculatus	Common Bird's-foot-trefoil	native
Luzula pilosa	Hairy Wood-rush	native
Lysimachia arvensis	Scarlet Pimpernel	native
Malva arborea	Tree-mallow	native
Malva sylvestris	Common Mallow	archaeophyte
Medicago arabica	Spotted Medick	native
Melica uniflora	Wood Melick	native
Mentha pulegium	Pennyroyal	native
Milium effusum	Wood Millet	native
Nardus stricta	Mat-grass	native
Ornithogalum umbellatum subsp. *campestre*	Star-of-Bethlehem	neophyte
Persicaria maculosa	Redshank	native
Pilosella aurantiaca	Fox-and-cubs	neophyte
Polygala vulgaris	Common Milkwort	native
Potentilla anglica	Trailing Tormentil	native

Taxon	Common name	Native status
Pulicaria dysenterica	Common Fleabane	native
Pyrus communis s.l.	Pear	native
Quercus petraea × *robur* = *Q.* × *rosacea*	Hybrid Oak	native
Reynoutria sachalinensis	Giant Knotweed	neophyte
Rosa spinosissima	Burnet Rose	native
Rubus curvispinosus	Bramble	native
Rubus leyanus	Bramble	native
Rubus oxyanchus	Bramble	native
Rubus plicatus	Bramble	native
Salix fragilis s.l.	Hybrid Crack-willow	archaeophyte
Scandix pecten-veneris	Shepherd's-needle	archaeophyte
Scrophularia auriculata	Water Figwort	native
Scrophularia nodosa	Common Figwort	native
Silene latifolia	White Campion	archaeophyte
Sinapis arvensis	Charlock	archaeophyte
Soleirolia soleirolii	Mind-your-own-business	neophyte
Succisa pratensis	Devil's-bit Scabious	native
Tamus communis	Black Bryony	native
Tanacetum vulgare	Tansy	native
Tragopogon pratensis subsp. *minor*	Goat's-beard	native
Ulex gallii	Western Gorse	native
Ulmus procera	English Elm	native or alien
Verbascum thapsus	Great Mullein	native
Vicia cracca	Tufted Vetch	native
Vicia sepium	Bush Vetch	native

Commemorative planting in Micheldever Wood

A note by Sue Bell

The Autumn 2022 edition of *Flora News* included a note I submitted about the wide avenue of forty trees which were planted in the middle of Micheldever Wood during 1992, each tree representing one year of the Queen's reign. In that note for *Flora News* I made a plea for assistance; I really must thank the Flora Group for such an informative response.

On 13 September 2022 Tony Mundell, Vice County Recorder for North Hampshire, accompanied me on a wet and blustery day, to visit the site of the 'Commemorative Planting' in Micheldever Wood. Fortunately, the avenue was protected by the stands of Pine and Beech plantations to the north and south. Tony was able to confirm, often with considerable surprise and amusement, that some of the trees were, in fact, exactly what they purported to be. My suggestion that 'The next tree should be a Purple Osier' was greeted by the response 'Oh no! It can't be. They need to have their feet in the water'. But, after a thorough check of leaves, buds and twigs, Tony chuckled 'But it is!' There was evidence that its growth had been cut right back some years previously but, despite such brutal treatment (or perhaps, because of it), the Purple Osier continues to throw out an abundance of vigorous new growth.

Greg Wylde, Micheldever Beat (extending from Eversley in the north to The Solent in the south) Ranger for Forestry England very kindly afforded me the time to *walk and talk* through Micheldever Wood to the site of the Commemorative Planting on 2 December 2022. During the 30 years since the Commemorative Planting was made, the priorities for Forestry England have changed. The management ethos has evolved in line with the generally acknowledged role of Forestry England. Management of Micheldever Wood is set in the context of the surrounding countryside with an emphasis on creating opportunity for diversity and providing nature corridors for the movement of wildlife. Forestry England is not keen to highlight this avenue of native trees as a specific feature because this would be likely to encourage significantly greater footfall to this particular part of the wood thereby altering the habitat. This planting has much to inform us of the growth of trees in unusual situations, such as the elegance of Crab Apple and Hawthorn when grown as specimen trees!

During last winter the undergrowth was cut back and when I visited on 24 January 2023, after a light powdering of snow during the night, I was delighted to see that the Juniper had been released from the strangle-hold of brambles. How will it respond to this clearance?

Juniper revealed at Micheldever Wood. *Sue Bell*

Micheldever Wood has a well-deserved reputation as a Bluebell wood and visitors converge in April/May to be entranced by the delicate aroma, mesmerised by the pale blue haze shimmering beneath the beech trees, and they take a multitude of photographs to remind themselves of the incredible spectacle. The avenue of the Commemorative Planting hosts a different ambience. In March/April primroses are in abundance with cowslips ready to follow on. Violets appear with both Common Dog-violet and Sweet Violet being evident. There are also signs of orchids but these require monitoring as they develop in order to make more accurate identification. Herbaceous plants ensure ground cover during the heat of summer.

I am particularly grateful to Carolyn Doorbar and Anna Stewart who have accompanied me to this site and shared my enthusiasm for its unique characteristics as well as enabling me to view, and think, more constructively about the flora within this habitat. Carolyn's recording of the Wild Liquorice *Astragalus glycyphyllos* was a delight to behold in the autumn with its long, curved seed-pods reminding me of Dead Men's Fingers inside the shell of a Spider Crab.

Wild Liquorice *Astragalus glycyphyllos*. *Sue Bell*

Were those delicate rosettes of leaves that Anna found emerging beside the central ride Hoary Ragwort *Jacobaea erucifolia*? Follow-up visits must be undertaken to check the flowers.

Hoary Ragwort *Jacobaea erucifolia* leaf rosette. *Sue Bell*

Tony Mundell noted that, although the specimen of Box *Buxus sempervirens* had grown well for 30 years in glorious isolation from any other of its ilk, and hence away from the centres of infestation by Box tree moth *Cydalima perspectalis*, in 2022 it too showed signs of attack.

There was much spring growth of fresh young leaves evident in April 2023. Will this Box tree survive another season?

I am so glad that the present regime of management allows for the cutting back of the vegetation surrounding the specimen trees on an annual basis to allow the wild flowers to thrive. Similarly, I respect the decision of Forestry England not to replace those trees which have perished and to encourage the 26 remaining to fend for themselves without any specific intervention. The avenue runs east-west and sunlight encourages a host of different plants and insects to thrive despite the proximity of small areas of monoculture plantations.

Where the original marker posts have not rotted away completely they remain beside their host trees; a reminder of some previous arboricultural initiative. I recognise that it might be foolish to encourage excessive numbers of people to this avenue but for those who do stumble upon it in 20, 30, 40 years hence, I believe it would be a great asset if Name Posts could be in position to confirm the identity of each specimen tree.

I am truly grateful to the Flora Group for publishing my request for advice in the Autumn 2022 edition of *Flora News* and to all the members who have shared their time, knowledge and enthusiasm with me.

Micheldever Wood car park: grid reference SU 52926 36279.

Commemorative Planting avenue: grid reference SU 5305 3720 to SU 5296 3720.

Anybody wishing to engage in discussion is most welcome to contact me at: *suebell0906@gmail.com*.

Box *Buxus sempervirens*. *Sue Bell*

Remnant of original name post. *Sue Bell*

Social botany

A note by Clive Chatters

A series of unexpected events curtailed much of my botanising this summer; however, there are always opportunities to be enjoyed.

A night at the opera was enriched by finding a huge population of Common Broomrape *Orobanche minor* growing in tumble-down grasslands reverting from the arable fields which once surrounded Northington Grange near Alresford.

Hotel lawns also proved interesting with the 'wedding photo' lawn at Bartley Grange (in the New Forest) being consistently tightly mown and so supporting a splendid population of Chamomile *Chamaemelum nobile* which complements the grazed lawns on the adjacent Open Forest.

A little over two hundred years ago the heathlands to the east of Southampton Water rivalled the New Forest in extent. Little survives today other than as placenames and fragmentary nature reserves. It was therefore pleasing (whilst attending an 80th birthday celebration) to find a tiny relic of Locks Heath/Titchfield Common in the front lawn of The Mansion hotel at Coldeast with a scattering of Heath Grass *Danthonia decumbens* and Heather *Calluna vulgaris.*

Catherine Chatters admiring the population of Common Broomrape *Orobanche minor* at Northington Grange, and a close-up of one of the plants. *Clive Chatters*

Book sale to raise funds for Flora Group and BSBI

A note by Catherine Chatters

Following Barry Goater's death last year, the executors (his sons) very generously allowed Martin Rand to take charge of Barry's botany books to sell them, with the proceeds going to the Hampshire Flora Group and the BSBI nationally. Martin has priced some of the items, and money from those was split with two-thirds for Hampshire & Isle of Wight Wildlife Trust on behalf of the Flora Group and a third for the BSBI. For other items, he invited people to offer what they considered to be appropriate as a donation to the Wildlife Trust/ Flora Group. To date, Martin has raised just under £900 (£897 to be exact) through purchases or donations and £873 of this amount has already been disbursed to the two charities (£582 to the Wildlife Trust and £291

to the BSBI). The Flora Group committee members are very grateful to Martin for all the time and effort he has put into raising funds in this way.

Martin still has some books available for sale (some from Barry's library and some from his own stock) and has provided details below.

List of books for sale

Martin Rand

The following is a list of books for sale in aid of Hampshire & Isle of Wight Wildlife Trust two-thirds of proceeds) and the BSBI (one third of proceeds). I am not now putting a fixed price on these; please make me a reasonable offer. As a guide I have given a reference price which is about half their value on the book market, but I am open to offers under this. You can collect these from me at home or at a Flora Group meeting by prior arrangement and I can now accept contactless card payments. I will also now ship books by courier but be aware that this may add several pounds to the cost (which I will advise before shipping).

From Barry Goater's library

Blockeel, T.L. et al. (ed.) (2014): *Atlas of British and Irish Bryophytes*. 2 vols. [£18]

Bowen, H. (2000): *The Flora of Dorset*. [£15]

Brewis, A., Bowman, R.P. & Rose, F. (1996): *The Flora of Hampshire*. [£12]

Castroviejo, S. et al. (ed.) (1986): *Flora iberica.* Vol. 1 (Lycopodiaceae-Papaveraceae). [£10]

Castroviejo, S. et al. (ed.) (1990): *Flora iberica.* Vol. 2 (Platanaceae-Plumbaginaceae). [£10]

Cope, T. & Gray, A. (2009): *Grasses of the British Isles* (BSBI Handbook 13). [£12]

French, C, Murphy, R. & Atkinson, M. (1999): *Flora of Cornwall*. [£30]

Gillam, B. (ed.) (1993): *The Wiltshire Flora*. [£20]

Green, P.R., Green, I.P. & Crouch, G.A.(1997): *The Atlas Flora of Somerset*. [£6]

Hill, M.O. et al. (ed.) 1991): *Atlas of the Bryophytes of Britain and Ireland*. 3 vols. [£35]

Paton, J.A. (1999): *The Liverwort Flora of the British Isles*. [£35]

Poland, J. & Clement, E. (2009): *The Vegetative Key to the British Flora*, 1st edn. [£5]

Preston, C.D., Pearman, D. A. & Dines, T.D. (2002): *New Atlas of the British and Irish Flora*. [£16]

Rollan, M.G. (1985): *Claves de la Flora de España (Peninsula y Baleares)*, 2nd edn. 2 vols. [£20]

From Martin Rand's stock and library

Cullen, J., Knees, S.G. & Cubey, H.S. (2011): *The European Garden Flora* vol. 1 (Monocotyledons) 2nd edn. Second hand, vgc. [£8]

Lansdown, R.V. (2008): *Water-starworts of Europe* (BSBI Handbook 11). New, in plastic protective cover. [£12]

Mabberley, D.J. (1997): *The Plant-book: A portable dictionary of the vascular plants*. 2nd edn. Second hand, vgc. [£2]

Moore, J.A. (1986): *Charophytes of Great Britain and Ireland* (BSBI Handbook 5). New but slight bumping to one corner. [£6]

Poland, J. (2018): *The Field Key to Winter Twigs*. New, in plastic protective cover. [£11]

Shaw, M. (2020): *Hawkweeds of South-east England* (BSBI Handbook 20). New. [£20]

Obituaries

David Elliston Allen (1932–2023)

John Norton

David Allen died in July this year, aged 91. He is well known for being one of Europe's foremost authorities on brambles (*Rubus*) and had a lifelong interest in botany, but his other main passion was researching the biographies and social history of botanists and other natural historians of the past. He wrote or contributed to several books on these subjects and wrote more than 400 notes and articles during his lifetime.

He was born in Southport, Lancashire, to Joan and Gerald Allen (a Colonel in the army and a solicitor), and had an older sister. He attended Bilton Grange Preparatory School in Rugby, Warwickshire during the Second World War, spending his holidays in Scotland where his grandparents had been evacuated. In 1945 he gained a scholarship to Rugby School where he specialised in Classics, but he was already developing an interest in botany, and published his first notes on the flora of the Rugby area in the Report of the Rugby School Natural History Society in 1948, when he was 16. He went on to Clare College, Cambridge in 1950, initially to read Law, but after only half a term realised it was not for him so switched to a joint degree of Archaeology and Anthropology, graduating in 1953. In a typewritten account with the tongue-in-cheek title of 'My brilliant career', he recounts that he thought about changing again to a botanical subject, but this would have meant staying on an additional year and 'one way or another it did not work out'. He had his eye on a career at Kew but mistakenly assumed a Botany degree was a necessity for this and he explained that he 'resisted attempts to lure me there and fatally assumed I must wander down other avenues'.

On leaving university David tried a variety of careers, his first job being a trainee with the Natural History department of Birmingham City Museum and Art Gallery, where he recalls unexpectedly undertaking a six month period of immersion in the history of art. He then spent eight years in market research, initially gaining a job by walking in off the street into the offices of an advertising agency, where he was taken on almost immediately. He recalls that his anthropology degree came in useful during this part of his career, particularly when conducting a major survey of the market for contemporary furniture; one of his contributions being a report titled 'The Future of the Wardrobe'. In later years he worked as a buyer of sample surveys from subcontractors, and explains that he developed 'a fascination with the often sharp regional differences in patterns of consumer behaviour – a transference into that other sphere of my long-standing fascination with the distribution patterns exhibited by plants'.

Whilst employed in market research the idea for a book developed and in 1965 he took the bold step of quitting work to write full time for the next two years. His first book, *British Tastes*, took half of this time to write and was published in 1967 to a 'blaze of almost stupefying publicity, which I had never anticipated'. This included a whole page in the Sunday Times, numerous reviews and seven TV appearances. He explains that this was 'rather an embarrassment' since by this time he had returned to full time employment with the Social Science Research Council (later the Economic and Social Research Council, ESRC), where he was 'mingling with the top echelons of Academia'.

At the ESRC he inherited the administrative responsibility for a somewhat problematic national computerised data archive (though ironically never used a computer in his life) and was the Secretary of the Economic and Social History Committee. Whilst there he also founded what is now the National Statistics Users Council, on which he also served as Secretary for an initial spell of years. The data archive was taken on by the University of Essex where it flourished and now holds the UK's largest collection of social, economic and population data (*www.data-archive.ac.uk*). This work earned him an honorary doctorate from the university, awarded in 1995. Whilst at ESRC he also met his future wife Clare; they were married in 1972 and bought a house in Winchester, where they lived until 2020.

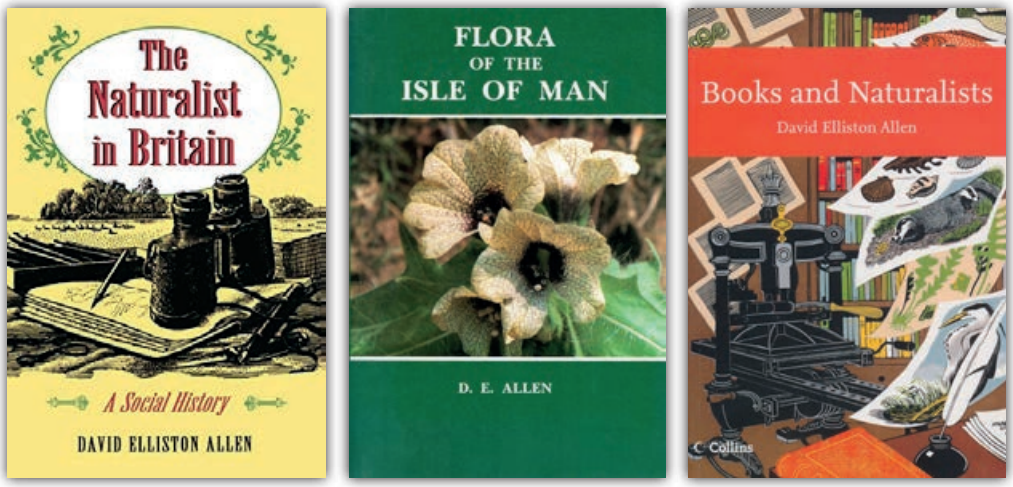
In 1986, after 19 years with the ESRC, David jumped at the opportunity to retire early, so he would have more time to pursue his other interests. However, realising he still needed to supplement his pension he joined the Wellcome Institute for the History of Medicine and did some freelance teaching as an Honorary Lecturer in the History of Biology (jointly at the Institute and University College London). This soon led to him taking on the role of Co-ordinator of the History of Medicine grants programme for the Wellcome Trust (who funded the Institute). During this time he recalls that he also started to become interested in another new botany-related field, that of traditional herbal medicine. After nearly 11 years with the Wellcome Institute he retired in 1997 at the age of 65.

David Allen's interest in botany started during visits as a schoolboy from his home in Birkdale, Southport to the Isle of Man. From the 1950s he published several articles and papers on the flora of the island, which eventually culminated in the *Flora of the Isle of Man* (1984). He joined the Botanical Society of the British Isles as a teenager in 1949 and was the second longest serving member (74 years) when he died in 2023. He was elected to Council in 1953, aged only 21, and later served as Honorary General Secretary from 1967 to 1969 and President from 1985 to 1987. He was made an Honorary Member in 1994 and a Vice-county Recorder Emeritus in 2013. One of his earliest botanical papers 'The history of the vasculum' was published in the Proceedings of the Society in 1959 and whilst serving as President he published the official account of the Society in *The botanists: a history of the Botanical Society of the British Isles Through 150 Years* (1986). Unsurprisingly, he took on several referee and specialist contact roles for the subjects he was interested in; these included: 'Biographical details of British botanists', 'Herbaria', 'Medicinal uses of British plants' and 'infraspecific taxa of British phanerogams'. He was never a referee for *Rubus*, presumably because by the time he considered himself expert in the group, it was already well covered by others.

During the two years away from employment he had also started on two more books with social history as the main subject matter: *The Victorian Fern Craze; a History of Pteridomania* (1969), which he described as 'little more than an essay' and *The Naturalist in Britain, a Social History* (1976), which he was extremely proud of and also amazed that it was even published in Chinese. In 'My brilliant career' he explained that 'although History as an academic subject had passed me by at university, I had discovered a taste for it at school and during my second year at Cambridge the chance loan of the script of an old lecture by one of the Botany staff had fired me with the idea of writing a book on the social development of natural history, partly as a way of reconciling my passion for field botany with the social anthropology with which I was currently attempting to grapple'. David's interests in botanical research and social history were also combined during the writing of two other important books: *British & Irish Herbaria* (1984) with D.H. Kent and most recently, *Books and Naturalists* (2010) in the Collins New Naturalists series. He also co-authored *Medicinal Plants in Folk Tradition: an Ethnobotany of Britain & Ireland* (2004) with Gabrielle Hatfield.

The Naturalist in Britain paved the way to him gaining election to the Council of the British Society for the History of Science (1978-81), to take on the Presidency of the Society for the History of Natural History (1977-80), and take a place on the editorial board of the international journal History and Philosophy of the Life Sciences. He was a long-time supporter of the British Records Association (who promote the preservation and study of British heritage), where he served on Council and as the Chair of the General Purposes Committee. He was also active in several other societies, including the Market Research Society, the Royal Statistical Society and the Economic History Society.

Whilst at the Wellcome Institute he was also invited to speak at the German Historical Institute, London and give lectures at the universities of Cambridge, Oxford, Leicester and The Open University. He also spoke at seminars and conferences at locations overseas, including Uppsala, Jena and Montreal. He was an external examiner for higher degrees at the universities of Sussex, Durham, King's College London and the Open University.



Three of David Allen's well-known books: *The Naturalist in Britain* (1974) (cover of 1994 paperback edition); *Flora of the Isle of Man* (1984) and *Books and Naturalists* (2010).

He was awarded a PhD (through submission of publications) in the History and Philosophy of Science by the University of Cambridge in 1988 and as already mentioned received an honorary doctorate from the University of Essex in 1995. He was awarded the Sloane Lecture Medal by the Society of Apothecaries in 1979; the H.H. Bloomer Medal by the Linnean Society of London in 1981 (where he was also made a Fellow) and the Founders' Medal in 1998 and John Thackray Medal in 2005 by the Society for the History of Natural History.

David Allen's interest in brambles began during his early investigation of the Isle of Man Flora. In 1961 he visited southern Ireland for a week at the invitation of a non-botanical friend and although only a novice, collected 34 specimens which were donated to the University of Cambridge herbarium. In a later account of the history of *Rubus* study in Ireland he noted that he 'put names to one or two with reasonable confidence'. It was not until a year after moving to Hampshire, in 1973, that he started recording and researching the group in earnest. Initially he concentrated his efforts on that county, but over time he also covered the adjacent counties of Surrey, West Sussex and Dorset and was also able to further his interest in the *Rubus* flora of islands, by making regular visits to the Isle of Wight, the Isles of Scilly and the Channel Islands. In addition, he visited the Normandy area of France, hunting for 'cross-channel' species (several accounts of which were written up in *Watsonia*), and Mid Wales where he enjoyed several trips in the company of Arthur Chater. Since bramble recording is only really possible during the summer flowering period of June to July, recording trips to these locations were often conveniently taken as 'holidays' with Clare.

Whilst President of the BSBI in 1986 he was invited over to Ireland to attend the centenary celebrations of the Dublin Naturalists' Field Club, but although too early in the season to record brambles, this led to further invitation to study *Rubus* for a forthcoming Flora of County Dublin and the start of a long friendship with Declan Doogue. One thing led to another and David ended up making regular, almost annual summer visits to Ireland, organised with help from Declan and other enthusiastic recorders. Eventually he covered most of the Republic and parts of Northern Ireland and examined thousands of specimens sent to him in large batches at the at the end of each season (including from areas he was unable to get to during his visits). His last major work on *Rubus* to be fittingly titled *Allen's Brambles of Ireland* will be published by the National Botanic Gardens, Glasnevin in collaboration with the Field Club in the near future.

In Hampshire, faced with a bewildering number of taxa, and with the literature of the day confusing at best, he naturally started in the way he knew how, by meticulous historical research. He examined the old county Floras and visited local and national herbaria to locate specimens. Details were noted onto sets of index cards for species and collectors and he then set about finding the localities on current maps (not always a simple task) and systematically making visits to these, so he could familiarise himself with the species. In addition to his field notebooks, he kept an additional set of notebooks for descriptions and species notes. Descriptions were taken of fresh specimens collected during recording trips if they were not straightforwardly assignable to a named species. They were numbered consecutively, prefixed by 'H' for Hampshire, which we now refer to as 'H-numbers'. The last entry for H1448 (made in 2017 or shortly after) appears to be a note to the effect

that a herbarium specimen of *Rubus multifidus* had been located for VC12, making it a new vice-county record (*R. multifidus* was previously considered a red-styled variety of *R. bloxamii* in Britain). Of course, many of the H-numbers turned out to be unnamed 'local entities' with a small geographical distribution, which by convention batologists (people who study *Rubus*) do not publish names for. A large number are also likely to have been duplicates, collected on more than one occasion. Eventually, however, David was able to figure out the correct names for many of them, and became familiar with several more widely distributed entities which were given nicknames. A small number of these were subsequently described and published as new species. He eventually published names for 12 new brambles in the British flora, and three more jointly with other authors, most of which had ranges including part of Hampshire. The first, H288, was appropriately named *Rubus hantonensis*, which David published in 1985 and which made it into the Addenda and Corrigenda section of *Brambles of the British Isles* by Edees & Newton (1988).

David did not drive a car, so in pursuit of his interest in *Rubus* in Hampshire, he travelled to almost every woodland, common and heathland area of the county by train, bus and on foot. He spent a lot of time recording brambles around his home city of Winchester, but another of his favourite localities was Southampton Common, a 150-hectare area of woodland and parkland of medieval origin lying to the north of the city. He led a BSBI meeting there in the hot, dry summer of 1976 and in his report in *Watsonia* (Vol. 12, 1978) he compared the effects of the heat during the preceding week which 'had resulted in all but a few of the brambles being deprived of their petals' with the 'ferocious heat' on the day, which 'induced mass wilting on the part of the 11 members who attended'. His Southampton Common list numbers around 60 named species, plus several hybrids and unnamed H-numbers, so the area is undoubtedly one of the best recorded and richest *Rubus* sites in Britain.

David Allen demonstrating how to collect a bramble specimen at Southampton Common during a Southampton Natural History Society meeting, July 2007. *John Norton*

In addition to making good use of public transport he would occasionally accept offers to be driven around by car by other botanists, including friends such as the late Barry Goater and myself. I first met David in 2005 during a Hampshire Flora Group meeting in the New Forest that he had been invited to lead. I had missed out on a previous meeting to Southampton Common and was very eager to get familiar with brambles. A few days after the meeting I collected a few specimens from one of my local woods in Gosport, which I later showed to him. The first one he looked at he immediately recognised as one he was familiar with from his Isle of Man days, *Rubus lanaticaulis*, and was new for Hampshire! Subsequently, this particular wood (Carters Copse, in the Alver Valley, an area of ancient Alder fen grading into acid woodland) was the focus of our attention on several future

visits, eventually yielding two more county firsts. From then on I met up with him for two or three trips each summer, usually accompanied by Eric Clement. We explored Eric's and my home area of Gosport and made trips to other parts of the county to productive sites for brambles and locations where David could show us some of his best finds. We also enjoyed some outings to the Isle of Purbeck, Dorset, to meet up with Ted Pratt and latterly David Leadbetter, and West Sussex with the late Mike Shaw where several visits were made between 2011 and 2015 to update records for a new *Flora of Sussex*, published in 2018.

I have very fond memories of these trips, always being amazed by David's ability to quickly put a name to a species based on just a few 'jizz' characters – a feat which I have still not fully mastered myself. I was also impressed by the speed with which he could reconnoitre a bramble rich area, quickly picking out bushes which looked potentially interesting, but walking past those which were unlikely to be identifiable. My partner, Debbie Allan, accompanied me on some of the visits, helping to take notes and grid references, while I would try to snatch a few photographs before we moved on to the next bush (David encouraged me to take photographs of brambles in the field, since this was an important means of capturing details of the flowers which are lost in pressed specimens). The speed and intensity of the field recording was only punctuated by brief stops to listen to his tales of bramble collectors of the past, which would include obscure, and often humorous, biographical details.

For a man in his seventies (when I first started brambling with him) David was extremely fit and active. He could easily sustain six hours in the field in hot sunshine, when those around him were flagging. Eric Clement and I visited him in Winchester in July 2008 for a whistle-stop tour of the city, which is built over several hills. We ended the day by climbing one of the highest and steepest ones and it was several days before our legs recovered. On bramble trips David traditionally brought along a sandwich for lunch, washed down with a small bottle of lager, which he drank from a plastic cup. However, he was not averse to visiting a tea shop and was well known to have a sweet tooth. During visits to Purbeck we always took the opportunity to visit the Corfe Castle tea rooms to enjoy a cup of Earl Grey and some cake.

David's first publication on brambles was a paper entitled 'Irish and Welsh species of *Rubus fruticosus* L. agg. in the Isle of Man', published in the BSBI's journal *Watsonia* in 1974. His descriptions of the new species were also published in *Watsonia*, along with several other reports and notes, which were often based on his detailed historical investigations of herbarium specimens and collectors. In *Watsonia* Vol. 19 (1992) he gives an account of how he came to discover that *Rubus corbieri* was a British species.

David Allen enjoying his lunchtime drink during a visit to West Sussex, July 2015. *John Norton*

David Allen standing by a bush of *Rubus corbieri*, Purbeck, Dorset, June 2010. *John Norton*

He had first noticed it during his first visit to the Cherbourg area of northern France in 1987, but subsequently realised that it was identical to a bramble he had collected from Guernsey in 1978 (where it is common). In 1990 whilst going through Channel Islands specimens at Oxford University herbarium he chanced upon a matching specimen which had been collected from Corfe Common in Dorset in 1916 (named as another species). He visited the area the following year and found an extensive colony there and another population nearby. He later discovered two more Dorset specimens held in British herbaria.

David wrote up his account of *Rubus* in Hampshire in the *Flora of Hampshire* (1996), when around 137 of the 360 or so named British taxa had been reliably recorded in the two vice-counties. He wrote updates for later discovered species in *Flora News* in 2005 (no. 28) and 2014 (no. 46), and the figure now stands at around 160 species. In the *Flora* he also listed 25 of the more widely distributed and plentiful H-numbers, of which he stated in his second update that 21 were probably deserving of full names (he published the last five of his 12 new British species in a *Watsonia* paper published in 2004 but no more subsequently, possibly because by that time he felt it more important to concentrate on other projects, including the work in Ireland). David also wrote the *Rubus* account for the *Isle of Wight Flora* (2003) where he was credited as a co-author and '*Rubus* in Surrey (v.c.17)' (2nd edition) in 2003, which appears to have been distributed only as an unpublished report. More recently he contributed to the *Rubus* account for Sussex, included in the 2018 county Flora, mentioned above.

David went out bramble hunting at least every other day during June and July but spent the days in between and most other months of the year carrying out visits to museums, libraries, herbaria and other institutions, to carry out his research. He spent one day each week at the Natural History Museum herbarium (BM) and one day at the herbarium of the Hampshire County Council Museums Service (now the Hampshire Cultural Trust) in Winchester. His *Watsonia* papers include remarkably detailed background accounts into the taxonomy (which is often very complicated) and the timeline of specimens collected of the species concerned and are testament to the enormous amount of detective work and time spent gathering the information needed before he could finally finish writing each paper (the *R. corbieri* account being a good example). Interestingly, he did not keep his own *Rubus* herbarium, only a small reference collection of rarer species. Batches of specimens for checking and confirmation were sent regularly to Alan Newton (the leading authority on Rubus in Britain and Ireland until his death in 2016), and once fully identified and confirmed, duplicates were mounted, labelled and deposited in Winchester and the BM.

David was undoubtedly one of Hampshire's most famous botanists, even though for most of his time in the county he only looked at brambles and so many Flora Group members may not have had the pleasure of getting to know him. His botanical skills were mostly self-taught, though the public school and university education, followed by a career partly in data analysis and statistics clearly helped instil a meticulous, methodological approach in the collection and collation of data, which turned out to be particularly important and well-suited for the study of *Rubus*.

In his later years David's memory faded as a result of Alzheimer's disease and he suffered ill-health from a shoulder injury and a fall which broke his wrist, but he soldiered on and continued his herbarium visits to London and bramble trips, including his last visit to Ireland, in 2017. He and Clare moved to a retirement village in Romsey in 2020, where they celebrated their 50th wedding anniversary in 2022. He died on 14 July 2023 and his funeral was held at a natural burial site in East Meon, Hampshire on 17 August. His family requested that donations in his memory be made to the Alzheimer's Society.

Acknowledgements

I am very grateful to David's wife, Clare and his niece, Amanda for providing information on David's life and career and the photograph shown at the start of this article.

Recording

Bryophyte news and records, August 2023

John Norton

This is an update to my report in the last issue (*Flora News* 64, p. 26–31) and completes the reporting of new county and vice-county records for the 2022/23 winter.

Publications

Tom Ottley's study of *Leucobryum* in Britain, mentioned in the last report, was published in March, and in April Des Callaghan published an updated Red List of British bryophytes (full references below). I have not fully checked to see what changes are applicable to Hampshire and Isle of Wight species, but *Codonoblepharon forsteri*, *Cephaloziella baumgartneri* and *Tortula cuneifolia* (the latter extinct in Hampshire) remain as EN (Endangered) and *Philonotis marchica* (the Isle of Wight speciality) is upgraded from EN to CR (Critically Endangered).

Callaghan, D.A. 2023. A new IUCN Red List of the bryophytes of Britain, 2023, *Journal of Bryology* 44(4): 271–389. *doi.org/10.1080/03736687.2023.2185393*

Ottley, T. Kučera, J. Blockeel, T & Langton, J. 2023. A molecular and morphological study of *Leucobryum* in Britain and Europe: the presence of *L. albidum* (P. Beauv.) Lindb. confirmed, *Journal of Bryology* 45(1): 1–29. *doi.org/10.1080/03736687.2023.2188389*

Meetings, surveys and other visits

Jonathan Sleath organised and led a meeting to Castle Bottom NNR at Yateley on 21 January 2023. I was unable to make it due to a recent bout of Covid and Jonathan reported that the bog was 'frozen solid making it difficult do the Sphagna justice'. The small group that attended was, however, rewarded with finding *Marchantia polymorpha* subsp. *polymorpha*, a new vice-county record and *Entosthodon obtusus*, a debracketer (first post-1969 record). On the walk to the site he found a small patch of *Platygyrium repens* on the trunk of an oak, the second VC record.

***Marchantia polymorpha* subsp. *polymorpha* specimen from Castle Bottom NNR.** *Jonathan Sleath*

Jonathan also led a meeting to Walbury Hill (SU3761, VC12) in the north-west corner of the county on 18 March, which also looked at part of Gallows Down (SU3662) to the south of Combe Gibbet. Much of the grassland was fairly rank and uninteresting but we did find one slope with some shorter turf and added a lot of species from track edges along the Wayfarer's Walk as well as a good range of epiphytes from trees and woodland, ending up with a total of around 95 species. It was pleasing to find most of the chalk specialists during the trip; however, some of the nicer ones were only on the Berkshire (VC22) side of the vice-county boundary on Walbury Hill, including *Abietinella abietina*, *Encalypta streptocarpa* and *Entodon concinnus*. Other highlights were *Weissia sterilis*, *Bryum torquescens*, *Dicranum bonjeanii*, *Seligeria calycina* and *Tortella inflexa*.

***Entosthodon obtusus*, Castle Bottom NNR, 21 January 2023.** *Jonathan Sleath*

Two days earlier, on 16 March, I had met up with Jonathan to show him an interesting area on the Greensand, at Ashford Chace north of Steep, near Petersfield (SU7426, VC12). Here both *Leptobarbula berica* and *Gyroweisia tenuis* (a

confusable pair) occur together on malmstone rocks and boulders strewn along the side of a small stream. We saw both species, including plenty of *Leptobarbula berica*, some of which was starting to produce sporophytes (which are apparently very rare or under-recorded in the UK). It was also nice to see *Fissidens gracilifolius* and *Rhynchostegiella curviseta* on a wall and *Orthotrichum stramineum* on an Ash tree. After looking at the *Leptobarbula* I left Jonathan to continue on, and a short distance farther along the footpath he came across a fruiting colony of *Campylostelium saxicola* on exposed rock, the first record in VC12 since 1967 (which was at Wheatham Hill, about 1km to the north).

***Campylostelium saxicola*, Ashford Chace, 16 March 2023.** *Jonathan Sleath*

In 2021 the Royal Armouries at Fort Nelson (at the western end of Portsdown Hill, SU6007, VC11) had approached the Wildlife Trust to enquire about getting some botanical surveys carried out. I offered to have a look at the bryophytes and visited the site for a brief look inside on 12 January 2022, but was not able to arrange a proper guided tour until this year, which took place on 15 March. I concentrated my survey on the well managed chalk grassland on the ramparts of the fort and also had a look at some bare gravel and concrete in the courtyard and the walls around the outside of the fort. However, most of the walls were too exposed, and did not support any bryophytes except along the base on the north-facing side where there was a little more moisture. I have not yet compiled a species list, but highlights included *Pseudocrossidium revolutum* on top of a low brick wall, *Bryum torquescens* in thin turf on top of the ramparts and *Seligeria calycina* on exposed chalk. The first two had not been recorded in the Portsdown Hill area before. *Pseudocrossidium revolutum* seems to have undergone a steep decline in Hampshire in recent decades, with only one known site (Netley Abbey) and one other record in the vice-county since 1960, though this could be due to under-recording of suitable habitat. *Bryum torquescens* has only been recorded twice before in VC11 since 1960, though is likely to be passed off as the very similar and ubiquitous *B. capillare* (it is only readily identifiable when fruiting capsules are present in spring). During the visit in January 2022 I also found *Sphaerocarpos michelii* in the car park south of the fort.

Following Cathy Wilson's discovery of *Bartramia pomiformis* in SU73 in a woodland area near Bordon in February 2022, mentioned in the last report, Jonathan Sleath visited the site on 9 February 2023 and recorded 62 taxa including several other species local in north-east Hampshire, including *Bryum alpinum*, *Dicranella rufescens* and *Cephaloziella rubella*. The last species was fertile and is probably the first record in the vice-county since 1975. It is another species likely to be under-recorded due to difficulty of identification when infertile, but has also probably undergone a decline in Britain in recent decades.

Jonathan also found *Brachythecium salebrosum* on a horizontal log in Micheldever Wood on 19 January 2023. There are only two previous records for VC12 and this is the first since 1984. It has not yet been recorded in VC10 or VC11. He also found *Dicranum tauricum* during the same visit (only two other VC12 records). On 23 January he found *Weissia longifolia* in an arable field at Bradley, near Preston Candover which was new to VC12 and the county. It is a species mainly of non-calcareous soils as distinct from the similar *W. angustifolia*, which is a fairly common species of chalk downland. These were previously known as *W. longifolia* var. *longifolia* and *W. longifolia* var. *angustifolia*. Another good find by Jonathan was the second VC12 record of the recently split *Ulota intermedia*, on *Salix* at the Flood Meadow, Alton on 2 June.

***Brachythecium salebrosum*, Micheldever Wood 19 January 2023.** *Jonathan Sleath*

More Gosport finds

I reported on some interesting finds in Gosport in the last issue of *Flora News*, and since then have added three more species of interest (two being new for the county) and submitted a further voucher as a VC11 debracketer.

The debracketer was *Weissia brachycarpa* var. *brachycarpa*, the much scarcer neutral to acid soil counterpart of the common and widespread *Weissia brachycarpa* var. *obliqua* which occurs on chalk and limestone. During some checking of the Hampshire records I realised that there was a Rod Stern record of var. *brachycarpa* for SU42 dated 1/1/1980. However, this was one of his 'marker' records which he had apparently entered for the purposes of producing his VC11 atlas; there were no 'proper' records for SU42 mapped in the atlas and none appear on Rod Stern's record cards or in the national database. The only other VC11 records for var. *brachycarpa* are three for the Holmsley area in the New Forest by Jean Paton, dated 1957-59, so it was therefore still needed as a debracketer. I checked some specimens that I thought might be this species and found a reasonably convincing one from Browndown Common which I sent to Sharon Pilkington (the national moss referee), explaining the mapping error. She agreed and duly confirmed the new record. I have one other specimen from Browndown from 2011 which at the time was identified as var. *obliqua* by Rod Stern, so I need to recheck this as well, as it is more likely to also have been var. *brachycarpa*.

***Grimmia laevigata*, Workhouse Lake, Gosport. Top to bottom: colony in dry state; colony moistened; comparison of dry and wet shoots; February/March 2023.** *John Norton*

On 9 February during a local walk I was crossing the small road bridge over Workhouse Lake, one of the coastal creeks in Gosport, and looked at the mosses on top of the concrete walls either side of the bridge. I was pleased to spot more *Grimmia orbicularis*, the second such colony in Gosport after finding this at Elson church in 2021, but then noticed something that I didn't recognise. It was in dry condition, forming a flattened patch of somewhat succulent, dark green leaves with obvious white hair points. I realised it was something exciting that I hadn't seen before so collected a small piece and examined it at home the next day. It resembled a *Hedwigia* species, but the leaves had a long, stout costa (nerve), ruling out that genus. I considered *Racomitrium*, *Schistidium* and *Grimmia* species and spent half a day examining, photographing and keying it out under the microscope until I eventually came to the conclusion that it was *Grimmia laevigata*, a relatively rare species of acidic to slightly base rich rocks and boulders, and not unexpectedly, new for Hampshire. It took some time to find comparable photos on the internet, and it didn't help that the photos in the field guide appear to be of a completely different species (probably *G. orbicularis*)! In Britain *G. laevigata* is scattered along the south coast, with a few recent hectad dots in West Sussex, and is frequent in parts of Wales and south-east Scotland. I posted some photos on the Facebook bryophytes group and Howard Matcham commented that the West Sussex records refer to colonies on old clay roof tiles on farm buildings in the Chichester area. I don't know how he was able to examine these, but this suggests it may also occur on roofs of houses and could be much more common than we realise.

In my last report I mentioned finding possible *Tortula pallida* (a recently segregated species of saltmarsh habitats) on the cliffs at Alum Bay, Isle of Wight. Since then I have paid a couple of visits to Farlington Marshes where I felt sure it must occur, but only managed to find numerous colonies of the very similar *T. caucasica* (previously named *T. modica*). Then, during a walk along the Haslar Hospital sea wall (just west of Portsmouth Harbour entrance) I came came across large patches of fruiting bryophytes on a grass verge which is subjected to regular inundation by salt spray. These included the expected coastal taxa *Hennediella heimii* and *Tortula acaulon* var. *piliferum*, but the dominant species appeared to be something resembling *Tortula pallida*, but was growing

so densely that it was difficult to dissect out typical looking leaves. I returned on 10 March and collected some better specimens which I was happier with and were later confirmed by Sharon Pilkington as the first Hampshire record. On a later date I found more on similar coastal grassland at Haslar Lake, though a check of all my other specimens from coastal parts of Gosport (e.g. from Browndown and Stokes Bay) did confirm these were *T. caucasica*).

***Tortella tortuosa*, Rowner, Gosport, 23 July 2023.** *John Norton*

Another interesting find concerns *Tortula tortuosa* which was spotted by chance during a stop on a cycle ride on 23 July. I would not normally look at bryophytes during the 'dry' season, but recent rain had moistened some mosses on a large limestone boulder that I had leant my bike on, and I noticed something different in a crevice on the north-facing side. I was hoping for *Tortella nitida* which is still inexplicably unrecorded in Hampshire, but was happy enough with *T. tortuosa*, which is rare in the county. It has been recorded from six hectads, but only three recently, including the localities of Netley Abbey, Butser Hill and Portsdown Hill where I have also seen it. *T. tortuosa* is described in the 2014 bryophyte atlas as a 'species of sheltered base-rich rocks' and has a strong bias to the west and north, with only scattered records in the dry south-east. It is therefore clearly very unusual to find it in the middle of an urban area in central southern England, but it is possible that it was transported with the rocks on which it was growing. It was mixed with some *Fissidens dubius*, which I have not seen on bare stone before. The locality was in a relatively sheltered situation next to the northern edge of Rowner Copse (SU 5861 0215); the adjacent wet grassland which we had stopped to have a look at had probably keeps the humidity high enough for it to survive.

List of new and debracketed (post-1969) records

Pete Flood's record of *Hedwigia ciliata* var. *ciliata*, mentioned in the last report, was confirmed. In addition to the records mentioned above, Rob Sharp emailed me to say he had found the liverwort *Lophocolea fragrans* on both sides of the VC9/VC11 border at Branksome Chine on 16 February 2023, which was new for Hampshire. It is a western species, very rare in our area with only one other locality on the Isle of Wight, where George Greiff refound it in 2018. Jonathan Sleath also found *Bryum pallescens*, a known zinc-tolerant species, under a galvanised roof at Preston Candover on 24 July, new for VC12.

***Bryum pallescens*, VC12.** Preston Candover, SU 6024 4143, 24 July 2023. At base of brick wall under galvanised roof of outbuilding. Jonathan Sleath, conf. S. Pilkington. New to VC12.

***Campylostelium saxicola*, VC12.** Ashford Chace, Steep, SU 7417 2636, 16 March 2023. On exposed rock by footpath. Jonathan Sleath, conf. S. Pilkington. Debracketer for VC12.

***Entosthodon obtusus*, VC12.** Castle Bottom NNR, Yateley, SU 7985 5981, 21 January 2023. Jonathan Sleath, conf. S. Pilkington. Debracketer for VC12.

***Grimmia laevigata*, VC11.** Workhouse Lake, Gosport, SZ 6097 9932. One main patch 11 × 8cm and several smaller ones 3-4cm dia (some coalescing), on flat top of weathered concrete wall on west side of road bridge over Workhouse Lake; with *Grimmia pulvinata* and *G. orbicularis*. Not fruiting. J. Norton, conf. S. Pilkington. New to Hampshire.

***Lophocolea fragrans*, VC11.** Branksome Chine, Bournemouth, SZ06019031, 16 February 2023. On bank of stream and on a fallen tree trunk. R. Sharp, conf. N. Hodgetts. New to Hampshire.

***Marchantia polymorpha* var. *polymorpha*, VC12.** Castle Bottom NNR, Yateley, SU 7988 5970, 21 February 2023. Jonathan Sleath, conf. S. Pilkington. Debracketer for VC12.

***Tortula pallida*, VC11.** Haslar sea wall, Clayhall, Gosport, SZ 6206 9871. Abundant in small densely-growing patches in bare areas of soil within mown grass verge above sea wall, subject to regular sea spray. With *Bryum dichotomum*, *Hennediella heimii*, *Tortula acaulon* var. *pilifera* and *Microbryum rectum*. J. Norton, conf. S. Pilkington. New to Hampshire.

***Weissia brachycarpa* subsp. *brachycarpa*, VC11.** Browndown Common, Gosport, SZ 5824 9960, 21 March 2021. On sandy humus at side of track through dry heath. J. Norton, conf. S. Pilkington. Debracketer for VC11.

***Weissia longifolia*, VC12.** Bradley Hill, Bradley, SU640428, 23 January 2023. Jonathan Sleath, conf. S. Pilkington. New to Hampshire.

Hampshire lichen report 2022–23

Neil Sanderson

Introduction

For once, the most exciting lichen find of the year was not from the New Forest but from Baddesley Common; this is what appears to be *Hypotrachyna lividescens*, an attractive warm temperate – tropical leafy lichen which was found on a mature Birch on open wet grassland. This species had recently been found as far north as Brittany, so is assumed to have jumped across The Channel as a result of warmer summers. Otherwise, the New Forest has continued to surprise and astonish, with yet another rare Cladonia found, Cladonia brevis, the unexpected upland epiphytes *Bryobilimbia sanguineoatra* and *Porina collina* and more localities for very rare New Forest specialists. Further difficult species have been sorted out, especially the daunting isidiate *Micarea prasina* s. lat. group. This group was widespread in the New Forest and were clearly old woodland taxa, but which and how many species were involved? Thanks to the late and much missed Alan Orange I now know there are three species (*Micarea aeruginoprasina*, *Micarea atroviridis* and *M. isidioprasina*) and the infrequent fertile specimens can be identified without resort to DNA sequencing. Finally, a mention of an ongoing project being caried out in the New Forest woods by Vince Giavarini searching for lichenicolous fungi parasitising lichens; to date he has added over 40 species to the New Forest lichen and related fungi list, which is now at over 700 species recorded since the 1960s.

New to Britain

Hypotrachyna lividescens: an attractive species similar to the common *Hypotrachyna afrorevoluta* and *Hypotrachyna revoluta* s. str., but the thallus more ash-grey in colour, with lobes with rounded sinuses and very distinctive hemispherical pale grey-greenish soralia, which are situated just below the apices or occasionally laminal (Photo 1). In addition, the medulla is C+ red then fading to orange-red and the rhizines short but dichotomously branched. The identity as *H. lividescens* is awaiting final conformation but it matches the description and is the most likely species to colonise southern England. It is a warm temperate – tropical lichen recently discovered as growing in France as far north as Brittany. It is likely a recent colonist spreading north with warmer summers. It was found by Neil Sanderson and Andy Cross growing frequently on a birch trunk and as a single thallus on a sallow twig in the HIWWT nature reserve at Baddesley Common, SU3821, August 2023. The trees were in open unimproved floodplain grassland, sheltered by woodland on the edges of the site. The humid sheltered habitat on open trees matches that described for France. The species should be looked for in similar habitat elsewhere along the south coast.

Photo 1. A young thallus of *Hypotrachyna lividescens* (centre), growing on a birch in Baddesley Common, with the common species *Hypogymnia physodes*, *Parmelia sulcata* and *Flavoparmelia caperata*. The assemblage indicates low levels of ammonia pollution in Emer Bog and Baddesley Common Nature Reserve. *Neil Sanderson*

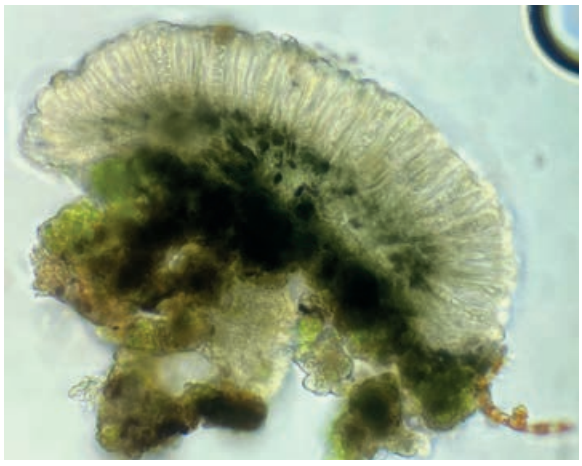


Photo 2. A cross section of a *Micarea atroviridis* apothecium, showing the diagnostic dark green pigment in the hypothecium. *Neil Sanderson*

Micarea atroviridis Coppins, Orange & Sanderson (2022) (*Micarea nigra* van den Boom, Guzow-Krzemińska, Brand & Sérus. (2019), non (Huds.) Fr. (1825)): this has proved to be the most widespread isidiate *Micarea prasina* s. lat. taxon found in the New Forest. It is also frequently fertile, when it has distinctive dark grey to black apothecium with the pigment Cinereorufa-green colouring the inside dark green (Photo 2). First confirmed from material collected in August 2022 by Neil Sanderson from an old Oak with acidic

bark in Matley Wood, New Forest, SU333077, by its mtSSU sequence by Alan Orange. Since found to be widespread across the New Forest woods and frequent in the old growth stands but also colonising the older Oaks within the Inclosures. This is emerging as a widespread southern oceanic old woodland species, being also found from Sussex to North Wales and in a ravine in the North York Moors. Previously only collected from an exotic tree fern in the garden of Sintra, Portugal and named as *Micarea nigra*. *Micarea nigra* van den Boom et al. (2019), however, is a later homonym of *M. nigra* (Huds.) Fr. (1825) – a synonym of *Placynthium nigrum* (Huds.), so a new name was required.

Stigmidium subcladoniicola: this tiny rarely recorded fungal parasite of *Cladonia* species which had the honour of being the 700th species on the New Forest lichen and related fungi list recorded since the 1960s. It was new to Britain when found on *Cladonia polydactyla* on two standing dead Oak in open Beech – Oak pasture woodland in Denny Wood (SU337059), January 2023. Subsequently Vince Giavarini found it on *Cladonia parasitica* on the underside of a fallen tree in pasture woodland, Frame Wood (SU362038), February 2023. *Stigmidium subcladoniicola* was first described from The Azores but internet searches indicate it has been since reported from Thailand, Hawaii, Japan and Vietnam.

New to England

Cladonia brevis: a neat little *Cladonia* consisting of rounded appressed squamules with olive brown tops and white smooth undersides (Photo 3). Rarely fertile and sterile here but distinctive in its Pd+ yellow spot test and the spherical black pycnidia on the squamules. The similar *Cladonia pulvinata* is also Pd+ yellow, but has less rounded squamules and the white underside is tomentose. Rare in Europe, where it is found in open habitats. Recently found new to Britain in a Welsh mine site by Alan Orange. In May 2023, it was spotted on a lightly used track in short grazed heath on Fritham Plain, New Forest (SU227138), with a rich associated lichen assemblage including the Notable species *Cladonia firma* and *Cladonia zopfii* along with the Near Threatened *Scytinium palmatum* (*Leptogium palmatum*) and the regionally rare moss *Racomitrium elongatum*.

Photo 3. *Cladonia brevis*, showing the distinctive spherical black pycnidia, along with an upside down *Cladonia strepsilis* thallus, growing in open short heath on an old track. *Neil Sanderson*

Micarea aeruginoprasina: the second isidiate *Micarea prasina* s. lat. taxon found in the New Forest. This species was originally determined by Alan Orange, by the mtSSU sequence and by micareic acid found by TLC (thin layer chromatography) from sterile material collected from shaded acid bark on a veteran Sessile Oak, in Beech – Sessile Oak – Holly pasture woodland in Bramshaw Wood, New Forest, SU258165, January 2022. Subsequently it was found on lignum inside a hollow Holly pollard, in similar habitat in Great Wood, Bramshaw, New Forest, SU252155 in January 2023. The green isidiate thallus is very similar to that of *Micarea atroviridis*, which also grows on acid substrates in old growth woodlands but the latter appears to be much more frequently fertile. *Micarea aeruginoprasina* may account for a lot of the persistently sterile isidiate *Micarea prasina* s. lat. thalli in very sheltered humid parts of the New Forest, but cannot be reliably separated from *Micarea atroviridis* or *Micarea isidioprasina* when sterile except by DNA sequencing or TLC. As far as can be told from the scarce finds of fertile material this is a more restricted and strongly oceanic species than either species and was already known from Wales. Previously only recorded from the Azores.

Photo 4. *Sphaerellothecium cladoniae* parasitising the squamules of the Critically Endangered *Cladonia peziziformis*. *Neil Sanderson*

Sphaerellothecium cladoniae: a fungal parasite of various *Cladonia* species which forms a network of dark thickened hyphae in the cortex of *Cladonia* squamules (Photo 4).

A related species forms a similar network on *Ochrolechia* species and is better known, but the species infecting *Cladonia* species is rarely recorded. In July 2023, while doing intensive survey on the Critically Endangered *Cladonia peziziformis* for Natural England in the New Forest this fungus was found on C. *peziziformis* at four sites: Withybed Bottom SU252105, Butchers Corner, Bramshaw SU263154, Akercome Bottom SU194072 and Holmsley Ridge SU216014, the last with Andy Cross. The fungus is new to England.

Other species of interest

Abrothallus prodiens: an obligate fungal parasitic of *Hypogymnia physodes* with a single old English record from Cornwall, and otherwise found only in eastern Scotland. Found on *Hypogymnia physodes* on a young Birch by a mire in pasture woodland, the Knowles, Wood Crates, New Forest, VC11, S. Hampshire, SU266085 in October 2022 (Photo 5).

Photo 5. *Abrothallus prodiens* apothecia on the thallus of *Hypogymnia physodes*.
Neil Sanderson

Arthonia anglica: this southern oceanic species is very rare in Europe and has been confirmed from only two areas in recent decades in England: the New Forest and a small area on the north Cornish coast. The New Forest population is small, and a welcome find was made of a large colony of five thalli, on ancient Holly in Anses Wood, SU225123, the fourth wood and fifth tree recently recorded with this species in the New Forest.

Calicium hyperelloides: this pinhead lichen is a very widespread tropical lichen, but is rare in Europe, reaching its northern limit in south west England. First found on a single Oak in the Busketts area in 2004, which fell over shortly after it was found, however, this Critically Endangered lichen was found on another Oak in the same area in 2021. A second extant New Forest population was found on a veteran Oak in a new area at Vinney Ridge (SU258055) during the Wessex Lichen Group 2023 New Year meeting by Neil Sanderson and Nicola Bacciu.

Cladonia crispata* var. *crispata: this *Cladonia* is quite distinct from the widespread *Cladonia crispata* var. *cetrariiformis* in its sturdy podetia with well-developed perorate cups with short proliferations, which can form tiers of podetia. Sequencing data indicates that they are different species. This taxonomic change has not yet been made, however, due to the difficulty checking out old synonyms for var. *cetrariiformis*. Rarely recorded in Britain and then mainly from coastal dunes. In May 2023 it was found by Neil Sanderson and Andy Cross in the base of an old gravel pit, on Fritham Plain, New Forest (SU225139), new to Hampshire, with a rich associated lichen assemblage including the Notable species *Cladonia zopfii* and *Cladonia pulvinata*.

Coenogonium tavaresianum: an internationally rare southern oceanic species with a strong population in the south east of the New Forest, where it is found on base rich bark on veteran Oaks. Curiously absent from the rest of the Forest until it was found on a veteran Oak in pasture woodland on a restored floodplain woodland, Warwick Slade (SU268066) by Neil Sanderson in December 2022.

Buellia hyperbolica: another an internationally rare southern oceanic species with a strong population in the south east of the New Forest, but in this case found on dry bark on veteran Oaks and on old lignum on both standing and fallen trees. Found in a new site in the centre of the New Forest on a standing dead Oak in a glade in Beech – Oak pasture woodland, Pound Hill, Mark Ash Wood (SU243073), January 2023.

Bryobilimbia sanguineoatra: an uncommon species of acid bark on old trees in upland woodlands found in the west of Britain. Not previously recorded from lowland England and this was a most unexpected find when it was found on an old Oak by a stream, in Oak – Beech pasture woodland, deep in a valley in Great Wood, Bramshaw, New Forest, (SU259154), June 2023.

Micarea isidioprasina: the third of the isidiate *Micarea prasina* s. lat. group to be found in the New Forest. This tends to have a paler green thallus than either *Micarea atroviridis* or *Micarea aeruginoprasina* but still needs to be fertile to be identified without resort to DNA sequencing. It was first found fertile on a standing dead Oak, with *Micarea atroviridis* in pasture woodland, Bignell Wood (SU280128), September 2022. It has since been

found in several New Forest woods, all on standing or fallen dead Oaks. The species is much less oceanic in distribution than the other two isidiate *Micarea prasina* s. lat. taxa.

Porina collina: another very unexpected find of what was thought to be an upland species found in the New Forest. Originally described from damp upland rocks, it had been recently found on old trees in oceanic woodland. First found on base rich bark on an old Oak in King's Hat, Hollands Wood (SU306056), May 2023, here growing with *Porina hibernica*, in Beech – Oak pasture woodland and then on another Oak at Canterton (SU 27443 12718, June 2023, in similar habitat. This lichen has clusters of bright orange-brown indistinct and granular isidia, that are paler at base. Probably over-looked as *Porina hibernica* in the Forest previously, which has well defined isidia that are uniformly coloured a dull orange.

Photo 6. *Porina collina* on an oak at Canterton; this species is distinctive once known, but probably dismissed as poorly developed *Porina hibernica* in the past in the New Forest.
Neil Sanderson

Sphaerellothecium cinerascens: an obligate fungal parasite of *Cladonia,* which appears extremely rare in Europe, and is mainly found on the old forest dead wood species *Cladonia parasitica*. Although the perithecia are tiny it can be spotted by infections staining the hosts thallus a grey-blue colour. It was found staining a strip of *Cladonia parasitica* deep grey-blue on a standing dead Oak, in a glade in Beech – Oak pasture woodland, Vinney Ridge, New Forest, SU258055, January 2023, during the Wessex Lichen Group's 2023 New Year meeting by Neil Sanderson. This was the third New Forest record in spite of the host being common and widespread in the Forest.

BSBI Recordership changes for South Hampshire (VC11)

A note by Martin Rand

At the end of 2023 I shall have been the South Hampshire Vice-county Recorder for the Botanical Society of Britain and Ireland for 20 years, which is really long enough for me; I also think the county deserves some new blood and a fresh approach to things. I am therefore very pleased to say that early this year Tristan Norton was confirmed as a joint Recorder for 2023, and in the new year he will take over the reins entirely. As many of you will already know, Tristan is an enthusiastic and energetic presence in the county, with good professional links to many of the organisations that matter – not to mention an excellent field botanist, and keenly involved in the Flora Group! He has also now taken over from me as the BSBI representative on the Hampshire Biodiversity Information Centre's Steering Group.

For the rest of the year any email that you send to the 'vc11recorder' address publicised in *Flora News* and elsewhere will go to both of us, and we shall each copy our responses to the other when we think it relevant. If you do want to send a botanically related email to one or other of us personally, there are now two mailboxes for 'first name.last name' at hantsplants.net. I'm sorry for the rather roundabout way of putting that, but I've suffered data breaches from having explicit addresses published in documents on the web that can be 'scraped' by software for nefarious purposes, and I'm sure that you will work out what to do with the information above. From early 2024 Tristan will get all the 'vc11recorder' mail exclusively, and anything you wish to say to me on botanical matters should go to my personal address at hantsplants.net.

Naturally, I'm not giving up botanising at the end of the year and I intend to stay engaged with the Flora Group. Indeed, I hope it will give me more time to take forward some of the projects (such as the Supplement to the 1996 Hampshire Flora) that have been languishing a while. I shall also be in the background to support Tristan should he need it, and to continue to manage and develop the software that supports county recording and the Hants Plants website. But if you have IT and/or software skills and are looking for a project to work on in your free time, Tristan and I would both appreciate having you on board, either as a formally appointed joint Recorder or as part of a support team.

Finally, I'd like to thank everyone who has helped me in so many ways over the last two decades, including all those people who have submitted records and taken part in projects that make Hampshire one of the best-documented counties in the UK botanically. I'd like to thank especially those people who have formed part of my support team over the last few years and have done wonders not only in going out in the field themselves during difficult times, but also in checking the many submitted records coming at us electronically from many directions these days.

VC11 Notes and records compiled by Martin Rand will be included in the Spring 2024 edition of *Flora News*

VC12 records

Compiled by Tony Mundell

This report covers records for 26 Oct 2022 to 25 Jul 2023. When I select records to include here I have to constrain the number of records to be considered initially to a few thousand. I do this by selecting records dated for a fixed period. In fact, when I started this selection process at the end of July 2023, there were already 3,131 records to consider (more for the period will come to me later). This means that if I do not receive the record until many months after it was seen then it might never get considered. For example, my data exchange agreement with HBIC gives me many thousands of records by HBIC's own surveyors each year, but none ever get considered for inclusion in *Flora News* because when I receive them, they are all for a year or two ago. The same is true for a few MapMate users who very infrequently 'synch' me their records. Luckily I receive thousands of records each year via Living Record and by regularly visiting Living Record I collect most records there within a short period of the plant being seen. So, my profuse thanks to all you regular Living Record users.

I have spent many days this year searching for various different declining species under our Threatened Plant Project, amassing a copious pile of handwritten records, but sadly I have not had time to get most of those records onto my MapMate database yet, so most of them are omitted below. One exception is a new spot for Mezereon *Daphne mezereum* found at Basing Fen, as I was shown it on 4 April by the previous finders. Despite a thorough search, the four of us could not find any extra plants of it, neither could we find it elsewhere in the same fen where it was reported in 1994 in the Alder carr.

With global warming, during the last few years Lizard Orchid *Himantoglossum hircinum* plants have been popping up in many counties, and this year one appeared in Selborne. At least it is reasonably safe there in the meadow at the Gilbert White Museum from trowel-wielding vandals that sometimes threaten orchids. Talking of plants 'popping up' it is good to see below some examples of plants that appear thanks to Plantlife's 'No Mow May' – see *Ophioglossum vulgatum* and *Ophrys apifera*. Amongst the orchids listed below I was pleased to receive an updated record for Lady Orchid *Orchis purpurea*, as it is difficult to get access to its only Hampshire site at Porton Down.

Lizard Orchid *Himantoglossum hircinum*, Selborne, July 2023. *Chris Piper*

A relatively common orchid Broad-leaved Helleborine *Epipactis helleborine* is included below merely because of its unusual growth form. It lacked the usual spirally arranged broad leaves but had only two tiny 1cm long well-separated leaves at the base, but with a normal set of 18 flowers up the stem, each beside its normal narrow bract. Lacking the lower leaves, it looked very odd.

The Ground-pine *Ajuga chamaepitys* is still just hanging on, at what is probably its last Hampshire site.

It is a similar story for several other species listed below with Round-leaved Wintergreen *Pyrola rotundifolia* confined in Hampshire to two spots in one area, that I was told suffered some damage early in the

Broad-leaved Helleborine *Epipactis helleborine* (unusual form), Ewshot, July 2023. *Tony Mundell*

year due to forestry works hauling out timber. Hairy Lady's-mantle *Alchemilla filicaulis* subsp. *vestita* and Red-tipped Cudweed *Filago lutescens* both only survive in two Hampshire sites and are dependent on sympathetic management. Slender Bedstraw *Galium pumilum* has only survived as a single plant in North Hampshire for many years without producing any offspring. Although both Lesser Butterfly-orchid *Platanthera bifolia* and Ivy-leaved Bellflower *Wahlenbergia hederacea* occur in a reasonable number of sites in the New Forest, they are both heading for local extinction in North Hampshire.

Meadow Saffron *Colchicum autumnale* is included below, because some vandal has illegally planted it at Noar Hill SSSI a few years ago. It does grow as a native in Hampshire, but all the native sites are close to the Wiltshire border, where it is mainly a woodland plant of rides or at the woodland edge. Unfortunately, Noar Hill has been a target of other plantings including the garden plant Astrantia *Astrantia major*, Tall Tutsan *Hypericum* × *inodorum* and even Round-headed Rampion *Phyteuma orbiculare* (which has now died out).

Among the neophytes listed below Tunicflower *Petrorhagia saxifraga* is new to Hampshire, but as there was only a single plant it sems unlikely to persist. The False Lupin *Thermopsis montana* is also new for Hampshire and there were sufficient separate plants for a voucher herbarium specimen to be collected.

One of the records below is for so-called Hairy Bindweed (that is not particularly hairy) *Calystegia pulchra*. I was amused to see that its pink flowers are clearly visible in the hedgerow beside Deptford Lane when using Google Images in Street View mode (by dragging the little yellow man icon there) or when doing the same using 'Wheresthepath'. That made me wonder how many roadside sites for plants could be found that way. Obviously it does depend on the time of year that the road was filmed.

I have included some example records for Musk Stork's-bill *Erodium moschatum* as it seems to be spreading on road verges in suburban areas that are often mown. Can others please keep an eye open for it, so its spread can be tracked. I guess it gets transported to new sites as seeds on mowing machines.

***Agrostemma githago* (Corncockle)** Abbots Barton, Winchester SU4785 3132, occasional flowering plants noted through drainage basin landscaping fencing. Recently sown by the developer and growing alongside Cornflower and Corn Marigold., Tristan Norton 21 Nov 2022. Field south of Bramdown Copse, north headland, single plant at SU52785 47059, John Moon 21 Jul 2023.

***Agrostis castellana* (Highland Bent)** Winchester Services, Northbound M3, SU5226 3579 and SU5229 3580, lemma has hairy surface and awn, Anna Stewart 26 Jun 2023.

***Ajuga chamaepitys* (Ground-pine)** S of Freefolk Wood SU5037 4391, three plants in two locations. Very small. All on crumbling edge of bare soil bank at extreme N edge of field margin, Tristan Norton 15 Jun 2023.

Four plants noted. Three in one cluster, one of these flowering. Second plant found but small main flowering stem nibbled-off by a mammal. Stem taken home to see if it will root, Tristan Norton 3 Jul 2023.

***Alchemilla filicaulis* subsp. *vestita* (Hairy Lady's-mantle)** Hound Green SU7306 5912, at least 8 plants, not flowering,

on the green close to the road junction, Andrew Cleave & Paul Sterry 20 Jul 2023.

***Alisma lanceolatum* (Narrow-leaved Water Plantain)** Fleet Pond, photographed in flower at 11am at SU81903 55276 beside the footpath south of the railway, Andrew Cleave & Paul Sterry 25 Jul 2023.

Narrow-leaved Water-plantain *Alisma lanceolatum*, Fleet Pond. *Paul Sterry*

***Anacamptis pyramidalis* (Pyramidal Orchid)** Barton Mill, Old Basing SU 6608 5313, with developing flower spikes, also Hook SU 7311 5376, 2 plants one of which had a developing flower spike, at the bottom of an embankment at the north side of Griffin Way South, next to a pond, also Hook SU 7314 5418, in grass verge at the eastern side of Griffin Way South, three strimmed leaf rosettes and one intact plant growing against a tree trunk with a tall developing flower spike, all Peter Vaughan 8 Jun 2023. Warren Farm SINC SU6940, certainly hundreds of plants, scattered in many places across the site, Tony Mundell, Isobel Girvan & Cathy Wilson 19 Jun 2023. Basing Lime Pits SU656522, 11 at various points on the bank around the Ampitheatre, 408 in the field to the north of the Ampitheatre, Peter Vaughan 20 Jun 2023. Noar Hill SU7397 3194, one white-flowered form, Nigel Johnson & Rosemary Webb 22 Jun 2023. Ladle Hill SU478567, hundreds in flower, Caroline Reid 3 Jul 2023.

***Anemanthele lessoniana* (New Zealand Wind-grass)** Winchester, Alresford Road SU4873 2938, large grasses in planters, 10+ small plants in cracks on base of wall, Anna Stewart 9 Dec 2022.

***Anisantha diandra* (Great Brome)** Magdalen Hill Cemetery SU5138 2935, one plant flowering, Anna Stewart 12 May 2023. Crawley SU4357 3493, a few plants, David Leadbetter 6 Jul 2023.

***Atropa belladonna* (Deadly Nightshade)** Micheldever Spoil heaps west SU5189 4468, one large plant with flowers and unripe fruit, at base of scree slope, Anna Stewart & Sue Bell 12 Jul 2023.

***Blysmus compressus* (Flat-sedge)** Chilbolton Cow Common SU3893 4009, abundant in area of shorter grassland. Many hundreds of plants flowering, Tristan Norton, 8 Jun 2023.

***Calamagrostis epigejos* (Wood Small-reed)** Blacknest Fields SU7992 4188, a large patch, but no flowering stems, Tony Mundell & Cathy Wilson 27 Jun 2023. Headbourne Worthy SU4876 3188, Tristan Norton 17 Jul 2023.

***Calystegia pulchra* (Hairy Bindweed)** Greywell SU7223 5127, still doing well in hedgerow opposite to the driveway into Greywell Pumping Station, Andrew Cleave 8 Jul 2023.

***Calystegia sepium* subsp. *sepium* f. *schizoflora* (a Bindweed)** Blacknest Road SU7976 4167, form in roadside hedgerow with each corolla split into separate petals, Tony Mundell & Cathy Wilson 27 Jun 2023.

***Campanula glomerata* (Clustered Bellflower)** Ladle Hill SU478567, a few plants on the earthworks, Caroline Reid 3 Jul 2023.

***Campanula rotundifolia* (Harebell)** Magdalen Hill Cemetery SU5135 2936, many plants in vegetative state, Anna Stewart 12 May 2023. Morn Hill Cemetery SU5111 2934, plants in vegetative state, Anna Stewart 30 May 2023. North of Bourley Reservoir 2 SU830507, a few clusters of plants in flower, approx 50 or so plants, Caroline Reid 12 Jul 2023.

***Campanula trachelium* (Nettle-leaved Bellflower)** Malta Barracks SU8581 5252, growing on soil bank, Caroline Reid 30 Jun 2023.

***Capsella rubella* (Pink Shepherd's-purse)** Tadley SU5984 6214, about 5 plants at base of a wall/pavement beside the A340. Mostly finished flowering but those that remained were tiny and pinkish tinged, but not vibrant, Paul Sterry 22 May 2023.

Pink Sheperd's-purse *Capsella rubra* fruit, Tadley. *Paul Sterry*

***Carex disticha* (Brown Sedge)** Southwood Country Park SU8535 5550, a very large patch, Tony Mundell 25 Jun 2023.

***Catabrosa aquatica* (Whorl-grass)** Alton, Flood Meadows SU7130 3948, a 1m × 1m patch in the river and another nearby, Tony Mundell, Cathy Wilson & Laura Gravestock 1 Jun 2023.

***Catapodium rigidum* (Fern-grass)** Freefolk Wood SU5044 4391, large patch of flowering plants noted in field corner, Tristan Norton 15 Jun 2023.

***Centaurea cyanus* (Cornflower)** Abbotts Barton, Winchester SU4785 3132, patches of flowering plants noted, introduced as seed by the developer, Tristan Norton 21 Nov 2022.

***Cephalanthera damasonium* (White Helleborine)** Headbourne Worthy SU480320, c.200 plants noted along tree line and spreading into adjacent grassland, many flowering, Tristan Norton 10 May 2023. Tunworth SU6744 4793, Peter Vaughan 17 May 2023. Leckford, Old golf-course SU3672 3671, at least two flowering spikes, Glynne

Evans 24 May 2023. Micheldever SU520433, three plants on scrubby land near the railway line, Andrew Bolton 24 May 2023. East Tisted SU705332, disused railway path, also SU706331, adjacent woodland, Nick Aston 27 May 2023. Ecchinswell SU489566, at junction of a path from Sydmonton and Wayfarer's Walk, the small colony is spread over an area of about 5 square metres, Steve Jones 15 Jun 2023.

***Cephalanthera longifolia* (Narrow-leaved Helleborine**) Tunworth 3 at SU 6710 4770, 2 at SU 6711 4767, 1 at SU 6746 4790, Peter Vaughan 21 May 2023.

***Colchicum autumnale* (Meadow Saffron)** Noar Hill SU7428 3187, Four plants, one of them on edge of path, Nigel Johnson & Rosemary Webb 22 Jun 2023. [Certainly, introduced here]

***Convallaria majalis* (Lily-of-the-valley)** Blandford Woods South SU8627 5256, 100s of plants now finished flowering, Caroline Reid 6 Jun 2023.

***Cornus mas* (Cornelian-cherry)** A272, Winnall, in full flower, a large roadside shrub in two places, SU4980 3020 and SU4967 2984, Tony Mundell 22 Feb 2023.

***Crassula tillaea* (Mossy Stonecrop)** Longmoor, disused airstrip, near a large concrete structure on dry sandy soil at SU8061 3135 and SU8063 3136, Tony Mundell & Helen Boyce 15 Apr 2023. Heatherley Wood Natural Burial Ground SU849362, David Streeter 5 May 2023.

***Crataegus persimilis* (Broad-leaved Cockspurthorn)** Southwood Country Park, west part, SU8521 5476, Tony Mundell 25 Jun 2023.

***Cynoglossum germanicum* (Green Hound's-tongue)** [This is just a small selection of many recent records of this species made by Caroline Reid. I have added extra information to the first record here] Farnborough SU8505 5273, this is an introduced site. Part of one of the native colonies of this rare plant near Shoe Lane was threatened by a new housing estate. Natural England, the Species Recovery Trust, et al. were involved in a translocation of plants (some raised from seed) to other woodland areas nearby. This is one of seven of the transplant sites that I have found in mixed woodland south of the Basingstoke Canal near to Puckridge Barracks. Most plants healthy but some with blackened or yellowing leaves. About 30 plants here split on both sides of path, Caroline Reid 19 Nov 2022. Update by Caroline on 25 May 2023, most plants have survived and flowered at this location. There is a lot of evidence of the same aphid infestation which affects the native population of plants behind Forge Cottage, Shoe Lane. This is not surprising as transplanted plants have been relocated to this site from there, and inevitably aphid eggs would have been brought with the plants. The aphid infestation does not seem to prevent flowering or fruit formation, it just causes badly deformed and stunted flower stems. Farnborough SU8476 5280, this is clearly where seed has been introduced. A photograph taken of the site shows many hundreds of closely packed healthy seedlings, Caroline Reid 16 Jun 2023. Farnborough, near A325 bridge over Basingstoke Canal, colony extending 84m from SU8634 5232 to SU8643 5232, previously spotted in June 2022, a separate colony of 100+ last year's flowering stems a few metres north of the canal towpath, Caroline Reid 5 Jan 2023. Wellesley Woods, Farnborough SU8605 5227, in May 2022 there were 100+ flowering plants surrounding the brick pill box, the area has since been cleared and only two basal rosettes of leaves are now here, Caroline Reid 6 Jan 2023. Shoe Lane SU8613 5280, hundreds of plants following the line of trees where it meets wasteland area, Caroline Reid 26 Apr 2023.

***Dactylorhiza incarnata* subsp. *incarnata* (Early Marsh-orchid)** North Warnborough Greens SU7311 5202, well in flower, Peter Vaughan 30 May 2023.

***Dactylorhiza maculata* (Heath Spotted-orchid)** Bartley Heath (west side), Hook, 423 at SU7286 5344, 165 at SU7286 5351, 17 at SU7281 5354, 30 at SU7279 5354, 6 at SU5277 5356. Bartley Heath (east side), Hook, single spike at SU 7309 5330. First time I've seen this species in the eastern area of Bartley Heath. All Peter Vaughan 19 Jun 2023.

***Dactylorhiza praetermissa* (Southern Marsh-orchid)** North Warnborough Greens SU7311 5202, first flowers opening, Peter Vaughan 30 May 2023. Bassetts Mead, Hook SU7387 5447, Peter Vaughan 7 Jun 2023. Mapledurwell Fen SSSI SU677523, a count of 553 flower spikes, Peter Vaughan 22 Jun 2023. The Hatch Nature Reserve – Northern Field SU677522, a count of 1,131 flower spikes, The Hatch Nature Reserve – Southern Field SU678521, a count of 62 flower spikes, Peter Vaughan 22 Jun 2023. Southwood Country Park, east part, some tall spikes at SU8535 5549, SU8536 5548 and SU8536 5544, flowers going over, Tony Mundell 25 Jun 2023.

***Dactylorhiza* × *grandis* (*D. fuchsii* × *praetermissa*)** Bassetts Mead, Hook SU7397 5432, a group of 9 spikes packed together as a single clump, Peter Vaughan 7 Jun 2023.

***Daphne mezereum* (Mezereon)** Greywell Moors SU7188 5091, Threatened Plant recording form with map, associated species plus extra details. Only 4 plants found (with multiple stems) but probably more could be found later when the leaves form. Two stems had buds, Tony Mundell & Dave Pearson 14 Mar 2023. Basing Fen SU6595 5269, first found by Alan Wilkinson during a Harvest Mouse survey, then shown to Jim Andrews & Rob Still the following week on 21 March. A photo shows 5 stems (probably all from the same plant) two of them in flower. Had a brief look in this vicinity but no more seen, though plenty of suitable habitat not looked at, Jim Andrews, Rob Still & Alan Wilkinson 21 Mar 2023. Shown to Tony Mundell on 4 Apr 2023, after letting the GPS settle down for many minutes the reading was SU65938 52673. The plant, less than a metre tall, had two of the five stems with flowers, now gone over.

***Darmera peltata* (Indian-rhubarb)** Alton, Flood Meadows SU7129 3946, a single plant, now in fruit, beside footpath, Tony Mundell, Cathy Wilson & Laura Gravestock 1 Jun 2023.

***Dianthus carthusianorum* (Carthusian Pink)** Aldershot, Queens Avenue SU8632 5149, several in flower on road verge. Presumably introduced as seed, David Leadbetter 23 May 2023.

***Dianthus plumarius* (Pink)** Wootton St Lawrence SU5958 5359, one large clump of flowering plants, Tristan Norton 5 Jun 2023.

***Dipsacus laciniatus* (Cut-leaved Teasel)** W of Liss SU7784 2751, several tall plants in a passage-way between houses at Sommerfield Lane, Sheryl Pape & Bill Lowe 19 Jul 2023.

Bill Lowe admiring Cut-leaved Teasel *Dipsacus laciniatus*, Liss. *Sheryl Pape*

***Elaeagnus* × *submacrophylla* (*E. macrophylla* × *pungens*)** Southwood Country Park, west part SU8522 5477, Tony Mundell 25 Jun 2023.

***Epipactis helleborine* (Broad-leaved Helleborine – unusual form)** Beacon Hill Road, Ewshot SU8201 4972, beside a bridleway off Beacon Hill Road. Photo taken, showing an unusual plant with the flower buds arranged on practically the whole stem from the ground up (photo p. 64). Not yet flowering, small leaves with traces of purplish colour, Caroline Reid 4 Jun 2023. The unusual plant found earlier beside the bridleway is now flowering. Photo taken, Caroline Reid 11 Jul 2023. Beacon Hill Road SU8201 4972, an unusual plant first found by Caroline Reid. It lacks the usual spirally arranged leaves below the inflorescence and only has two tiny leaves with 18 flowers above each subtended by a bract. There are normal plants of *E. helleborine* a few metres away and a normal non-flowering stem of *E. helleborine* only a few centimetres away that probably belongs to the same plant, Tony Mundell 15 Jul 2023.

***Epipactis palustris* (Marsh Helleborine)** Mapledurwell Fen SSSI SU677523, count of 86 flowering Marsh Helleborines at the site, included 4 var. ochroleuca plants, Peter Vaughan 6 Jul 2023.

***Epipactis phyllanthes* (Green-flowered Helleborine)** Hollywater Road, Bordon SU8034, 22 spikes on west side and 18 on east side, from SU8052 3429 to SU8081 3537, Bill Wain 3 Jul 2023. [Bill found 3 more on east side on 25 Jul 2023, so now 21 on east side]. Shoe Lane, Farnborough SU8628 5332, on road verge, beneath Bramble, Caroline Reid 8 Jul 2023. QinetiQ, Cody Gate car park SU8442 5420, Peter Vaughan 10 Jul 2023.

***Eranthis hyemalis* (Winter Aconite)** Upper Neatham Mill Farm SU7332 4053, single clump on grassy road verge, probably originally planted, Tony Mundell & Alton Nat. History Society 1 Apr 2023.

***Erodium moschatum* (Musk Stork's-bill)** Hartley Wintney, Sandy Lane SU7654 5625, many vegetative plants scattered along the pavement and road verges, Tony Mundell 10 Mar 2023. Hartley Wintney, Hartford Road SU7651 5698 and SU7656 5702, plentiful of grassy road verge, Tony Mundell 24 Mar 2023.

***Euphorbia cyparissias* (Cypress Spurge)** Morn Hill Cemetery SU5144 2938, spreading in graves, Anna Stewart 12 May 2023.

***Euphorbia lathyris* (Caper Spurge)** East Tisted SU705332, disused railway path, Nick Aston 6 Jun 2023.

***Euphorbia oblongata* (Balkan Spurge)** Patchington Farm SU4100 4302, large single plant beside Test Way, warty capsules, John Moon 23 Nov 2022. Down Farm Lane SU4642 3355, single clump noted. Obviously from dumped garden waste. Layby on N side of Down Farm Lane, Tristan Norton 5 Feb 2023.

***Festuca brevipila* (Hard Fescue)** M3 Winchester Services, Southbound SU5230 3560, beginning to extend panicle, long awns on lemmas, now re-named as *Festuca trachyphylla*, Anna Stewart 5 Apr 2023.

Hard Fescue *Festuca trachyphylla* (*F. brevipila*). *Anna Stewart*

***Filago germanica* (Common Cudweed)** North of Bourley Reservoir 2 SU830507, Caroline Reid 12 Jul 2023.

***Filago lutescens* (Red-tipped Cudweed)** B3013 Minley Road Verge SU812563, twenty flowering plants noted: likely to be more. All within area from concrete post S and E, Tristan Norton 22 Jul 2023.

***Fumaria bastardii* (Tall Ramping-fumitory)** Abbotts Ann SU3291 4376, shown to me by John Moon and identified by Tim Rich from close-up scans and photos. Later I realised that it had been recorded in the same place back in 2009, Tony Mundell 4 Dec 2022.

Tall Ramping-fumitory *Fumaria bastardii*, Abbotts Ann. *Tony Mundell*

***Fumaria densiflora* (Dense-flowered Fumitory)** Abbotts Barton, Winchester SU4771 3109, numerous flowering plants dotted along edges of footpath, Tristan Norton 17 Nov 2022. Upper Cranbourne Farm SU505434, many flowering plants noted on both edges of track, Tristan Norton 7 Jul 2023. Field south of Bramdown Copse, north headland SU528470, John Moon 21 Jul 2023.

***Galanthus woronowii* (Green Snowdrop)** Morn Hill Cemetery SU5128 2917, Anna Stewart 19 Apr 2023.

***Galeopsis angustifolia* (Red Hemp-nettle)** Micheldever Spoil heaps east SU5198 4446, two plants, only 3.5cm high, one flower each, 10m NE from telegraph pole, Anna Stewart & Sue Bell 12 Jul 2023.

***Galinsoga parviflora* (Gallant Soldier)** Winchester SU4840 2953, locally frequent in very specific patch by trolley storage area, Tristan Norton 12 Nov 2022.

***Galinsoga quadriradiata* (Shaggy Soldier)** Winchester, Tanner Street SU4841 2949, small patch of flowering plants noted, Tristan Norton 11 Nov 2022. Winchester SU4833 2956, single flowering plant at base of lamp post, Tristan Norton 26 Nov 2022.

***Galium parisiense* (Wall Bedstraw)** Freefolk Wood SU5044 4391, single plant noted in non-exhaustive search. Examination of fruits reveals hooked bristles so considered to be subsp. parisiense, Tristan Norton 7 Jul 2023. Eelmoor Marsh, several plants growing in cracks in the tarmac of Leyland Track between SU83747 53366 and SU83743 53363. This is the variety with the fruits having minute papillae, but without hooked hairs, Tony Mundell & Cathy Wilson 19 Jul 2023.

***Galium pumilum* (Slender Bedstraw)** Ladle Hill, still present at SU47670 56739, on a steep slope at the base of a Ragwort on an animal track. Only occupying 15 square centimetres and flowers gone over, so not easy to find, John Poland 13 Jul 2023.

***Galium* × *pomeranicum* (*G. verum* × *album*)** Ladle Hill, at SU47873 56741 with both parents, John Poland 13 Jul 2023.

***Geranium sanguineum* var. *striatum* (Walney Island Geranium)** Greatham, St John's Church, on the ruins of the disused church, John Poland 8 Jul 2023.

Walney Geranium *Geranium sanguineum* var. *striatum*, Greatham. *John Poland*

***Glebionis segetum* (Corn Marigold)** Abbotts Barton, Winchester SU4785 3132, large patches of flowering plants. Introduced as seed by the developer, Tristan Norton 21 Nov 2023.

***Gymnadenia densiflora* (Marsh Fragrant Orchid)** Mapledurwell Fen SSSI SU677523, count of 93 flowering Marsh Fragrant Orchids at the site, Peter Vaughan 6 Jul 2023.

***Hedera colchica* (Persian Ivy)** Ivyhouse Farm, High Cross, for circa 70m west from SU7134 2718, Tony Davis 19 Nov 2022.

***Hedera helix* subsp. *poetarum* (Yellow-berried Ivy)** Aldershot, where first found by Fred Rumsey, on east side of Ayling Lane SU8582 4996 in hedgerow bordering a garden, also several large plants on SW corner of junction of Ayling Hill and Ayling Lane at SU8579 5002, most fruit already fallen, Tony Mundell 22 Apr 2023.

***Helleborus foetidus* (Stinking Hellebore)** Sun Lane, New Alresford SU5897 3161, between the footpath and a garden fence, Dave Pearson 1 Mar 2023. Alton, Upper Neatham Mill Lane SU7326 4070, garden escape on the side of lane opposite the houses, Tony Mundell & Alton Nat. History Society 1 Apr 2023.

***Helleborus viridis* (Green Hellebore)** Squiresfield Hanger near Bradshott Hall SU7613 3219, 26 vigorous clumps, Bill & Chris Wain 5 Mar 2023.

***Himantoglossum hircinum* (Lizard Orchid)** Selborne, The Wakes SU7407 3361, a single spike in full flower in the meadow of the Gilbert White Museum, Chris Piper & John Oates 30 Jun 2023 (photo p. 63).

***Hordeum secalinum* (Meadow Barley)** Blacknest Fields SU7993 4189, a few plants near hedgerow, and SU7975 4184, a small patch in horse field. Also, Blacknest Road SU7978 4165, along grassy road verge. All Tony Mundell & Cathy Wilson 27 Jun 2023.

***Illecebrum verticillatum* (Coral-necklace)** Bordon SU7828 3595, numerous patches, some still freshly flowering, Tristan Norton 14 Nov 2022.

***Koeleria macrantha* (Crested Hair-grass)** Micheldever Spoil heaps east SU5197 4443, just beginning to show panicle, Anna Stewart & Sue Bell 21 May 2023. Magdalen Hill Down SU5019 2926 and SU5044 2923, Anna Stewart 3 Jun 2023.

***Lactuca virosa* (Great Lettuce)** Abbotts Ann SU3243, 5 plants on overgrown verge outside Eagle pub. Tallest 2.6m high, John Moon 21 Jul 2023.

***Lamium hybridum* (Cut-leaved Dead-nettle)** Bordon SU795366, deeply incised leaves, possibly *L. purpureum* var. *incisum* but looks more like *L. hybridum*, Tristan Norton 14 Nov 2023.

***Laphangium luteoalbum* (Jersey Cudweed)** Manydown Estate SU593521, in a fallow arable field, Jonty Denton 22 Nov 2022.

***Lathraea squamaria* (Toothwort)** Wick Hill Hanger SU7508 3599, 30 vigorous spikes, Bill & Chris Wain 9 Apr 2023. Tunworth SU6732 4830, flowers nearly all gone over, Peter Vaughan 17 May 2023.

***Lathyrus nissolia* (Grass Vetchling)** Aldershot SU8585 5084, on roadside bank near the underpass, David Leadbetter 23 May 2023.

***Legousia hybrida* (Venus's-looking-glass)** Freefolk Wood SU5044 4391, two fruiting plants noted, Tristan Norton 15 Jun 2023.

***Lepidium draba* (Hoary Cress)** Wallfield Copse, Bentley SU7982 4535, Ian Chisholm 19 Jun 2023.

***Logfia minima* (Small Cudweed)** Hogmoor Inclosure SU7872 3484, abundant along edges of sandy tracks, Tristan Norton 25 May 2023.

***Lycopsis arvensis* (Bugloss)** Hogmoor, Bordon SU7837 3504, numerous flowering plants noted, Tristan Norton 15 May 2023.

***Lythrum hyssopifolia* (Grass-poly)** Eelmoor Plain SU8401 5145, 30 small plants some only an inch tall but many with one or two flowers, Caroline Reid 16 Jul 2023. Eelmoor Plain SU840514, several dozen plants noted along c.20m stretch. Many individual plants but also clusters of 10+ plants noted in places. Many flowering. Many plants very small, max.5cm height, Tristan Norton 22 Jul 2023.

***Menyanthes trifoliata* (Bogbean)** Mapledurwell Fen SSSI SU6776 5230, Peter Vaughan 22 Jun 2023.

***Moenchia erecta* (Upright Chickweed)** Longmoor, disused airstrip SU8080 3136, 120 immature, thinly scattered plants in closely grazed, wet, sandy, acid grassland, Tony Mundell & Helen Boyce 15 Apr 2023.

***Narcissus pseudonarcissus* (Daffodil)** Little Wood Copse, West Worldham SU737368, filling the copse, Bill & Chris Wain 19 Mar 2023. Tidworth, Ashdown Copse SU245473, doing well here. We also looked at the colony around SU240471 which persists but has been rather disturbed by forestry work, John & Julie Moon 22 Mar 2023.

***Neottia nidus-avis* (Bird's-nest Orchid)** Leckford, Old golf-course SU3670 3672 & SU3669 3673, Glynne Evans 14 May 2023. Tunworth, three flower spikes at SU6709 4767, four spikes at SU 6752 4782, also, three flower spikes at SU6732 4819, one spike at SU6738 4811, Peter Vaughan 17 May 2023. Porton, Isle of Wight Hill SU2501 3734, many in flower in beech wood, Wiltshire Botanical Society excursion 11 Jun 2023.

***Nicandra physalodes* (Apple-of-Peru)** Bordon SU7907 3451, two flowering plants noted, one very large, also

Wild Daffodil *Narcissus pseudonarcissus*, Ashdown Copse, Tidworth. *Julie Moon*

SU7920 3585, two large flowering plants, Tristan Norton 14 Nov 2022.

***Nonea lutea* (Yellow Nonea)** Sheet SU7543 2467, much increased since first found in 2020 and now a large flowering patch. This area used to be a farm/cattery, Duncan Wright 22 Apr 2023.

***Ophioglossum vulgatum* (Adder's-tongue)** Noar Hill SU7426 3187, Nigel Johnson & Rosemary Webb 13 May 2023. Hunton SU4820 3971, in a front garden in Hunton Down Lane, occupying about one square metre, plus smaller patches, all thanks to 'No mow May', Carolyn Doorbar 17 May 2023. Mill Field LNR SU6635 5344, at least 70 plants counted, Jim Andrews 26 May 223. Bramshott Common SU8636 3316, four plants, some fruiting, in a patch of short grass where not seen before, Andy Swan 30 May 2023.

Yellow Monkswort *Nonea lutea*, Sheet. *Duncan Wright*

Adder's-tongue *Ophioglossum vulgatum*, Bramshott Common. *Andy Swan*

***Ophrys apifera* (Bee Orchid)** Chilbolton Village Green SU3953 4017, at least 10 flowering spikes on triangle of green opposite church. First year, for many years, that it has not been mowed, Glynne Evans 27 May 2023. Greywell Moors nature reserve, fields next to Pumping Station SU7241 5150, var. *belgarum*, Peter Vaughan 13 Jun 2023. Aerospace Boulevard SU8609 5344, some with as many as 13 flowers and 50cm high, Caroline Reid 13 Jun 2023. Oakley, Upper Farm Road SU576499, 16 plants in garden of 2 Upper Farm Road, Linda Oxford 20 Jun 2023.

***Ophrys insectifera* (Fly Orchid)** Micheldever Spoil heaps east, four flowering plants SU51996 44344, one at SU51961 44398, one at SU51986 44338, one at SU51962 44380, and three at SU51995 44349, Anna Stewart & Sue Bell 21 May 2023. Noar Hill, 1 flowering at SU74264 31848 and 3 at SU74262 31845, 2 of which were in bud, 1 flowering at SU74270 31859 and 2 flowering at SU74270 31857, 2 flowering at SU74265 31863, 2 flowering at SU74268 31861, 2 in bud at SU74267 31860 and one in leaf at SU74267 31865, 2 in flower at SU74268 31859, 3 flowering at SU74268 31854, 6 flowering at SU74269 31854, 5 of which were the yellowish form, 2 flowering at SU74267 31850 and 2 flowering at SU74266 31855, Nigel Johnson & Rosemary Webb 22 May 2023. Ashmansworth SU398571, 2 plants growing on roadside bank, Simon Melville 1 Jun 2023. Ecchinswell SU491593, 7 fly orchids in woodland, but young sycamore trees are degrading the habitat for fly orchids, Nick Aston 4 Jun 2023.

***Orchis mascula* (Early-purple Orchid)** Noar Hill, one white-flowered plant beside a red one at SU73967 31956, 18 at SU7397 3193, 14 at SU7411 3201, 10 at SU7413 3201, 21 at SU7428 3188, 14 at SU7442 3188, 12 at SU7444 3185, Nigel Johnson & Rosemary Webb 13 May 2023. Bassetts Mead – Holt Copse SU7386 5429, flowers had almost all gone over, Peter Vaughan 7 Jun 2023.

***Orchis purpurea* (Lady Orchid)** Porton, Isle of Wight Hill SU2513 3732, Wiltshire Botanical Society [excursion] 11 Jun 2023.

***Orobanche hederae* (Ivy Broomrape)** Hook SU7284 5369, 25 emerging spikes some with first flowers open. Purple form growing in ivy at the northern side of Griffin Way South, Peter Vaughan 8 Jun 2023.

***Orobanche minor* (Common Broomrape)** Basing Lime Pits SU6569 5226, in the field to the north of the Ampitheatre, Peter Vaughan 20 Jun 2023. Warren Farm SU6919 4069, 1 spike on road verge. Host plant unclear, Cathy Wilson 6 Jul 2023.

***Paris quadrifolia* (Herb-Paris)** Chineham Woods SU657552, Caroline Reid 13 May 2023. Burley Wood, Ashe SU5322 4852, a single flowering plant, 20cm high on the south side of a small pit in the deciduous woodland, with another very small plant of it nearby, Sue Bell 4 Jun 2023.

***Petrorhagia saxifraga* (Tunicflower)** Amery Hill School, Alton SU7159 3970, private school site. Single flower at edge

of path. Not considered to be deliberately planted/seeded, Andrew Platt 18 Jul 2023.

Phalaris paradoxa **(Awned Canary-grass**) Cow Down SU380434, dense line of plants c.0.5m wide along entire edge of arable field and continuing further to south, Tristan Norton 6 Jul 2023.

Platanthera bifolia **(Lesser Butterfly-orchid)** Micheldever Spoil Heaps, west of railway SU5192 4459, a single flowering plant on a grassy track, east of the middle of the track, Tony Mundell, Sue Bell & Helen Boyce 13 Jun 2023.

Poa compressa **(Flattened Meadow-grass)** Micheldever Spoil heaps east SU5197 4450, a number of flowering culms in line, Anna Stewart & Sue Bell 12 Jul 2023.

Polypogon monspeliensis **(Annual Beard-grass)** Kings Barton, Winchester SU4783 3121, numerous patches of plants noted to N of footpath and odd plants elsewhere, Tristan Norton 15 Jun 2023. Naishes Lane, Corner of Quetta Park SU8152 5095, dozens, perhaps 100 large plants growing on disturbed ground, following excavation for new pipeline, not previously seen here, Caroline Reid 25 Jun 2023. Southwood Country Park, west part SU8479 5461 and SU8481 5461, Tony Mundell 25 Jun 2023.

Lesser Butterfly-orchid *Platanthera bifolia*, Micheldever Spoil Heaps. *Helen Boyce*

Polypogon viridis **(Water Bent)** Bordon SU787358, occasional plants noted, Tristan Norton 14 Nov 2022. Basingstoke Train Station SU6374 5250, single plant noted, Tristan Norton 19 Nov 2022. Hyde Street, Winchester SU480299, single plant noted at pavement edge, 26 Nov 2022.

Populus nigra **subsp. *betulifolia* (Black Poplar)** Mill Field LNR, Basing SU6634 5324, the pair of very large, pollarded trees that I last saw here in 2009 have since then both shed very large limbs, presumably during storms, they are both males, also the large pollarded male tree at SU6644 5338 has fallen since I first saw it in 2009, but it is still alive with slender, young vertical shoots arising from the prostrate branches, Tony Mundell, Rob Still & Jim Andrews 4 Apr 2023.

Potentilla verna **(Spring Cinquefoil)** Micheldever Spoil Heaps, west of railway SU519447, in extraordinary abundance with countless thousands of flowering plants, extending for over 400m from SU5192 4458 to SU5187 4495 wherever there is bare chalk, Tony Mundell, Sue Bell & Susanna Church, 10 May 2023. Micheldever Spoil heaps east SU5196 4439, SU5197 4443, SU5199 4434, SU5199 4435 and SU5201 4436, still flowering, Anna Stewart & Sue Bell 21 May 2023. Micheldever Spoil heaps west SU5192 4467, flowers over, Anna Stewart & Sue Bell 12 Jul 2023.

Spring Cinquefoil *Potentilla verna*, Micheldever Spoil Heaps. *Tony Mundell*

Primula pulverulenta **(Red Cowslip)** Test Way SU3670 3697, on disused railway, Nick Aston 4 Jun 2023 (photo on next page).

Pyrola minor **(Common Wintergreen)** Crookham Common SU8274 5277, now only 6 flower spikes and looking very droughted, Tony Mundell 25 Jun 2023.

Pyrola rotundifolia **(Round-leaved Wintergreen)** Eelmoor Plain SU8393 5145, around 50 plants, a dozen with well-developed flowering stems, still in bud, also at SU8435 5169, many small plants and 6 larger plants with signs of flower stalks starting, Caroline Reid 16 Jul 2023. Eelmoor Plain SU839514, many dozens of rosettes and eight emerging flower spikes approx, 1m S of the woodland edge, Tristan Norton 22 Jul 2023.

Red Cowslip *Primula pulverulenta*, Test Way. *Nick Aston*

***Ranunculus auricomus* (Goldilocks Buttercup)** Mill Field LNR, Basing SU6639 5339, patch of several plants about 0.5m across, not yet flowering, Tony Mundell, Rob Still & Jim Andrews 4 Apr 2023. Lee Wood, Crondall SU7878 4747, Andrea Coates 3 May 2023.

***Ranunculus lingua* (Greater Spearwort)** Southwood Country Park SU8552 5526, east part, in Cove Brook, known here for many years and surely native, Tony Mundell 25 Jun 2023.

***Roemeria argemone* (Prickly Poppy)** Upper Cranbourne Farm SU505434, occasional plants noted along S edge of track, Tristan Norton 7 Jul 2023.

***Roemeria hispida* (Rough Poppy)** Upper Cranbourne Farm SU505434, patchy but regular along both sides of track, Tristan Norton 7 Jul 2023.

***Rubus tricolor* (Chinese Bramble)** Aldershot SU8586 5079, much of it near underpass close to Morrisons supermarket, David Leadbetter 23 May 2023.

***Ruscus aculeatus* (Butcher's-broom)** Blacknest Fields SU7977 4190 on bridleway edge and at SU7990 4192 in copse, also SU7991 4193 beside bridleway, Tony Mundell & Cathy Wilson 19 Apr2023.

***Salvia pratensis* (Meadow Clary)** Aldershot, Queens Avenue SU8632 5149, a number in flower on the road verge. They seem to be the cultivar 'Twilight Serenade'. Presumably sown here, David Leadbetter 23 May 2023.

Meadow Clary *Salvia pratensis* 'Twilight Serenade', Queen's Avenue, Aldershot. *David Leadbetter*

***Saxifraga granulata* (Meadow Saxifrage)** Chilbolton Churchyard, several clumps amongst graves at SU3943 4019, a patch approx 7m × 5m amongst graves at SU3942 4021 and a patch approx 10m × 10m at SU395402 under Beech tree, Glynne Evans 2 May 2023. Chilbolton, West Down, approx 6 plants at SU38361 38992 & 1 at SU38362 38989, also at 38644 39370, Glynne Evans 13 May 2023. Hatch Warren, Garlic Lane SU6086 4814, about 8 plants on the roadside bank, Rob Still 13 May 2023. Litchfield SU467552, several patches in flower on downland near Seven Barrows, Andy Bolton 24 May 2023.

Meadow Saxifrage *Saxifraga granulata*, Litchfield. *Andrew Bolton*

***Scutellaria altissima* (Somerset Skullcap)** Crawley SU4454 3610, five plants on LHS side of gateway, one flowering, Tristan Norton 8 Jun 2023.

***Scutellaria minor* (Lesser Skullcap)** Bartley Heath (west side), Hook SU7298 5342, Peter Vaughan 1 Jul 2023.

***Senecio sylvaticus* (Heath Groundsel)** Southwood Country Park, west part SU8465 5500, in a former golf tee area, Tony Mundell 25 Jun 2023.

***Silaum silaus* (Pepper-saxifrage)** Blacknest Fields SU7968 4179, a single plant, Tony Mundell & Cathy Wilson 27 Jun 2023.

***Silene gallica* (Small-flowered Catchfly)** Hogmoor, Bordon SU7837 3504, appears to have spread substantially, numerous large plants noted along this verge and spreading into kerb base. Likely var *quinquevulnera*, Tristan Norton 15 May 2023. Bordon SU796347, large swathes of plants noted, one flower. Appears to have been unmown deliberately, allowing dense stands of plants to grow, certainly many 100s, Tristan Norton 15 May 2023. Conde Way, Bordon SU796347, now in flower, estimate of 500 to 700 flower spikes this year, Bill & Chris Wain 26 May 2023.

Small-flowered Catchfly *Silene gallica*, Conde Way, Bordon. *Bill Wain*

***Silene noctiflora* (Night-flowering Catchfly)** Crawley SU4334 3489, 4 plants in field margin, David Leadbetter 6 Jul 2023.

***Silene viscaria* (Sticky Catchfly)** Aldershot, two in flower on roadside bank near the underpass, one at SU8585 5084 and a smaller plant at SU8586 5085, David Leadbetter 23 May 2023.

***Silene* × *hampeana* (Pink Campion *S. dioica* × *latifolia*)** Warren Farm SINC SU6947 4045, one large plant in hedgerow with pink flowers. Many White Campions nearby but no Red Campions found at site. Confirmed by intermediate length of calyx teeth, Tony Mundell, Isobel Girvan & Cathy Wilson 19 Jun 2023.

***Sisyrinchium montanum* (American Blue-eyed-grass)** Eelmoor Marsh SU8404 5330, at least 7 plants, some in flower, in a dry rut on Albion Track, the stems are not branched, also at SU8405 5330 two plants in fruit, one with 7 fruiting stems and the other with 2 fruiting stems, Tony Mundell & Cathy Wilson 15 Jun 2023.

***Spergularia rubra* (Sand Spurrey)** Southwood Country Park, west part SU8459 5450, in former golf bunker, Tony Mundell 25 Jun 2023.

American Blue-eyed-grass *Sisyrinchium montanum*, Eelmoor. *Cathy Wilson*

***Stachys arvensis* (Field Woundwort)** Field south of Bramdown Copse, north headland SU528470, spread all along the headland, John Moon 21 Jul 2023.

***Symphytum caucasicum* (Caucasian Comfrey)** East Tisted SU7069 3239, 5 plants on ballast beside disused railway, also Colemore SU7033 3060, both Nick Aston 27 May 2023.

***Teesdalia nudicaulis* (Shepherd's Cress)** Woolmer Forest SU7876 3153, 200+ plants within 3-4 metres length of path, south of Woolmer Pond, Helen Boyce 16 Apr 2023. Hogmoor Inclosure SU7872 3484, frequent to locally abundant at edges of tracks, Tristan Norton 25 May 2023. Bordon Military Cemetery SU7873 3621, locally abundant with frequent flowering plants, Tristan Norton 25 May 2023.

***Teucrium botrys* (Cut-leaved Germander)** Micheldever Spoil heaps west, SU5189 4469 50+ seedlings at base of scree slope, SU5191 4468 3 mature plants on east facing scree slope, SU5192 4467 5 large flowering plants on loose chalk, SU5192 4467 single mature plant with flowers and buds, SU5193 4467 50 mature flowering plants 8-15cm high, plus carpet of seedlings in dip between mounds of chalk spoil, Anna Stewart & Sue Bell 12 Jul 2023. Micheldever

Spoil heaps east SU5197 4447, single plant with 2 flowers and one bud. NE of telegraph pole, on scree slope, Anna Stewart & Sue Bell 12 Jul 2023. Red Post Bridge SU3279 4515, certainly many dozens of flowering and non-flowering plants but numbers much reduced from previous years. Easily visible from field gate, Tristan Norton 13 Jul 2023.

***Thermopsis montana* (False Lupin)** St Swithun's School Winchester SU5005 2976, specimen taken, a number of plants, identified by John Poland, Anna Stewart 27 May 2023. Also, at SU4999 2977, Anna Stewart 1 Jun 2023.

***Tilia* × *euchlora* (Caucasian Lime *T. cordata* × *dasystyla*)** Southwood Country Park, east part SU8533 5519, presumably originally planted, Tony Mundell 25 Jun 2023.

***Trachystemon orientalis* (Abraham-Isaac-Jacob)** E of Wyck SU7611 3958, large clump, garden escape, Cathy Wilson 3 Apr 2023.

***Trifolium incarnatum* subsp. *incarnatum* (Crimson Clover)** Monk Sherborne SU5920 5565, sown in arable fields on both sides of Basingstoke Road, in full flower, Tony Mundell, Helen Boyce & Sue Bell 15 May 2023.

***Trifolium ornithopodioides* (Bird's-foot Clover)** Longmoor, disused airstrip, hundreds of plants on dry sandy soil at SU8052 3132, SU8052 3133 and SU8061 3135, Tony Mundell & Helen Boyce 15 Apr 2023.

***Tulipa saxatilis* (Cretan Tulip)** Magdalen Hill Cemetery SU5140 2934, large clump in shade, Anna Stewart 29 Apr 2023.

***Umbilicus rupestris* (Navelwort)** Churt SU8420 3886, several large dense patches noted, on bank and on Oak trunks, Tristan Norton 14 Nov 2023.

***Valeriana dioica* (Marsh Valerian)** Bourley SU827502, 15 flowering plants and many more basal leaves, in a small cluster near drainage ditch, Caroline Reid 16 May 2023. Reservoir No3 Bourley Lakes SU8283 5032, basal leaves only, in abundance at water's edge, Caroline Reid 12 Jul 2023.

***Valerianella carinata* (Keeled-fruited Cornsalad)** Upper Froyle SU757431, many plants beside Upper Froyle Road in long grass next to a wall for 3 or 4 yards. Identified from photos of the seeds, Sue & Barry Clark 29 May 2023.

***Valerianella dentata* (Narrow-fruited Cornsalad)** Freefolk Wood SU5044 4391, occasional flowering plants noted at field corner, Tristan Norton 15 Jun 2023. Upper Cranbourne Farm SU505434, abundant throughout margins on both edges of track. Many hundreds of plant at least, Tristan Norton 7 Jul 2023.

***Vicia pannonica* (Hungarian Vetch)** Overton, field south of Bramdown Copse, north headland SU528470, two plants found half way along headland, John Moon 21 Jul 2023.

***Viola hirta* (Hairy Violet)** Holybourne SU7342 4039, single flowering clump, Tony Mundell & Alton Nat. History Society 1 Apr 2023. Warren Farm SINC SU6933 4059 a few plants in mown path, and SU6945 4045 a small group of plants, Tony Mundell, Isobel Girvan & Cathy Wilson 19 Jun 2023.

***Viola odorata* (Sweet Violet)** Holybourne SU7346 4035 and Copt Hill, Holybourne SU7368 4024, both of these are the very pale violet form named f. *lilacina*, Tony Mundell & Alton Nat. History Society 1 Apr 2023.

***Viola odorata* var. *imberbis* (Sweet Violet)** Holybourne SU7345 4036 and SU7346 4035, also Copt Hill, Holybourne SU7364 4027, all the white-flowered variety without 'beards' on the side petals, Tony Mundell & Alton Nat. History Society 1 Apr 2023.

***Viola odorata* var. *odorata* (Sweet Violet)** Copt Hill, Holybourne SU7364 4027 and SU7370 4024, a dark violet coloured variety, Tony Mundell & Alton Nat. History Society 1 Apr 2023.

***Viscum album* (Mistletoe)** Farnborough, Pierrefondes Ave, several clumps on roadside tree at junction with cul-de-sac, tree host species not noted, Pat Mundell 31 Jan 2023. Mill Field LNR, Basing SU6638 5372, several clumps on an *Acer campestre* tree, also Pyott's Hill SU6670 5371, many clumps on *Populus* × *canadensis* just north of road, Tony Mundell, Rob Still & Jim Andrews 4 Apr 2023.

***Wahlenbergia hederacea* (Ivy-leaved Bellflower)** Gelvert Stream, Brock's Hill SU8296 5251, in a few patches it is creating a carpet of vegetation so it must consist of many plants. If all the plants were in one place it would cover a total of about 2m × 1.5m but actually there are several scattered patches, the largest two about 40cm × 40cm. All plants are on the east side of the stream, Caroline Reid 9 Jul 2023.

X *Dactylodenia heinzeliana* (*Gymnadenia conopsea* × *Dactylorhiza fuchsii*) Noar Hill SU7451 3180 single tall flower spike at bottom of steep slope just before reaching the wooden seat. Had a faint smell and similar leaves to Fragrant Orchid, with flowers more akin to Common Spotted Orchid, Dave Pearson 6 Jul 2023.

Hybrid Orchid X *Dactylodenia heinzeliana*, Noar Hill.
Dave Pearson

The Hampshire and Isle of Wight Wildlife Trust's Flora Group aims to monitor status and promote conservation of the flora of the two counties and develop skills of those members interested in flora.

This edition of *Flora News* was put together by Catherine Chatters and John Norton. The views expressed by contributors to *Flora News* are not necessarily those of Hampshire & Isle of Wight Wildlife Trust. Many thanks to everyone who contributed. If you have any comments or would like to submit an article for inclusion in a future issue please contact:

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When submitting photographs or illustrations for articles please include a small (reduced) version of the image in the article above its caption and send larger versions (no more than 5MB) directly to John Norton (*john@jnecology.uk*). Please include details of each image in its filename.

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