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Dear Flora Group member

The Flora Group committee hope that you and your family are keeping safe and well and that you have enjoyed botanising during 2022. We will ensure that future field meetings and other events are held in accordance with relevant guidance aimed at minimising the risk of transmitting COVID-19. Please note that booking is essential for the Flora Group events advertised in this edition of *Flora News*. Thank you for your patience while we continue to adapt to the situation.

We look forward to welcoming Flora Group members to our winter get-together at Testwood Lakes Education Centre on Saturday 10 December. Details can be found on page 3 of this newsletter. We will hold our brief Annual General Meeting during this event. Sarah Ball has indicated that she will be stepping down from her role as Flora Group Chairman at the AGM so we would like to thank Sarah for all her support for Flora Group over many years. If you are unable to attend the AGM but would like to make any comments or suggestions for future activities, please contact Catherine Chatters (Flora Group Secretary) at Catherine.Chatters@hiwwt.org.uk or at her home address which is given at the end of this newsletter.

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 subject, of course, to relevant guidance aimed at minimising the risk of transmitting COVID-19. 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: Sarah Ball (until she steps down as Chairman at the AGM on 10 December 2022), Meg Cathcart-James, Catherine Chatters, Clive Chatters, Andy Cross, Isobel Girvan, Gareth Knass, Tony Mundell, John Norton, Martin Rand, Neil Sanderson and Cathy Wilson.

We are pleased to include reports and articles by Tristan Norton, Andrew Powling, Sue Bell and Cathy Wilson 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).

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



Cover photo: Pink-flowered Yarrow *Achillea millefolium* at Chilbolton Down Farm, 15 August 2022. *Tristan Norton* (see p. 16). **Above:** Hampshire Flora Group members at Chilbolton Down Farm. *Tony Mundell*

Forthcoming Events

Due to the COVID-19 pandemic 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. 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 10 December 2022, 10.30am–4pm

Flora Group/BSBI Exhibition Meeting, with Flora Group AGM

Contact: Catherine Chatters

This event is contingent on any restrictions and advice concerning the COVID-19 situation at the time. If you wish to attend, you must register in advance with Catherine Chatters (whose contact details are given at the end of this newsletter) and provide contact details in case of cancellation.

After a couple of missed years due to the COVID-19 pandemic, we intend to resume this traditional winter get-together/social event. 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 (details on back page)

Provisional date: Sunday 7 May 2023, 10.30am–4pm

Winter annuals and early spring flowers, Stokes Bay, Gosport

Leader: John Norton

We'll visit the coastal area of southern Gosport including the MoD-controlled Browndown SSSI (if it is open), Elmore beach and Stokes Bay. We should see a good variety of acid grassland species, including the winter annuals and some of the earlier flowering clovers and other coastal plants. Potential species will include: *Cerastium semidecandrum* (Little Mouse-ear), *Crassula tillaea* (Mossy Stonecrop), *Lotus angustissimus* (Slender Bird's-foot-trefoil), *Medicago praecox* (Early Medick), *Moenchia erecta* (Upright Chickweed), *Myosotis ramosissima* (Early Forget-me-not), *Poa bulbosa* (Bulbous Meadow-grass), *Rosa spinosissima* (Burnet Rose), *Sagina subulata* (Heath Pearlwort), *Stellaria pallida* (Lesser Chickweed), *Trifolium suffocatum* (Suffocated Clover), *Vicia lathyroides* (Spring Vetch) and *Viola canina* (Heath Dog-violet).

This is a provisional date so please email me if you would like to come or are thinking of coming and I'll send round confirmation a couple of weeks beforehand. Numbers will be limited. Meet at the main Stokes Bay car park at the western end of Stokes Bay Road, SZ587988 (by 'No. 2 Battery' on the OS map). Parking is unfortunately quite pricey – £6 for the day, so car share if possible.

Contact: John Norton via email at john@jnecology.uk

Reports of Recent Events

'Leathery leaves' online workshops and field trips

Saturday 4 December 2021, Saturday 29 January 2022, Saturday 12 February 2022,
Saturday 19 March 2022

A report by Martin Rand

In preparation for this workshop during 2021, it became apparent that it was going to be too big a subject for adequate coverage in a single online session. So it was split into two parts: Part 1 was delivered twice, in December and January, to accommodate those who wanted to take part but couldn't all make the same date; and Part 2 was arranged for February. This was followed by two sessions of the same field trip through suburban Chandler's Ford in March. The workshops looked at 35 genera of evergreen trees and shrubs, some of which get limited or no coverage in field guides but are increasingly planted outside gardens or escape to town and country. We dealt with these family by family, but also considered 'confusibles' across genera and families as well as between species. Common horticultural species and cultivars that could be confused with the plants covered in works such as Stace's *New Flora* were also considered. As usual, the 87-page workshop notes are available for download on the Hants Plants website (<https://hantsplants.uk>) in the 'Documents' area. They include keys, descriptions and many photographs.

The field sessions were run starting from my garden, and the March weather was mercifully kind to us. We were able to look at examples of 28 genera in my garden and along the nearby streets, and to tackle such tricky subjects as the range of variation in cultivated species and hybrids of Oleasters *Elaeagnus*, the many cultivars of Holly *Ilex* that make taxonomic determination difficult, and why one shouldn't try to ID Rhododendrons from botanical Floras. On the morning session we were joined by David Perham, retired horticulturalist and former purchasing manager at Hilliers, and I was very pleased to have his informed and cautious views on what we were looking at. By the end, everyone was looking a little stunned but tolerably happy and, I hope, now mentally armed to do more botanising in winter!



An assortment of leathery leaves. Martin Rand

Conifers of the New Forest – Saturday 26 February 2022

A report by Robin Garnett

Phil Collier led a course for ten Flora Group members on identifying conifers at Blackwater Arboretum in the New Forest on 26 February – a good time of year to be looking at conifers when buds are available to help with identification. Participants had been advised to read Martin Rand's excellent notes on British conifers beforehand, which are available at <https://hantsplants.uk/assets/documents/guides/Conifer%20Workshop%20notes.pdf>.

After we had introduced ourselves to each other, we made our way from tree to tree in the Arboretum. Blackwater Arboretum was originally planted in 1859 as part of the landscaping around Rhinefield House. Replacement trees have been added and self-sown trees have encroached so that it is now a wonderfully diverse area to study conifers. The Arboretum is managed by Forestry England whose staff, helpfully, have maintained species labels to many of the trees. Nearly all the trees have a numbered tag attached. Helen Boyce had acquired a list of species names for these numbers, which proved to be very useful.

At selected trees, Phil encouraged participants to take note of key features including needle arrangement, bud shape, presence of resin, cone shape, orientation and persistence, foliage colour and smell of crushed foliage. He then facilitated a discussion about the identification of the tree, challenging people to deduce the identification themselves. Helen and I had fun developing mnemonics to help us relate the name to the key characters – an exercise that is, in itself, a useful mnemonic! For example, when you break the needle of a Scots Pine, you see wisps of fibres on the broken edge, like a Scotsman's beard.

After lunch, the group walked along the nearby Tall Trees Walk, which has a collection of spectacular mature trees plus some examples of naturalised conifers. It gave us a good chance to practice the skills (and mnemonics) that we had learnt within the Arboretum.

Thanks to Phil for giving us such a useful, shared learning experience and to Lisa Malter, our First Aider.

Portsdown Hill – Sunday 10 April 2022

A report by John Norton



Cowslip *Primula veris* at Portsdown Hill. Debbie Allan

Fifteen eager Flora Group members attended this meeting, including Martin Rand who helped co-lead and who also came along on the recce a week prior. We met on the east side of Fort Widley and spent the day exploring the eastern end of this extensive chalk grassland SSSI. Richard Jones, the Portsmouth City Council

site manager also joined us for part of the morning. The weather had been relatively cold, dry and not very sunny in the weeks leading up to the event, but on the day the sun shone and was warm at times, especially at the base of the hill where we were sheltered from the cool northerly breeze. I had originally hoped to hold the meeting in an urban/anthropogenic setting to look for winter annuals but couldn't find anywhere entirely suitable. Portsdown Hill was a good alternative and I thought it would be interesting to see what plants were in flower on chalk grassland at this time of year, since normally the flora of this habitat does not get going until at least the middle of June. As it turned out there wasn't a great deal in flower, but plenty to keep us occupied during the day, especially with John Poland and Eric Clement on hand to assist with the vegetative ID. We also briefly diverted our attention towards fungi and insects.

On the semi-improved grassland by the car park we saw some patches of Slender Speedwell *Veronica filiformis* in flower – this seems to be a new record for the whole of the Portsdown Hill area and not one I've seen very often in the surrounding area. Wayfaring-tree *Viburnum lantana* was also in flower by the fort. On the hill slope we found Hairy Violet *Viola hirta* and Spring Sedge *Carex caryophylla* in flower in several places and a few patches of Cowslip *Primula veris*. Not many other species were flowering, but we did find some Coltsfoot *Tussilago farfara* along the top path and back at the car park Common Fumitory *Fumaria officinalis* on a bund of chalk spoil, along with the only winter annual of the day, Red Deadnettle *Lamium purpureum*.

At the foot of the slope it was interesting to see patches of bright green leaves of Dog's Mercury *Mercurialis perennis* coming through on areas previously cleared of scrub. We managed to identify most of the characteristic chalk plants by either basal leaves or young foliage and were also shown young leaves of a small patch of Dropwort *Filipendula vulgaris* – the only location for this on the site.



Leaves of Dropwort *Filipendula vulgaris*. Debbie Allan

At the base of the slope in an area of more recently cleared scrub there was a distinctive looking dandelion in flower which Martin and I had examined on our recce. This turned out to be *Taraxacum ancistrolobum*, initially identified from a Facebook post by Tim Rich and later confirmed later by the referee John Richards from photographs. This is in section *Taraxacum* (previously *Ruderalia*), though Martin and I foolishly thought that it was in section *Hamata* initially, due to the downward-turned leaf lobes and apparent red strands in the petiole. However, we did find another section *Hamata* during the recce, but John Richards was unable to identify it. A few days later I found more *T. ancistrolobum* at my local cemetery in Gosport, so it may be quite widespread in the county (there is a scatter of records, but of course dandelion recording is very patchy in Hampshire). During the meeting I also photographed an *Erythrosperm* growing in dry chalk grassland but couldn't quite sort it out. There were possibly at least two species present and likely more over the site generally. It would be good to investigate the dandelions of Portsdown Hill in more detail at some time in the future.



***Taraxacum ancistrolobum*.** John Norton (left), Martin Rand (right).

Later in the day I led the group to one of the cuttings in the chalk where a rare ascomycete fungus, *Scutellinia barlae* occurs (found by Debbie Allan and myself a few years ago). We managed to refind several small fruiting bodies (only 1-3mm diameter) on the south-facing side of the cutting (SU 6543 0637) in pockets of bare soil. I checked the identification again from a specimen (the spore size and ornamentation are diagnostic). This has apparently only been found elsewhere in Hampshire at Butser Hill.



Fruiting bodies of *Scutellinia barlae*. Debbie Allan



***Scutellinia barlae* asci with spores.** John Norton

On the slope just below the car park we also had a look at a well-known population of Winter Stalkball *Tulostoma brumale* which grows in a small chalk pit (SU 6596 0644). As its name suggests this is a type of puffball on a stalk.

Invertebrates of note included an adult Down Shieldbug *Canthophorus impressus*, which feeds on Bastard-toadflax *Thesium humifusum*. Portsdown Hill may possibly have the largest populations of both these species in the UK. We also saw a few Lesser Bloody-nosed Beetles *Timarcha goettingensis*, and on the way back noticed a large weevil on Hogweed on the top path, later identified as *Liparus coronatus*, the largest British weevil – this one was 13mm long. It is quite a local species, mainly in south-east England, though it had been recorded on Portsdown Hill before.



A large weevil, *Liparus coronatus*. Debbie Allan

Beaulieu Estate – Saturday 30 April 2022

A report by Martin Rand

While some parts of the Beaulieu Estate coastline and estuary are accessible through either public access or permits, there are large areas of woodland, grassland and marsh which are little known to naturalists, and the aim of the visit was to explore some of these to the north-west of St Leonards and undertake some recording to improve the rather sparse data available. The trip concentrated on the areas of woodland known as Tyler's Copse and Cooper's Wood, ancient woodland that had a significant make-over in the second half of the 19th century, with radiating rides and circuses laid out in the style of a French 'domain forest' and a certain amount of coniferisation. In recent years several glades have been opened up by stream sides and on valley slopes across spring lines, with great benefits to the flora.



Sedge-rich habitat on the Beaulieu Estate. John Norton

After a brief walk down through the woodland by Kitcher's Rough, our initial forays were in the marshy grassland and sedge fen bordering the stream which runs from Hatchet Pond down to the Beaulieu Estuary at The Gins. Large beds of sedge included much Greater Pond-sedge *Carex riparia*, some Lesser Pond-sedge *Carex acutiformis*, and swathes of partially fertile material that appeared to be the hybrid between them, *C. × sooi* (yet to be confirmed). By bushes on the edge of this marsh there were also a few plants of Bladder-sedge *Carex vesicaria*, and a little higher up on the spring line in the wood a stand of Wood Small-reed *Calamagrostis epigejos* and one fine mature bush of Eared Willow *Salix aurita*. Shorter damp to dry grassland on the margins and track sides harboured Creeping-Jenny *Lysimachia nummularia* and several common sedges including Glaucous Sedge *Carex flacca*, False Fox-sedge *Carex otrubae* and Oval Sedge *Carex leporina*.

Our attention soon turned to a couple of the glades on the spring line slopes and some marl pits below the springs, the latter now mostly overshadowed by trees, where we started systematic recording. Here there was a rich flora of common woodland and marshland plants, among which we met our first Narrow-leaved Lungwort *Pulmonaria longifolia* and Southern Wood-rush *Luzula forsteri* of the day. On the margins of the upper glade there was a particularly fine group of Wild Service-tree *Sorbus torminalis* coming into leaf, and a good population of Early-purple Orchid *Orchis mascula*.

Our next target for systematic recording was a long narrow glade in the northern end of Tylers Copse bordering the stream. On the way we were able to see more Narrow-leaved Lungwort, get up close to Wild Service-tree foliage and discover our only small stand of Saw-wort *Serratula tinctoria* of the day, still recognisable from its previous year's inflorescences. A curiosity in one of the tracks in coniferised woodlands was a couple of plants of Jersey Cudweed *Laphangium luteoalbum*, one just coming into flower.

The northern glade proved to be even richer than those we had already visited, with quantities of Narrow-leaved Lungwort and more Southern Woodrush, Marsh Valerian *Valeriana dioica* and Early-purple Orchid. Woodland



Flowers and upperside of leaf of Narrow-leaved Lungwort *Pulmonaria longifolia*. John Norton



Eared Willow *Salix aurita*. John Norton

species we had not met before included Wood Spurge *Euphorbia amygdaloides* subsp. *amygdaloides*, Bitter-vetch *Lathyrus linifolius*, and both Branched and Unbranched Bur-reed *Sparganium erectum* and *S. emersum* along the stream.

We made our way back mostly on higher and drier ground where there were particularly fine displays of Bluebell *Hyacinthoides non-scripta*. It was interesting to see the effect of deer exclosures on the ground flora. Here, not only were the Bluebells at their densest but they were accompanied by creamy flowering drifts of Climbing Corydalis *Ceratocarpus claviculata*, which outside the exclosures was patchy at best. The more shaded clayey rides and the early time of year provided a few late-day challenges: these included sorting out young Smooth-stalked Sedge *Carex laevigata*, which was generally frequent in these woods, from possible Green-ribbed Sedge *C. binervis* lacking any overwintering old leaves, and distinguishing vegetative Wood Club-rush *Scirpus sylvaticus* from vegetative shade-grown Lesser Pond-sedge.

All in all, we collected about 200 records from the systematic glade recording and about 50 ad hoc records of notable plants made elsewhere during the day or on the reconnoitre. Considering the early time of year, this seems like a good tally and it was heartening to see thriving populations of characteristic Solent Basin species like Narrow-leaved Lungwort. Thanks go to Rachel Pearson, Estate Manager for the Beaulieu Estate, and to Peter Stagg, Head Keeper, who took an enthusiastic and very helpful interest in our visit. A trip to another part of the estate may be on for next year.

Itchen Valley Local Nature Reserve – Saturday 14 May 2022

A report by Martin Rand

This was the first of two visits this year to look at one of the oldest and largest systems of former water meadows in the Itchen Valley, and one of the richest in wildlife interest. Many users of the Itchen Valley Country Park may be unaware of the reserve, confining their visits to the more organised recreation near the visitor centre, or of its 1½-mile extent, since a large northern sector is not open to the public and an interesting southern bit is now cut off by the M27. On this visit we had permission to roam the whole area, but for practical reasons confined ourselves to the north side of the motorway. By and large we limited recording to species that had not been recorded recently, giving people a bit more leisure to discuss what we were seeing.

Old water meadows, which are a relic of a very intensively managed historic farming system, are often not that exciting from a botanical point of view and can be very homogeneous in their vegetation. One of the good features of this site is that there is one large area of quite deep peat, with one or two peat lenses elsewhere, which could never be engineered into water-meadows and have retained a tall herb fen vegetation over the years. Another is the large and complex system of feeder channels taking water from and to the Itchen Navigation and the Itchen. These watercourses maintain a good flow under current management, bringing miniature chalk stream habitat to much of the reserve and sustaining an important population of Southern Damselfly *Coenagrion mercuriale*, which we were lucky enough to see during the day.

We began by recording close to the entrance gate, where one of the smaller peaty lenses gave us several common sedges including Hairy Sedge *Carex hirta* and Brown Sedge *C. disticha*, which are almost ubiquitous in old water meadows, along with our first taster of the less common Distant Sedge *C. distans* which we were to see much more of during the course of the day. Water Avens *Geum rivale* was almost past flowering, but Marsh-marigold *Caltha palustris* was not yet over, Marsh Valerian *Valeriana dioica* was flowering and fruiting, and Ragged-Robin *Silene flos-cuculi* was already making a good showing.

Heading south-westwards down the reserve we continued to pick up aquatic and marsh species along with plants of drier chalky pasture, and at one of the main channels it was gratifying to see a nice flowering stand of Great Yellow-cress *Rorippa amphibia*. This has a wide distribution along the Itchen south of Winchester but seems to have become much less common in recent years and has disappeared from some stretches.

Turning back north-east on the far side of the reserve by the Itchen Navigation, which is now almost non-existent on this stretch, we came into the large area of deep peat, dominated by taller plants but with some nicely grazed peaty pasture around the margins: the whole reserve is nowadays grazed by about 70 head of cattle. Here



Great Yellow-cress *Rorippa amphibia* at Itchen Valley Reserve. Tony Mundell



Southern Damselfly *Coenagrion mercuriale*. Tony Mundell

the abundant Distant Sedge, Hairy Sedge and Brown Sedge were joined by Common Sedge *Carex nigra*, Carnation Sedge *C. panicea* and False Fox-sedge *C. otrubae*. Venturing out into the taller vegetation we were rewarded by several patches of Blunt-flowered Rush *Juncus subnodulosus* and lots of Common Meadow-rue *Thalictrum flavum*. Barer patches that the cattle had reached had an abundance of Celery-leaved Buttercup *Ranunculus sceleratus* and the odd plant of another Yellow-cress, Marsh Yellow-cress *Rorippa palustris*. There were opportunities to compare the two Fescue species Tall Fescue *Schedonorus arundinaceus* and Meadow Fescue *S. pratensis*, both characteristic of old water meadows but the former often quite invasive. Perhaps the oddest find was a single bush of *Salix* × *multinervis*, the hybrid between Eared Willow *Salix aurita* and Rusty Willow *S. cinerea* subsp. *oleifolia*. We found no sign of the first parent but given the peatiness of the soil in this area it may well have been present as a relic from wilder times.

Still heading north-eastwards we came onto drier chalky pastureland with some typical plants, including Quaking-grass *Briza media* and Downy Oat-grass *Avenula pubescens*. We now entered the part of the reserve with restricted access. Although the pastures here still gave evidence of their water-meadow past, they were generally more monotonous and less rich in species, and here much of the interest was centred on the ponds and watercourses. Particularly spectacular were large drifts of Whorl-grass *Catabrosa aquatica*, well into flower and looking spectacular backlit by the bright sun. There were chances for people to compare the tall marginal grasses Common Reed *Phragmites australis*, Reed Canary-grass *Phalaris arundinacea* and Reed Sweet-grass *Glyceria maxima*, while in the lesser ditches there were good quantities of Marsh Foxtail *Alopecurus geniculatus*. Here and elsewhere, we were able to compare Blue Water-speedwell *Veronica anagallis-aquatica*, Pink Water-speedwell *V. catenata*, and their robust hybrid *V. × lackschewitzii* which is now the commonest of the three in much of Hampshire's chalk catchments.

By the time you read this, a second late season visit to the reserve will have taken place, and it will be interesting to see how the summer's drought has affected the plant life. Thanks go to Ben Smith, site manager for the reserve, for helping with the reconnoitre and providing useful background information, and for sorting out the physical access arrangements; also to Rachel Hardy, Countryside Manager for Eastleigh Borough Council, for support in the early planning of the trip, and the staff of the Visitor Centre café for help with the logistics on the day (not to mention some welcome ice-creams at the end of a hot afternoon).



Carnation Sedge *Carex panicea* (left) and Celery-leaved Buttercup *Ranunculus sceleratus* (right). Tony Mundell

Hatchet Pond survey – Saturday 21 May 2022

A report by Martin Rand

This event was intended to be a repetition of the survey carried out in 2015 to record a large suite of aquatic and wetland plants in the pond and its immediate surroundings on a hectare-by-hectare basis, chiefly to monitor any changes over time but also to rectify a few omissions from the original survey. This requires quite a large team to carry out satisfactorily; unfortunately, we didn't muster enough bodies for the task. I therefore changed the day's remit to a simpler one, to record a list of species without recent records wherever we could find them within the 1km square that embraces the pond and much of its surroundings.

On the day we split into two small teams, one of which started on the south and east of the pond, while the other worked the north and north-west. At lunchtime we planned to reconvene and switch sides so that everyone had a chance to see all habitats, but in the end we spent more time together on the northern fringes of the pond which we had not fully covered in the morning, and is especially rich. Finally, a smaller group went on to look around the gravel pit ponds on Hatchet Moor, which the first group had not covered in the morning.

The list of taxa not seen since 2009 was 155, surprisingly long for this impressively 'rich and famous' site, but it included quite a lot of common things that only a dedicated square-basher records, some casuals, and a few that looked decidedly dodgy. In addition to these were a good sprinkling of species that the New Forest and Hatchet are well-known for. Gratifying re-records and new records included Tawny Sedge *Carex hostiana* and its hybrid with Common Yellow-sedge *C. demissa*, Dodder *Cuscuta epithymum*, Bog Hair-grass *Aristavena setacea*, Confused Eyebright *Euphrasia confusa*, Heath Milkwort *Polygala serpyllifolia*, the hybrid *Potentilla* × *suberecta* which is the hybrid between Trailing Tormentil *P. anglica* and Tormentil *P. erecta*, Pale Dog-violet *Viola lactea* and its hybrid with Common Dog-violet *V. riviniana*. Of course, there was also an opportunity for participants to see many of the celebrated New Forest specialities that have had records in the last decade or so.

The planned second visit to Hatchet will be run on the same basis as this one and continue to chase up older records. It is likely that the detailed survey will be attempted again in 2023 as a joint meeting between the Hampshire Flora Group and the BSBI nationally. Watch out for fuller details in the next *Flora News*. Thanks go to Leanne Sergeant of Forestry England for expediting arrangements for these meetings.

St Mark's Meadow, Hatch Warren – Saturday 11 June 2022

A report by Tony Mundell



Hampshire Flora Group members at St Mark's Meadow. Tony Mundell

Ten people had booked for this visit. We did not do any recording because, with a group of others (Cathy Wilson, Isobel Girvan, Phil Collier and Robin Garnett) I had made a reasonably complete survey in the previous year on 20 May and 2 July 2021, listing 130 species. At the main meadow site, we met up with Paul Beevers

who described how he, and a few members of the Hatch Warren Nature Group, had produced the colourful display of native meadow plants on land owned by Basingstoke & Deane Borough Council. This had taken many years, starting in 2013/14. The council had tolerated the project but had provided the minimum amount of support, not allowing any power tools to be used, but agreeing to mow the areas concerned just annually around early September. The cut hay was turned over manually by the Nature Group to spread the seed, prior to removal of the arisings by the council to keep the soil fertility down.

Apart from a commercial mix of grass seed, seeds of wildflowers had been gathered from many different sites before being sown on the meadow. The seeds collected were of native and mainly perennial species. This contrasts with the frequently seen patches of sown annual 'wildflowers' loved by councils, that do encourage pollinating insects, but contain many non-native plants. A few of the scarcer species had been nurtured in cultivation before being planted out in plugs. Apart from the main meadow several nearby road verges had also been treated in a similar way and we also visited those.

St Mark's Meadow and those particular road verges are now bursting with colour and insects, and it was an opportunity for us to see how botanically rich a meadow or road verge can be. The current mania for frequently mowing road verges encourages grasses that are adapted to happily re-grow from their base. It deters nearly all wildflowers that are pollinated by insects, so the insects suffer too.

I was amazed to see so many Small Blue butterflies that had somehow discovered the abundance of flowering Kidney Vetch *Anthyllis vulneraria*, on which to lay their eggs. The dominant colour of the meadow changes significantly with the season and as with all sown meadows there is a change from year to year as plants fight each other to gain space. By the time of our visit the Meadow Saxifrage *Saxifraga granulata* was over and in seed (it was colouring patches white when we surveyed in May 2021). Yellow flowers were plentiful with much Yellow-rattle *Rhinanthus minor*, Kidney Vetch and Lady's Bedstraw *Galium verum*. White flowers of Hedge Bedstraw *Galium album* and Dropwort *Filipendula vulgaris* also featured. During the previous year's July survey, the dominant colour was blue from countless Small Scabious *Scabiosa columbaria*, but during our visit they were nearly all vegetative.

Searching carefully, we found many other species like Pale Flax *Linum bienne*, Common Rock-rose *Helianthemum nummularium* and Maiden Pink *Dianthus deltoides* amongst lots of Quaking-grass *Briza media*. Later Paul led us to several different road verges that had been treated in a similar way. Here we found Meadow Crane's-bill *Geranium pratense*, Common Broomrape *Orobancha minor*, Wild Clary *Salvia verbenaca* and Clustered Bellflower *Campanula glomerata*, with more Maiden Pink and Horseshoe Vetch *Hippocrepis comosa*. Hopefully the latter will eventually attract a breeding colony of Chalkhill Blue. Paul said that a couple of males had been spotted here in recent years.

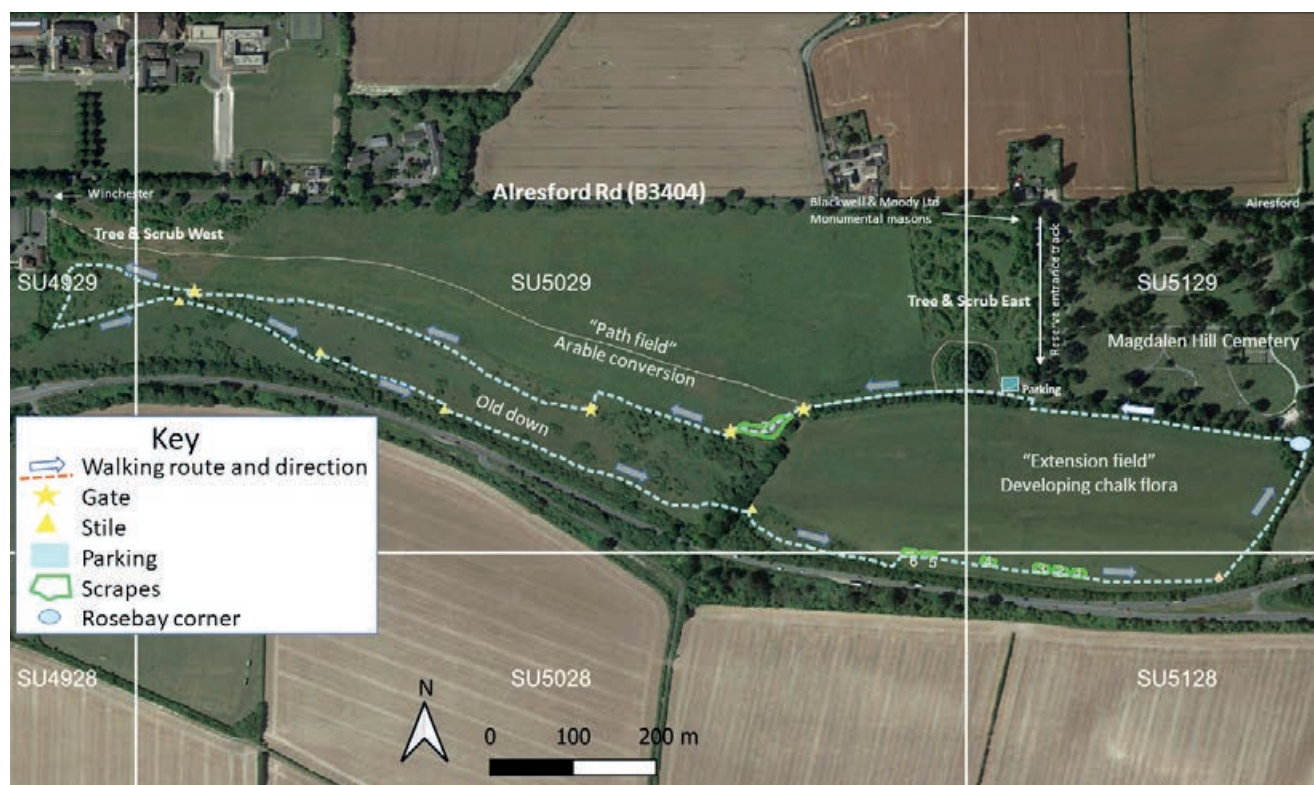


Top to bottom: **Horseshoe Vetch *Hippocrepis comosa*, Maiden Pink *Dianthus deltoides* and Meadow Crane's-bill *Geranium pratense*.** Tony Mundell

Magdalen Hill Down – Saturday 18 June 2022

A report by Anna Stewart

Eighteen people with a range of botanical experience gathered to enjoy the floristic and butterfly opportunities of Butterfly Conservation's premier reserve – Magdalen Hill Down. Established in 1998 on the original Old Down with its species-rich flora and offering fine views over the South Downs National Park, the reserve has been much added to and on this day of sensible weather we took in the Old Down and Extension Field.



Map of the Magdalen Hill Down Butterfly Conservation reserve showing named locations and route taken.

Dave Stewart's map shows our botanists' track which resembles a F1 circuit and sheepdog trial but avoided most of the steep slopes. Getting out of the car park can be difficult for many botanists but we were off and, in the company of Reserves Manager Fiona Scully we took a well-maintained path to the first and largest scrape, a sinuous structure carved out of the chalk down. This seemingly barren scrape provided ample opportunities to view some of the classic chalk flora plants individually and locate salient butterfly larval food plants – Horseshoe Vetch *Hippocrepis comosa* (Chalk Hill Blue and Adonis Blue), Kidney Vetch *Anthyllis vulneraria* (Small Blue), and Rock Rose *Helianthemum nummularium* (Brown Argus).

Mature Juniper *Juniperus communis* fringed the edges of the scrape with female plants blessed with tiny seedlings despite the obvious signs of rabbits. The Chalk Fragrant-orchid *Gymnadenia conopsea* plants were a new record for this scrape. Harebell *Campanula rotundifolia* excelled itself with surprisingly large flowers appearing rather early in the season. With less than one tenth of the course completed, botanists needed encouragement to exit the scrape, but we headed west on the top of the Old Down viewing the field to the north. This is home to skylarks and an arable conversion with stunning colours: pink – Sainfoin *Onobrychis viciifolia*; blue – Meadow Crane's-bill *Geranium pratense*; yellow – dandelion look-alikes, all of which Tony Mundell diligently ticked on his nifty shorthand recording sheets.

Lunchtime brought us to a lovely piece of turf replete with Stemless Thistle *Cirsium acaule* and larval food plants, Wild Thyme *Thymus drucei*, Rock Rose *Helianthemum nummularium*, Salad Burnet *Poterium sanguisorba* and Common Milkwort *Polygala vulgaris*. The area known as Tumulus Field straddles SU42Z and SU52E and has been much encroached by scrub but is now looking good with botanical treasures and well worth a late season visit.

We turned east and took a diagonal path across the Old Down, viewing Deacon Hill across the valley with its rare and threatened species the Duke of Burgundy butterfly. Our track merged with an ancient shady way where we found a good example of Knapweed Broomrape *Orobancha elatior*, obligate parasite of *Centaurea scabiosa*. Hemlock *Conium maculatum*, Hound's-Tongue *Cynoglossum officinale* and Upright Hedge-parsley *Torilis japonica* lined our way.

Meadowsweet *Filipendula ulmaria* was seen along the bottom of the slope with Male Fern *Dryopteris filix-mas* and increased amounts of Sweet Vernal-grass *Anthoxanthum odoratum*.

Some of our flock left us here but the remainder proceeded into the Extension Field to examine the remarkable arable reversion of 2010 with six scrapes. Soil had been removed from these relatively small areas to make a shelter ridge to the south, bare chalk then sown with meadow seed from local sources. Plug plants of Kidney Vetch and Horseshoe Vetch had then been planted. On our visit these plants were quite apparent as were numerous orchids – Common Spotted, Pyramidal and Fragrant. On this south-facing slope the chalk flora had developed well and was a delight to see and rather difficult to leave.

Heading north and back up the slope, we were nearing home but we had time to take in Rosebay Corner with two species of helleborine: White Helleborine *Cephalanthera damasonium* and Narrow-leaved or Sword-Leaved Helleborine *C. longifolia*, the latter being a most unusual find by Dave Pearson in 2019. We were too late for the flowers, but there was much speculation about the possibility of a hybrid, some plants having intermediate vegetative characteristics.

Butterflies were rather sparse on our visit; we had hit the 'June Dip' in between emerging broods and the most frequently seen were Marbled White (including one caught by a crab spider – see photo) and Meadow Brown. July and August would see the emergence of Chalkhill and Adonis Blues.

Before we disbanded, Fiona Scully gave us some insight into the future of the reserve:

'We manage the reserve to maintain the classic downland turf on the hillside, to benefit the short turf loving species, such as the Small Blue and Chalkhill Blue. The restored species-rich arable reversion fields are managed to ensure habitat continuity, diversity and to provide long grass habitats with varied structure. We are looking to create more scrapes, target-graze the remaining original chalk grassland on the Extension Field and continue clearing invasive scrub. Butterfly Conservation is working in the wider landscape to create additional habitat patches and provide corridors to connect areas of suitable habitat. These are small steps, but an incredible amount has already been achieved and Magdalen Hill Down is testament to that.'

Thanking Fiona for her amazing work on the reserve, we returned to the car park, having only taken five hours to complete the course filled with botanical delights. Magdalen Hill Down is a Hampshire treasure and we will be returning.



A female crab spider *Misumena vatia* with a Marbled White butterfly (the male spider is also visible on the left side of the leaf). Catherine Chatters



Chalk Fragrant-orchid *Gymnadenia conopsea*. Catherine Chatters

Southwood Country Park, Farnborough – Saturday 25 June 2022

A report by Tony Mundell

Unfortunately, I have to report that I decided to cancel this meeting at the last moment as so few people had booked a place. I had spent two separate days marking GPS waypoints for plants and deciding on routes for the proposed morning and afternoon sessions though, as suspected, there were few rarities as the event was really aimed at showing common plants to relative beginners in botany. The one really surprising plant that I found was Sea Couch *Elymus athericus*. This is a coastal species with only one previous record in VC12. As the patch of it was at a roadside entrance gate to the park, it had presumably arrived via seed, and perhaps it was associated with salt spread on the road in winter.

I had only three bookings and I happened to meet up with two of those people a few days before the event. One said she wanted to cancel and the other said she was really too busy writing reports for work to attend, so after that I decided to cancel. In the end I spent 25 June with a few others counting the Musk Orchids at Noar Hill (we counted 2,589!).

I think it is worth advertising this event again as a Flora Group meeting in 2023.

Chilbolton Down Farm – Saturday 2 July 2022

A report by Tristan Norton

It was with some trepidation that I arrived early for this, my very first Flora Group meeting and as joint leader to boot. Tony Mundell and I had made a recce visit a fortnight earlier and, to be honest, I was worried that we simply wouldn't find enough to keep a group of keen and experienced botanists interested. Would everyone be bored? Unimpressed? Annoyed? I really needn't have worried, and the fifteen very friendly attendees all had a good time and came away having seen a decent variety of species on the mid-Hampshire chalk.

The main reason for my nervousness was that the estate had carried out widespread verge cutting in the preceding weeks: perfectly logical for them of course but not the best outcome for botanists! In addition, cereal crops dominated the estate fields this year, with margins of minimal width and all sprayed-off in early season. It wasn't looking that promising for arable species either!

Anyway, this being my first ever HFG visit I was soon initiated into the 'don't leave the car park for ages' routine as a *Geranium* triggered some discussion: it turned out to be Shining Crane's-bill *G. lucidum* and not Little Robin *G. purpureum*. It was time to move on.

The Estate is sizeable, and comprises numerous large arable fields interspersed by hedgerows, woodland blocks, tree belts and wide grassy verges. It's not far from home for me and I've been wandering around the accessible parts of it for years and have seen some mouth-watering arable species: it was great to be able to explore in more detail.

The first point of interest was a fine stand of Leafy Spurge *Euphorbia esula*, first recorded in the 1990s and still there. Despite the verge mowing, this spot also yielded a good number of Broad-leaved Helleborines *Epipactis helleborine* and typical chalky herbs such as Wild Basil *Clinopodium vulgare*, Bladder Campion *Silene vulgaris*, Yellow-rattle *Rhinanthus minor*, Burnet Saxifrage *Pimpinella saxifraga* and Field Scabious *Knautia arvensis*.

A field corner nearby gave us our first selection of arable species, with Common Fumitory *Fumaria officinalis*, Dense-flowered Fumitory *F. densiflora*, Dwarf Spurge *Euphorbia exigua*, Grey Field-speedwell



Leafy Spurge *Euphorbia esula*. Tristan Norton

Veronica polita and Black Bindweed *Fallopia convolvulus* amongst others.

After navigating a couple of locked field gates (a true team effort to get everyone over!), we hit the first of the really good arable margins. This one held plenty of Dense-flowered Fumitory alongside Small Toadflax *Chaenorhinum minus*, Stinking Chamomile *Anthemis cotula*, Rough Poppy *Roemeria hispidula* and Long-headed Poppy *Papaver dubium*.

After a relaxed lunch on the verge we then entered the jungle. Brockley Warren SSSI is a small chalk downland site that has sadly been essentially unmanaged for at least two decades and is a textbook case of chalk downland succession: it desperately needs scrub removal and grazing. We got everyone in safely and navigated our way to the remaining open areas amongst the dense Buckthorn *Rhamnus cathartica* scrub. Tony's main mission was to get to the last remaining Juniper *Juniperus communis* shrub. The site had been surveyed for Juniper in 1969 and there was a fine population of c. 100 plants back then. Sadly, only the one female plant remains but it was looking okay despite being nearly swamped by surrounding scrub and trees.

Where the scrub is kept in check by deer and rabbits, some fairly decent chalk grassland persists. The most significant find was Common Valerian *Valeriana officinalis* subsp. *collina*, seemingly the first Hampshire record since 1873 for this subspecies. Tony suggests that it's probably widespread on chalk sites but as no-one routinely records subspecies it's clearly under recorded.

The remnant chalk grassland contains frequent Dropwort *Filipendula vulgaris* and some good patches of Common Rock-rose *Helianthemum nummularium*. Other interesting species included Hoary Plantain *Plantago media*, Pyramidal Orchid *Anacamptis pyramidalis* and an as-yet-unidentified Eyebright *Euphrasia* sp. I brought along a pheromone lure for Orange-tailed Clearwing *Synanthedon andrenaeformis* and we were soon rewarded with several of these lovely moths.

Once we'd exited the SSSI we headed through a shady wooded track to emerge at a fine species rich track verge. Having passed by a stunning deep pink Yarrow *Achillea millefolium* (see cover of this issue) and several crispy spikes of Knapweed Broomrape *Orobancha elatior* (with its Greater Knapweed *Centaurea scabiosa* host in abundance) a particularly rich patch of grassland gave us flowering Sainfoin *Onobrychis viciifolia*, Common Restharrow *Ononis repens*, Field Scabious and Small Scabious *Scabiosa columbaria* and some interesting grasses such as Crested Hair-grass *Koeleria macrantha* and the hybrid between Perennial Ryegrass and Meadow Fescue × *Schedolium loliaceum*.

The adjacent field margin was very productive, and we found several flowering plants of the lovely, and now very scarce, Venus's Looking-glass *Legousia hybrida*. There was a good display of Dense-flowered Fumitory and Common Fumitory but alas we couldn't find the rare Fine-leaved Fumitory *F. parviflora* that was last recorded here in 2020. [I did in fact manage to find five plants of *parviflora* on a visit a few days later – we just



An arable field margin at Chilbolton Down (top); Venus's Looking-glass *Legousia hybrida* (bottom). Tristan Norton

didn't search hard enough it seems!]. This richness of scarce arable species is very encouraging and shows what is possible on chalky farmland.

Heading back along a particularly lengthy arable margin on our way to the cars, we found a rich vein of arable species. Most notable were perhaps hundreds of examples of the lovely Round-leaved Fluellen *Kickxia spuria*, alongside copious Small Toadflax and Common and Dense-flowered Fumitories.

All in all a very enjoyable visit in good company. Like much of the farmed landscape, much is quite hostile to wild plants but there are pockets of high-value habitat which still support some wonderful species. Our thanks to the Chilbolton Down Farm Estate for facilitating this visit.

Winchester College – Sunday 17 July 2022

A report by Martin Rand

Because of the high temperatures and the exposed nature of much of the terrain we would be visiting, it was reluctantly decided to cancel this event. Earlier reconnoitres showed us that there was much of interest in the former water meadows, in the designated nature reserve area and in wilder parts of the formal college gardens where the gardening team are working to safeguard the native flora including several orchid species. Expect to see a new date for this to be arranged a little earlier in the season for 2023.

Learning plant families online workshop Part 4 – Saturday 13 August 2022

A report by Martin Rand

There was not sufficient interest in this event to justify running it, so it will be rescheduled for summer 2023 (the health situation permitting) as a 'face to face' workshop in one of the Wildlife Trust's centres, running over a weekend. The first day will be dedicated to presentations and bench ID, the second to a field trip.

Notes and Features

The BSBI LORE project

A note by Tony Mundell

The BSBI LORE (Lost Rarities in England) project got underway in Hampshire in 2022 within both VC11 and VC12. This is just a brief update for VC12. Several Flora Group members have been searching to try to re-find particular plants that were recorded before 2000 but have not been recorded since anywhere in the same whole 10km × 10km grid square (called a hectad). So, the idea is to turn some of the lonely 'red dots' on distribution maps into 'green dots' by re-finding the plant at its former location. The project is a bit of a misnomer because some of the species are not strictly rarities but may be restricted to particular areas in the county.

If you visit our Hants Plants website at <https://www.hantsplants.uk> and navigate to Projects/LORE Project, you will find background information about the project, including guidelines on what to record and how to submit records. If you only visit a few sites, it is easiest to just send the information to me in an email, quoting the E or W record number. If it is obvious why the plant was not re-found, e.g., the pond it was in has been filled in, or the vegetation is too overgrown then please let me know. If a plant is not re-found, whenever I can, I will amend the original record to say that it was not re-found by you on the search date. When a plant is re-found of course I will add a new record so that there is now a 'green dot' (a post-2000 record) within that whole 10km × 10km grid square.

The suggested searches list 123 previous records in the west part of VC12 and 240 in the east half, so 363 previous records in all.

So far, at the time of writing (in August 2022) 73 searches have been made but the re-find rate is rather low with 15 re-found and 58 not re-found. Perhaps this just indicates that plants right on the edge of their Hampshire distribution due to soil conditions, etc. are those most likely to disappear when stressed. However, 'not re-found' does not necessarily mean that the plant is lost there, and a different pair of eyes might re-find it.

I have not been able to participate in searches as much as I originally intended, partly because very few people have responded to join me on the dates advertised on our Hants Plants website. The poor re-find rate is also a bit of a deterrent, as is the cost of petrol, but I am hoping that some of you can just concentrate on searches in your own local areas. If you do go on a LORE search do check first whether particular records have already been searched for, by looking at the updated version of the VC12 listing on the following Dropbox link:

<https://www.dropbox.com/s/6ubpik9aecsyixp/Updated%20LORE%20records%20in%20VC12.xlsx?dl=0>

I continue to update this file as I receive LORE records. There is certainly no point in searching if the plant has already been re-found.

Early years of the Hampshire Flora Group

A note by Tony Mundell

In the previous issue of *Flora News* Catherine Chatters included an article on the early history of the Flora Group. As Catherine noted, following the first suggestion in 1988 of a group being formed, Andy Byfield, then of the Nature Conservancy Council (NCC), was asked to prepare a discussion paper regarding the aims and functions of the proposed group.

One of several aims that Andy highlighted was 'to manage populations of plants as and when such action was required' and as examples of this he wrote that small scale management work could be done by the proposed group to benefit rare plants such as Pale Butterwort *Pinguicula lusitanica* and Red-tipped Cudweed *Filago lutescens* in their sole North Hampshire sites. Here I want to expand on that a bit.

Referring to the Pale Butterwort Andy wrote: '*In the 1970s hundreds of thousands of plants of Pale Butterwort could be found lining the ditches within Eelmoor Marsh Site of Special Scientific Interest (SSSI) – by the mid-1980s the ditches were overgrown and not a plant was to be seen. Four man-hours of work shaving fifty metres of ditch-sides of coarse vegetation during the winter of 1986/87 resulted in the appearance of a few hundred plants of this rare species. More work needs to be done...*'

Originally the ditches were maintained in rotation by contractors using manual digging in the winter. This was to avoid local flooding of the adjacent Farnborough Airfield. To save money this work eventually ceased and sadly some of the open ditches were replaced with pipes and filled in. The remaining ditches rapidly became overgrown. It was Andy who suggested to me using our own spades to re-open a ditch. I was very sceptical that it would work, but that was long before I appreciated how persistent seed can be in the soil. Currently we are back to many thousands of plants of Pale Butterwort at Eelmoor Marsh and that is mainly due to Marwell Zoo getting a contract to manage the site that is now owned by QinetiQ. Marwell have now managed the site for about 25 years. Every winter, in addition to much mowing and scrub-cutting, a JCB digger is used to lightly scrape boggy areas, leading to many rarities like the Pale Butterwort germinating from the seed bank.

Another example that Andy gave in his discussion paper was the Red-tipped Cudweed *Filago lutescens*. He wrote: '*In 1985 no plants of the Red-tipped Cudweed could be found in its North Hampshire locality despite only being discovered in the early 1980s. Work during the winters of 1985/6 and 1987/8 revived the colony and this year 38 strong plants will ensure a good seed (bank) for the 1980s and hopefully beyond. However, it will need management at least every other year...*'

In fact, the Red-tipped Cudweed was first found there by Lady Anne Brewis on 5 September 1980. Knowing that I lived nearby, she telephoned me about it, and I photographed it the following day. After it had disappeared for a few years, Andy persuaded me that the site needed soil disturbance and in March 1986 together we hired a rotavator to till the soil (see *photo*). That disturbance worked and plants appeared later that year.

Annual soil disturbance was then done manually with spades and forks every single year for 24 years 1986–2010, by volunteer work parties led by me or by Chris Hall in the winter months. This led to counts as high as c.2,250 plants in 2004. Over the years it became progressively harder to muster volunteers and with much help from Nicky Court of the Hampshire Biodiversity Information Centre, Hampshire County Council (HCC) were persuaded to take over management of the site. It is registered by HCC as an RVEI (Road Verge of Ecological Importance) with a specific management plan that calls for an annual rotavation in the winter months and also limits the times when mowing is permitted.

HCC first took over the soil disturbance using a rotovator in December 2010 (just after the last two or three volunteers had tried disturbing it with spades in September 2010). However, HCC's winter works have been sporadic, and in most recent years relatively few Red-tipped Cudweed plants have been found. The site often has a dense thatch of grasses where annuals cannot germinate. Worse than that, about half of the formerly open site is now covered in dense trees due to natural succession.

The photo taken in 1986 shows how the site extended right up to the fence of Broomhurst Farm. In the recent photo that fence is lost from view behind trees.

In the last couple of decades, the practice of frequent mowing of road verges has often led to any flowering plants of Red-tipped Cudweed being mown off, though who does this mowing is disputed. Of course, mowing of flowering Red-tipped Cudweed is illegal as the plant is supposed to be protected by Schedule 8 of the Wildlife & Countryside Act, 1981 (as amended).

I was aware that HCC did an excellent (if very late!) job of rotavating the site last March, so I visited the site on 9 July 2022 and was delighted to find 20 robust plants of *Filago lutescens*. So, although it has teetered on the edge of extinction in Hampshire for many years it is still just hanging on. Realistically, its days are numbered because it is not in its 'correct' habitat of a regularly tilled, sandy arable field edge. The sad truth is that such edges are usually dosed in herbicides.

At the same time in 2010 that HCC took over the management of the Red-tipped Cudweed site, it also took on the scrub-cutting at the Tower Mustard *Turritis glabra* site at Kingsley. This is another registered RVEI and has a similar history because between 1986 and 2010 I used to organise groups of people to help me cut away the scrub growth that threaten this very rare plant. Unlike the annual Red-tipped Cudweed work, we found that scrub removal was only necessary every three or four years. Steve Povey and others searched hard for the Tower Mustard on 12 July 2020 but reported that for



Top to bottom: Andy Byfield rotavating the Red-tipped Cudweed site on 22 March 1986; the present-day site photographed on 9 July 2022; close-up of flowers of Red-tipped Cudweed *Filago lutescens*. Tony Mundell

the first year ever no plants at all could be found. I searched myself with Eric Clement and Andrew Powling on 25 July 2022 and we also failed to find any mature plants or even next year's tiny rosettes. However, I later found that Joel Miller (of HBIC) had seen two plants there on 23 June 2022 and he sent me a photo of one in green fruit. I do not know if HCC did the requested work there this time. I have no doubt that seeds will still be present in the soil and if there is some soil disturbance caused by future scrub removal it will return.

Andy's discussion paper continued with: '*Whilst the Trust and NCC amongst others have organised these and similar tasks in the past, much remains unmanaged. The Group would be able to mastermind and coordinate annual programmes of work to ensure that no further rare species are lost from the county*'. Sadly, NCC's current replacement Natural England certainly has no resources to undertake such tasks, and the Flora Group has not developed in that direction as Andy had hoped. Sadly, some native plants are continuing to go extinct in Hampshire.

Andy also wrote that the Group '*might also endeavour to undertake management work in especially rich botanical spots (though with no great rarities): fens, bogs, ponds, etc. immediately spring to mind. It could also put its mind to clearing particularly noxious alien plants in good areas – Crassula helmsii might be a prime candidate*'. At least work on trying to remove invasive aliens from the New Forest is now being addressed by Hampshire & Isle of Wight Wildlife Trust, and other organisations like the Wessex Rivers Trust and the Fleet Pond Society are doing similar work in other areas. A few members of the Fleet Pond Society have recently removed literally thousands of plants of American Skunk-cabbage *Lysichiton americanus* from around the pond.

I wish to acknowledge Catherine Chatters for providing me with extracts from Andy Byfield's original discussion paper.

A springtime saunter in the streets

An article by Cathy Wilson

Walking along a street in Alton at the end of April 2022 I spotted either Common Cornsalad *Valerianella locusta* or Keel-fruited Cornsalad *V. carinata* flowering freely in the cracks between the pavement and a wall. Shortly after came a gathering of Greater Quaking-grass *Briza maxima* crowding outside the local Conservative Party HQ – was it shaking or nodding its great dangly heads?

These were a welcome prod to curiosity at a time when I was feeling despondent about botany, suffering a post-winter low of rusting memory for names and poor confidence in identification skills. I recalled too that I've found many more species flowering in urban areas than rural ones when taking part each year in BSBI's New Year Plant Hunt so a wander around the streets to see what other pavement plants I could find seemed a gentle way to scrape off some winter rust.

Defining a pavement plant is perhaps the trickiest part of urban botany. My approach was to:

- include plants growing in grass verges and strips between pavements and buildings but not in large grassy recreation areas (e.g. I excluded The Butts green);
- include garden plants that had made a successful break for it and were thriving beyond the immediate boundary of any particular garden;
- include species generally regarded as 'weeds' growing at the pavement boundary of private properties that would not have been planted or, probably, welcome there;



Greater Quaking-grass *Briza maxima* shaking or nodding its heads at the Conservative Party HQ? Cathy Wilson

- exclude both garden and 'wild' species on the external fringes of private properties if they were clearly being cultivated (e.g. on banks or as 'wildflower margins');
- exclude trees, large shrubs and (so as not to hold myself up with unwanted identification headaches) most grasses. I also didn't attempt any Bryophytes.

I decided to stick within one monad, SU7138, though in three hours or so I covered only a small proportion of roads within it.

None of the plants I spotted was rare or particularly unexpected in an urban setting, though it was a little odd to see Bluebells *Hyacinthoides non-scripta* struggling against the tarmac, a mangled Winter-cress (either *Barbarea intermedia* or *B. verna*) bravely flowering horizontally against the odds and (undoubtedly 'Plant of the Monad') that Cornsalad that started me off, waving its dainty bouquets of tiny pale blue flowers from nooks and crannies in every street.

The biggest surprise for me was simply the number and variety of plants. I clocked up 116 species (see list on next page); and what I noted must have been little more than a tiny snapshot of what's there. Of these, only four had previously been recorded in the monad, giving 112 new records. This figure gives a skewed view of reality, as for Atlas 2020 we recorded species by tetrad and SU7138 was not the principal monad recorded for its tetrad. Nevertheless, I picked up 10 new species for the tetrad that had not been recorded before.

All of which shows how much there is to find in towns – and how much fun a botanist may have wherever they care to roam, even in apparently unwelcoming settings for plants. If you fancy something a little different, I recommend an urban stroll with a notebook.

Footnote by Tony Mundell: Cathy originally identified the cornsalad as Common Cornsalad *Valerianella locusta* but without seeds to examine, this species can't really be separated from Keel-fruited Cornsalad *V. carinata*, which is spreading rapidly and is now at least as 'common' as *V. locusta*. Cathy originally identified the winter-cress as Common Winter-cress *Barbarea vulgaris*, but the pinnately divided upper leaves in her photo show that it must be either Medium-flowered Winter-cress *B. intermedia* or American Winter-cress *B. verna*.



A cornsalad, either *Valerianella locusta* or *V. carinata*, plant of the monad. Cathy Wilson



A winter-cress, either *Barbarea intermedia* or *B. verna*, hugging the road to avoid any passing mowers. Cathy Wilson



Hedgerow Crane's-bill *Geranium pyrenaicum*, a long way from a hedgerow. Cathy Wilson

Species spotted in SU7138, May 2022

Scientific name	Common name
<i>Achillea millefolium</i>	Yarrow
<i>Aegopodium podagraria</i>	Ground-elder
<i>Alchemilla mollis</i>	Soft Lady's-mantle
<i>Alliaria petiolata</i>	Garlic Mustard
<i>Allium ursinum</i>	Ramsons
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Aphanes arvensis</i>	Parsley-piert
<i>Aquilegia vulgaris</i>	Columbine
<i>Arctium minus</i>	Lesser Burdock
<i>Arum maculatum</i>	Lords-and-Ladies
<i>Asplenium ruta-muraria</i>	Wall-rue
<i>Asplenium scolopendrium</i>	Hart's-tongue
<i>Aubrieta deltoidea</i>	Aubretia
<i>Barbarea intermedia</i> or <i>verna</i>	Medium-flowered or American Winter-cress
<i>Bellis perennis</i>	Daisy
<i>Briza maxima</i>	Greater Quaking-grass
<i>Buddleja davidii</i>	Butterfly-bush
<i>Calystegia silvatica</i>	Large Bindweed
<i>Capsella bursa-pastoris</i>	Shepherd's-purse
<i>Cardamine hirsuta</i>	Hairy Bittercress
<i>Carex sylvatica</i>	Wood-sedge
<i>Centranthus ruber</i>	Red Valerian
<i>Cerastium fontanum</i>	Common Mouse-ear
<i>Cirsium vulgare</i>	Spear Thistle
<i>Clematis vitalba</i>	Traveller's-joy
<i>Convolvulus arvensis</i>	Field Bindweed
<i>Crepis capillaris</i>	Smooth Hawk's-beard
<i>Cymbalaria muralis</i>	Ivy-leaved Toadflax
<i>Dactylis glomerata</i>	Cock's-foot
<i>Dipsacus fullonum</i>	Wild Teasel
<i>Epilobium hirsutum</i>	Great Willowherb
<i>Epilobium montanum</i>	Broad-leaved Willowherb
<i>Epilobium parviflorum</i>	Hoary Willowherb
<i>Epilobium tetragonum</i>	Square-stalked Willowherb
<i>Erodium cicutarium</i>	Common Stork's-bill
<i>Erophila verna</i>	Common Whitlowgrass
<i>Euphorbia amygdaloides</i>	Wood Spurge
<i>Euphorbia peplus</i>	Petty Spurge
<i>Ficaria verna</i>	Lesser Celandine
<i>Foeniculum vulgare</i>	Fennel
<i>Fragaria vesca</i>	Wild Strawberry
<i>Galium album</i>	Hedge Bedstraw
<i>Galium aparine</i>	Cleavers
<i>Geranium lucidum</i>	Shining Crane's-bill
<i>Geranium molle</i>	Dove's-foot Crane's-bill
<i>Geranium pyrenaicum</i>	Hedgerow Crane's-bill
<i>Geranium robertianum</i>	Herb-Robert
<i>Geum urbanum</i>	Wood Avens
<i>Glechoma hederacea</i>	Ground-ivy
<i>Hedera helix</i>	Common Ivy
<i>Helleborus foetidus</i>	Stinking Hellebore
<i>Heracleum sphondylium</i>	Hogweed
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Hordeum murinum</i>	Wall Barley
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Hyacinthoides × massartiana</i>	Hybrid Bluebell
<i>Hypericum perforatum</i>	Perforate St John's-wort
<i>Hypochaeris radicata</i>	Cat's-ear
<i>Jacobaea vulgaris</i>	Common Ragwort

Scientific name	Common name
<i>Lamium album</i>	White Dead-nettle
<i>Lamium purpureum</i>	Red Dead-nettle
<i>Lapsana communis</i>	Nipplewort
<i>Leucanthemum vulgare</i>	Oxeye Daisy
<i>Linaria purpurea</i>	Purple Toadflax
<i>Lotus corniculatus</i>	Common Bird's-foot Trefoil
<i>Lysimachia arvensis</i>	Scarlet Pimpernel
<i>Lysimachia nummularia</i>	Creeping-Jenny
<i>Malva sylvestris</i>	Common Mallow
<i>Medicago arabica</i>	Spotted Medick
<i>Medicago lupulina</i>	Black Medick
<i>Myosotis arvensis</i>	Field Forget-me-not
<i>Myosotis sylvatica</i>	Wood Forget-me-not
<i>Oxalis corniculata</i>	Procumbent Yellow-sorrel
<i>Papaver rhoeas</i>	Corn Poppy
<i>Papaver somniferum</i>	Opium Poppy
<i>Pentaglottis sempervirens</i>	Green Alkanet
<i>Pilosella aurantiaca</i>	Fox-and-cubs
<i>Plantago coronopus</i>	Buck's-horn Plantain
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Plantago major</i>	Greater Plantain
<i>Poa annua</i>	Annual Meadow-grass
<i>Polygonum aviculare</i>	Knotgrass
<i>Primula vulgaris</i>	Primrose
<i>Pseudofumaria lutea</i>	Yellow Corydalis
<i>Pulmonaria officinalis</i>	Lungwort
<i>Ranunculus acris</i>	Meadow Buttercup
<i>Ranunculus bulbosus</i>	Bulbous Buttercup
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Rubus fruticosus</i> agg	Bramble
<i>Rumex crispus</i>	Curled Dock
<i>Rumex obtusifolius</i>	Broad-leaved Dock
<i>Sagina apetala</i>	Annual Pearlwort
<i>Sagina procumbens</i>	Procumbent Pearlwort
<i>Senecio vulgaris</i>	Groundsel
<i>Silene dioica</i>	Red Campion
<i>Sisymbrium officinale</i>	Hedge Mustard
<i>Soleirolia soleirolii</i>	Mind-your-own-business
<i>Sonchus asper</i>	Prickly Sowthistle
<i>Sonchus oleraceus</i>	Smooth Sowthistle
<i>Stachys sylvatica</i>	Hedge Woundwort
<i>Stellaria media</i>	Common Chickweed
<i>Symphytum × uplandicum</i>	Russian Comfrey
<i>Taraxacum</i> agg.	Dandelion
<i>Trifolium dubium</i>	Lesser Trefoil
<i>Trifolium repens</i>	White Clover
<i>Tripleurospermum inodorum</i>	Scentless Mayweed
<i>Urtica dioica</i>	Common Nettle
<i>Valerianella locusta</i> or <i>carinata</i>	Common or Keel-fruited Cornsalad
<i>Veronica arvensis</i>	Wall Speedwell
<i>Veronica chamaedrys</i>	Germander Speedwell
<i>Veronica hederifolia</i>	Ivy-leaved Speedwell
<i>Veronica persica</i>	Common Field-speedwell
<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell
<i>Viola odorata</i>	Sweet Violet
<i>Viola riviniana</i>	Common Dog-violet

The Queen's green canopy – but what grows beneath it?

A request for help by Sue Bell

Can you assist us total novices, to check for interesting species, and consider appropriate care of these trees? Thirty years ago a 'Commemorative Planting' was made in the middle of Micheldever Wood (car park grid ref: SU 5291 3624). Forty trees were planted in a wide avenue, one tree for each year of the Queen's reign. The species chosen are native to Britain and are indigenous to the region.

On 5 June 2022 I revisited this 30-year-old site with a group of children. We identified 28 of the trees which continue to grow in their original positions. We scored each plant with points out of 5, on a very basic checklist, as follows (score 1 point for each of the following): (1) the tree still exists, (2) strong growth in the crown of the tree, (3) new growth evident this year, (4) no flaking, cracks or cavities in the bark/trunk and (5) no plants encroaching or restricting growth. Only 13 of the original 40 plants achieved 5/5.

We appreciate that this planting took little heed of preferred companion plants and individual habitat but I believe it has much to teach us in that respect. I would like to gain opinions regarding:

- capitalising on the learning experiences afforded by this planting;
- the range and nature of the species of flora that have colonised the avenue beneath the trees;
- whether any ancient woodland plants that had lain dormant beneath the more recent beech plantation have taken advantage of the present management regime;
- whether any of these specimens (e.g. Juniper) should be released from vegetation that tethers them, restricts their growth, and causes branches to snap;
- methods of informing the public of the significance of this planting. The original signage disintegrated many years ago. Might use of QR codes for each tree be a sensible option?
- how best to ensure this Commemorative Planting remains for posterity?

I would greatly appreciate any suggestions, observations or site visits with a botanist/ecologist who might share my curiosity regarding this interesting feature in the heart of Micheldever Wood. If you are interested in helping me or would like to find out more, please contact me via email at suebello906@gmail.com and I will then happily arrange to meet you in the car park on a mutually convenient date. Thank you.



The 1992 Commemorative Planting in Micheldever Wood (photographed 18 January 2022) and list of species.
Sue Bell

Spotting features and identification of Hard Fescue

An article by John Norton

Hard Fescue, currently *Festuca trachyphylla* (Hack.) R.P. Murray in Stace (2022), but also known as *Festuca brevipila* R. Tracey is an introduced grass used in lawn grass mixtures, and according to Stace (2019) is also 'naturalised on roadsides, commons and rough ground especially on acid well-drained soils'. Stace describes its UK distribution as 'frequent in central and southern England, very scattered elsewhere' but 'greatly under-recorded'. It originates from Europe but is also introduced in North America. Cope & Gray (2009) give further details on its UK distribution and notes it was probably introduced into Britain from Germany in the early part of the 19th century. There is some useful background information on its taxonomy and British distribution in Wilkinson & Stace (1988).

Until last year I had only seen Hard Fescue on a handful of occasions around Gosport, mostly by accident when collecting small samples of grasses whilst out botanising. I had seen it once in a grassy verge at the edge of a cycleway next to an industrial estate, once on a road verge and once on a coastal bank, all on dry, acidic soil and probably all growing as single plants or small clumps.

On 15 May 2021 I was carrying out surveys of Portsmouth Water's Farlington waterworks site where on one of the large, soil-covered reservoirs I noticed abundant small tussocks of a fescue with rather thin, wiry-looking, glaucous leaves. These were growing on chalky soil underneath a sward of Upright Brome *Bromopsis erecta*, together with a variety of typical chalk grassland herbs and species of dry, disturbed calcareous soils.

The fescue was already almost past flowering, so I picked a few plants for later inspection at home. I was quite excited at the possibility that this could be *Festuca longifolia* Thuill. (Blue Fescue) a presumed native in the UK with the main known populations in the Suffolk Brecks and south Devon, and also recorded from the Isle of Wight. Historically there has been a lot of taxonomic confusion over blue-leaved fescues which I won't delve into here; the one which can be purchased from most garden centres is Glaucous Fescue *F. glauca* Vill. Eventually, however, and after a lot of detailed study, I decided that my plant was in fact Hard Fescue *F. trachyphylla*. My specimen was confirmed by the referee, Arthur Copping, and checked by Mike Wilcox.

I paid a later visit to the reservoir on 8 July, when thanks to some summer rain, the site was looking a little lusher than the earlier May visit, though still very dry. The tussocks are locally frequent in evenly spaced groups over nearly the whole reservoir area of just over 1ha, so there are probably many thousands of plants present. Although it had finished flowering I was able to take a few photos and collected some rooted plants for my garden (figuring that this would definitely not harm the population). The soil here is a layer no more than 50cm deep on top of the concrete-covered reservoir so typically dries out completely by mid-summer. The reservoir



Habitat of Hard Fescue *Festuca trachyphylla* on a soil-covered reservoir, Farlington waterworks, 8 July 2021 (left) and closer view with small tussocks of the Fescue marked with dots (right). John Norton

also supports a number of annual species of disturbed or bare calcareous habitats, including abundant Dwarf Spurge *Euphorbia exigua*, Field Madder *Sherardia arvensis*, Hop Trefoil *Trifolium campestre* and Pale Flax *Linum bienne*. Other frequent grasses include two other noteworthy species of dry, calcareous habitats: Flattened Meadow-grass *Poa compressa* and Fern-grass *Catapodium rigidum*. There is also a high cover of mosses, particularly the chalk grassland species *Homalothecium lutescens*.

I grew on the rooted plants in my patio, but these didn't really come into full flower until mid May 2022. I suspect that *F. trachyphylla* may often start to flower from late April onwards, but mid May may be the main start of its flowering period. Cope & Gray note that the flowering (and fruiting) period is early May to early July (Table 1). I found a small patch of the species again this year at Haslar Cemetery in Gosport on 10 May; this had fully formed panicles but no sign of any anthers.

Identification

My description of the Farlington specimen was as follows: 'Forming small dense tussocks of strongly glaucous, slightly curved leaves. Tillers intravaginal. Leaves mainly c.10–20cm long, folded with rounded midrib, 0.95–1.1 mm across [i.e. width of the folded leaf]; leaves and sheaths glabrous to minutely pubescent. Culms c.25–40cm. Lower glume c.2 mm; upper glume 3.2 mm; lemma glabrous to pubescent 3.5–4 mm + awn 1.5–2.5 (2.8) mm; palea c.4 mm; anthers 2.8–3 mm; pedicels very variable, the basal one longest and exceeding 1 cm in one case'.

This keys out to *F. brevipila/trachyphylla* using either Stace (2019) or Cope & Gray (2009) mainly because the basal pedicels and awns are too long for *F. longifolia*. Cope & Gray (2009) state that pedicels in *F. longifolia* are up to 1 mm and awns 1.2–2.2 mm, compared to 1.7–3 (3.5) mm and 2–3.2 mm for *F. trachyphylla*. Stace (2019) gives slightly different measurements, maybe reflecting the fact that Cope & Gray (2009) examined a wider range of material. I've compared the measurements of these two sources and my plants in Table 1, along with some other characters, but it can be seen from the table that the anthers, glumes and lemma of the two species are very similar in length, so the pedicel and awn length are by far the most useful distinguishing characters.

Due to the relatively long leaves and panicles, and the long awns, the general appearance of *F. trachyphylla* is in fact most similar to *Festuca rubra* (Red Fescue), but it is a simple matter to differentiate from that due to the open sheaths. These are easiest to check on the younger tillers where they are clearly open with loosely overlapping margins.

On closer examination of the plants in my garden I noticed that the leaf margins of *F. trachyphylla* are minutely scabrid, making them rough to the touch. This might be a good way of quickly differentiating from leaves of *F. rubra*, which I believe are usually smooth. I've also realised that the scabrid leaf margins are probably what gives the leaves their glaucous colour. Leaves of fresh plants laid flat or viewed from the side appear dark green



Hard Fescue *Festuca trachyphylla* specimen.
John Norton

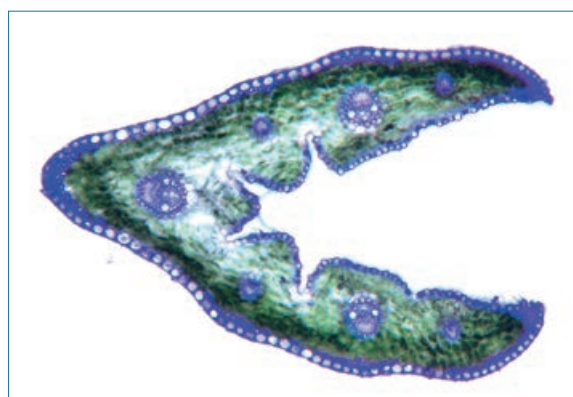
Table 1. Comparison of *Festuca trachyphylla* and *F. longifolia*.

Character	<i>Festuca longifolia</i>	<i>Festuca trachyphylla</i>
Pedicle length	0.6–1mm (Cope & Gray 2009) 0.5–1.8mm (Stace 2019)	1.7–3(3.5)mm (Cope & Gray 2009) 1.2–2.8 (Stace 2019) variable (Farlington specimen)
Awn length	1.2–2.2mm (Cope & Gray 2009) 0.5–1.5mm (Stace 2019)	2–3.2mm (Cope & Gray 2009) 1.2–2.6mm (Stace 2019) 1.5–2.5(2.8)mm (Farlington specimen)
Anther length	1.7–2.6mm (Cope & Gray 2009)	1.8–3mm (Cope & Gray 2009)
Lower glume length	(1.6)2–3(3.3)mm (Cope & Gray 2009)	2–3.5mm (Cope & Gray 2009)
Upper glume length	(2.5)3.2–3.8(4.5)mm (Cope & Gray 2009)	3–4.7mm (Cope & Gray 2009)
Lemma length	3.8–5.2mm (Cope & Gray 2009) 3.5–4.8mm (Stace 2019)	(4.2)4.4– 5.3mm (Cope & Gray 2009) 3.9–5.5mm (Stace 2019) 3.5–4mm (Farlington specimen)
Sheath pubescence	'mostly quite glabrous' (key)/glabrous (text) (Cope & Gray 2009)	'usually pubescent' (key & text) (Cope & Gray 2009) glabrous to minutely pubescent (Farlington specimen)
Colour of leaves	'very glaucous' (key)/'strongly glaucous' (text) (Cope & Gray 2009) 'usually strongly glaucous' (Stace 2019)	'scarcely glaucous' (key); 'green or glaucous' (text) (Cope & Gray 2009) 'usually somewhat glaucous' (Stace 2019) distinctly glaucous when viewed from distance, but leaves laid flat appear dark mid-green, paler fresh green below (Farlington specimen – see photos)
Flowering time	'Flowering and fruiting late May to mid-July in the east, earlier in the southwest' (Cope & Gray 2009)	'Flowering and fruiting early May to early July' (Cope & Gray 2009)

but not distinctly glaucous (and are yellowish-green below). When the whole plant is viewed from above the edges of the folded leaves are more visible and due to the whitish scabrid hairs produce an overall glaucous sheen to the plant (see notes in Table 1).

Cope & Gray (2009) and Stace (2019) note that sheaths are usually pubescent in *F. trachyphylla* (smooth/hairless in *F. longifolia*) (Table 1), but the plants from the Farlington colony were at best minutely pubescent. The sheaths are distinctly whitish below and pinkish at the base (at least from specimens freshly collected from my garden). A glance at a sheath should therefore be enough to distinguish it from *F. rubra*, in which the sheaths are usually noticeably pubescent and often reddish.

Distinguishing non-flowering plants of *F. trachyphylla* from *F. longifolia* and other fescues with open sheaths can be more tricky, but a useful method is to examine leaf cross sections under a microscope (possible with a binocular microscope, but certain features are easier to see under a compound microscope). Both Cope & Gray (2009) and Stace (2019) include illustrations of cross-sections of all the main species (these were drawn by different illustrators and differ slightly, so both sets and the accompanying descriptions are worth referring to). I found that cross-sections are easier to see if stained (e.g. with gentian violet). The distribution and thickness of the sclerenchyma tissue below the epidermis is useful in distinguishing between certain species, though



Stained leaf cross-section of *Festuca trachyphylla* showing sclerenchyma (lines of smaller purple cells) mainly under the midrib (keel) and on the leaf margins, but very reduced above the other ribs. Note the generally rounded oval shape and the pronounced bulge of the midrib. John Norton

in both *F. trachyphylla* and *F. longifolia* it can be continuous (though probably only in younger leaves) or present in isolated small patches over each rib. Of course, the other fescues with open sheaths most likely to be found in company with either of these species are Sheep's-fescue *F. ovina* and Fine-leaved Sheep's-fescue *F. filiformis*, but these both have more distinctly rolled leaves rather than folded leaves, so are very easy to distinguish by leaf cross-section (though possibly not that easy to tell apart from each other).

Field spotting features

Norfolk botanist Bob Leaney has coined the term 'spotting features' for plants, in his series of articles in *BSBI News* (e.g. see his article on *Polygonum* in *BSBI News* 148, September 2021). The more experienced botanists among us probably spot and identify most plants from distance almost instantly without thinking about it, often based on a single salient visual feature or a feature combined with the habitat or season. I think it could be useful for identification guides and articles such as this to draw attention to exactly what these spotting features are, particularly as an aid for beginners and less experienced botanists. I'm sure that some beginners may welcome less emphasis on plant ID using complicated keys and long-winded descriptions!

Spotting plants of Hard Fescue in the field is initially going to be by the glaucous colour of the leaves, particularly as the species grows in discrete tussocks or patches and often stands out amongst other grasses. At closer distance the relatively long awns will be visible, so an awned plant in flower in April or early May is likely to be this species, rather than one of the glaucous-leaved forms of Red Fescue which usually flower from late May onwards in southern England (that is according to the books, but I think mid-June flowering is more typical). The plants seen at Haslar Cemetery were noticed only because of their distinctly blue-green colour at the edge of an area of mown green turf (and they were also favouring the dry edge of a gravel path). However, it should be borne in mind that a strongly glaucous-leaved fescue with short awns (<1.5mm) could potentially be *F. longifolia* or possibly one of the forms of *F. ovina* with relatively long awns. *F. filiformis* has less glaucous looking, very fine leaves and very short awns (or minute projections), so would not be confusable with *F. trachyphylla*.

Once 'spotted' any potential plants of Hard Fescue should then be checked more closely for the presence of rough-edged leaves and open sheaths, using a hand lens if necessary. It would also be useful to check the amount of pubescence on the sheath and its colour. Collect a specimen so that if need be the awns and pedicels can be measured and cross-sections of the leaves taken for microscopic examination.

Discussion

The reservoir supporting the Farlington colony was built to replace two older reservoirs and was commissioned in 2005, so it is clear that the Farlington colony has established recently. It may have colonised naturally from the surrounding landscape or may have been sown in a grass seed mixture to reinstate vegetation on areas of disturbed soil (disturbance happens regularly on the reservoir roof during occasional maintenance to check for leaks or to dig trenches for cables). I will see if I can confirm or rule out the possibility that it was deliberately sown by asking Portsmouth Water.

However, it is likely that the topsoil covering the older reservoirs was removed and then replaced on top of the new reservoir, so there was clearly a good seed bank of chalk plants present in the soil, judging by the



Typical appearance of panicle before flowering, photographed 21 May 2022 in my garden (top) and fully opened panicle at anthesis, 29 May 2022 (bottom). John Norton

present flora which is relatively species rich. If the fescue was already on the site it may have responded to the soil disturbance and lack of competition from other plants when the topsoil was replaced. It is interesting to note that it occurs in company with mostly native plant species – the only other non-native species recorded from the reservoir roof was Canadian Fleabane *Erigeron canadensis* (and two archaeophytes, Dwarf Spurge and Bristly Oxtongue *Helminthotheca echioides*). Although I hadn't noticed it elsewhere on the site, e.g. in semi-natural chalk grassland, it is likely that non-flowering plants recorded as *Festuca ovina* (Sheep's Fescue) could actually have been *F. trachyphylla*. Indeed, during a previous visit to the reservoir I had recorded it as *Festuca ovina*.



Hard Fescue *Festuca trachyphylla* at Haslar RN Cemetery, Gosport, 10 May 2022. John Norton

It is unusual that this colony occurs on calcareous soil, when the usual habitat is acidic, so it is quite likely that it is the dryness of the soil which is the most important factor determining its choice of habitat. This is certainly a useful grass to sow for amenity use on any soil type subject to summer drought (as we are experiencing while I write this article).

In view of its habitat at Farlington I did consider briefly whether Hard Fescue could be native to Britain, but all literature I have consulted so far points to it being clearly introduced. There is a map of its native status on a country-by-country basis on the Euro+Med PlantBase website (<https://europlusmed.org>, accessed 14 August 2022) (as *Festuca stricta* subsp. *trachyphylla*). This apparently shows it as native across most of central Europe including France and Belgium, doubtfully native in Sweden and Italy and introduced in the UK, Belgium, Denmark and Norway. Ireland is not mapped but it was confirmed as present there (i.e. introduced) only as recently as 2018 by Alexis FitzGerald in his thesis on the *Festuca ovina* aggregate (FitzGerald 2018). However, this map may not necessarily give an accurate picture. Martin Rand looked at the French literature for me and noted that Kerguelen, in his 1989 monograph *Les Festuca de la Flore de France*, writes: 'In France in artificial habitats: road verges and banks, lawns. Plant of north-eastern, central and south-eastern Europe, introduced with lawn seed. Perhaps native in Alsace?' The authors of *Flora Gallica* (Tison & De Foucault 2014) go along with this, but don't even consider it native in Alsace.

In conclusion, this turned out to be a useful exercise to better familiarise myself with this species, but unfortunately I didn't manage to confirm a native population of *Festuca longifolia* for Hampshire. However, that species might turn up on a chalk grassland site somewhere in the county, so head out and look for both of these grasses in early May next year!

Acknowledgements

I would like to thank Eric Clement for loan of his herbarium specimens of *Festuca trachyphylla* and *F. longifolia*. Thanks also to Martin Rand for reading a draft of this article, alerting me to the *Watsonia* reference and checking the French literature.

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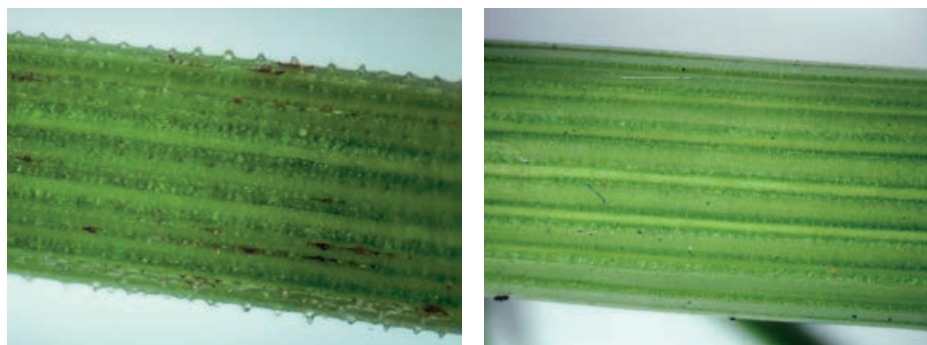
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Bowman's Horsetail at Buskett's Lawn – a revisit

A note by Martin Rand

In July 2017 Neil Sanderson reported finding Bowman's Horsetail *Equisetum* × *bowmanii* along a stream side in Buskett's Lawn Inclosure, SU3110, where it appeared dominant over a stretch of about 60 metres. This was the first record away from its axis of distribution along the A337 northwards from the Minstead site where the first world record was made. Neil reported finding Great Horsetail *E. telmateia* (one parent) nearby, but not the other (Wood Horsetail *E. sylvaticum*) which had in fact been recorded at this location by Paul Bowman, the discoverer of the hybrid at Minstead and the person after whom it was named (Paul Bowman was the former VC11 Recorder). I visited the site in August the same year (as did others), and after a cursory examination of a few of the plants concluded that Neil was right; I enthusiastically reported the find in *Flora News* 54 (Spring 2018), with a photo of a part of the stand.

Late in 2019 I received an email from Victor Freestone, who had visited the site and found only Wood Horsetail, as seen by Paul Bowman in 1986, and having compared the plants here with those along the A337 axis, raised doubts about this population. In 2020 I didn't make it back to Busketts Lawn, but finally in August 2021 I took a small posse there and this confirmed what Victor had suspected – that the population was almost entirely of *E. sylvaticum*. These plants had papillose stems, whereas *E. × bowmanii* have the smooth stems of their other parent or at most have minute papillae that do not make the stem rough to the touch (see the pictures below). Talking this over with Neil and with others who had visited the site since, it became obvious that we had been taken in by the robustness of the plants and their relatively thick, pale stems, and (at least in my case) fallen prey to confirmation bias.



Left: papillose stem sculpturing of *Equisetum sylvaticum*. Right: smooth stem of *Equisetum* × *bowmanii* (specimens from Busketts Lawn). Martin Rand

However, with a great deal of searching and examining the thickest-stemmed specimens in the area we managed to find three stems which had copiously branched branches, minutely bumpy but lacking in prominent papillae, and whose sheath teeth showed the irregular clumping mentioned by Chris Page in *The Ferns of Britain and Ireland* (2nd edn). I was broadly satisfied that we had found *E. × bowmanii* at the site, but not in any quantity. However, Victor had also proposed that another good character for separating the hybrid from *E. sylvaticum* was the branching habit: branches of the hybrid would retain the ascending angle at their point of branching which is so characteristic of *E. telmateia*, but *E. sylvaticum* branches would be horizontal at their point of attachment.

I remained a bit sceptical of this character, as it didn't seem to fit with my experience at other confirmed *E. × bowmanii* sites; but in considering the point, I realised that I had only visited *E. × bowmanii* late in the season. I therefore organised another team visit to Busketts Lawn Inclosure, Minstead and Shave Green populations in early May 2022. Now the value of this character became apparent at all these sites, and it was relatively straightforward to pick out candidates for *E. × bowmanii* at Busketts Lawn which could then be further confirmed from their lack of prominent stem papillae. Even so, we found only ten such stems amongst the large population of *E. sylvaticum*. Seven were in a loose group within the population of predominating *E. sylvaticum*, with the other three dispersed. My current view is that it could be rash to rely entirely on branching habit after about mid-July, but that earlier in the season it appears to be a reliable character.

There remain other points in the literature concerning the two species and the hybrid which deserve discussion, but these (along with the present thoughts) will be the subject of a longer *BSBI News* article soon. Meanwhile, I am grateful to Victor Freestone for bringing his doubts and careful observations to my attention, and to my support team for their help and commentary during site visits.



Early season *Equisetum sylvaticum* at Busketts Lawn (above); early season *Equisetum* × *bowmanii* at Shave Green, showing ascending branches (right). Martin Rand



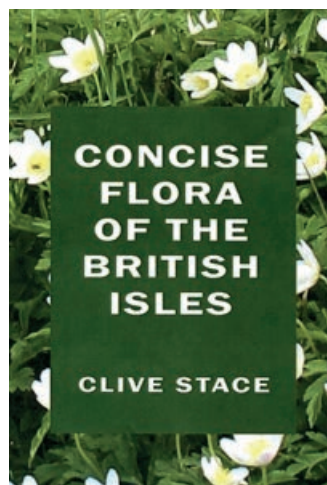
A damaged stem of *E.* × *bowmanii* next to *E. sylvaticum* at Busketts Lawn. Martin Rand

Book Reviews

Concise Flora of the British Isles

Clive Stace

C & M Floristics,
Middlewood Green,
Suffolk, 2022
pp. xii + 804, with 32
monochrome plates
and illustrations;
plastic flexicover,
£30.00. ISBN
9781399919609



Review (1) by Martin Rand

Clive Stace's portable Flora appeared in its new incarnation in late May this year. In essence, it does for the fourth edition of the *New Flora of the British Isles* what the *Field Flora of the British Isles* did for the second. Despite the minor name change and the fact that this is not advertised as a 'second edition' (presumably because of the change of publisher), users of its predecessor will not find much to surprise them in format or content. It shares the same page dimensions, typography, and layout. It is nearly 70 pages longer to accommodate the extra material from the two later editions of the big *Flora*, but it weighs only a few grams more. The paper has a more finished feel than the *Field Flora*'s, which hopefully augurs well for its robustness in the field, but it has a strong yellowish cast which does nothing for legibility in poor light.

Like its predecessor, the *Concise Flora* presents its identification text purely as a set of keys. This has some advantages, in my view. More of the important characteristics are included in the key text, so the necessity to cross-refer between key and account to reach a diagnosis simply goes away. I have always found it a minor irritation that genera with coverage of just two taxa in the *New Flora* don't have an initial key as well as species accounts, and this inconsistency simply disappears in an entirely key-based work.

All the species and subspecies given more than passing mention in the *New Flora* are covered, and the treatment of critical genera is much the same. Coverage of hybrids is maintained for those that were keyed in the *New Flora* and reduced to checklists, if retained at all, for those without diagnostic accounts, so nothing substantial for field identification is lost. As before, only a few of the *New Flora* illustrations are retained. Some of those removed are useful but not essential; but there are some like *Populus* leaf photographs that I wish had been retained.

The *Concise Flora* incorporates all the errata and updates published for the 4th edition of the *New Flora* up to the time the former went to press. There is an addendum for one newly discovered species, the fern *Stenogrammitis myosuroides*. The only taxonomic change is that the author has regretted making Adoxaceae embrace Sambucaceae and Viburnaceae, and these now reappear as separate families 137A, 137B and 137C respectively, to avoid affecting the numbering of other families.

If you have previously been a satisfied user of the *Field Flora*, then you will surely want this important update (if you haven't obtained it already). If you've struggled with its concision and the author's reluctance to rely on less precisely definable features as 'props' to identification, then there is nothing in the *Concise Flora* that will make your life any easier; but a combination of this book with an illustrated field guide is worth considering if you want to expand your horizons and get to grips with a more technical approach. Unfortunately, at present there is no field guide up to date with edition 4 of the *New Flora*. If you wish for more in the way of vegetative description, then with the second edition of the *Vegetative Key* you now have a combination that won't overload your backpack and is based on the same taxonomy.

Review (2) by Andrew Powling

For those who used CTW's *Excursion Flora* in the field but found Stace's *New Flora of the British Isles* rather too heavy for outdoor use, his *Concise Flora* comes as an interesting development. This book is an abridged version of the *New Flora* (4th edition, second printing, with the latest nomenclature), intended, as the author states 'to be taken into the field or on holiday'. The keys to plant families, genera and species in the *New Flora* are retained, but the separate descriptions of species have been cut. In compensation more information is added to the species keys themselves. The line of a couplet that leads to a species or subspecies name also gives information on habitat, distribution in the British Isles and native/alien status. Rarity of native and archaeophyte species is also indicated. No information on world distribution is given, nor on flowering time in the British Isles – perhaps wisely in this time of global heating.

Much less information on hybrids is included compared to the *New Flora* and further reduction of book size has been achieved by omitting many of the figures included in the *New Flora*. Readers may have their own opinions on which figures should have been cut. I find it good that the drawings of Apiaceae fruits have been retained, which are so useful in confirming or refuting a provisional identification. Drawings of the petals of *Dactylorhiza* are retained and should be useful in the field, but I doubt that the cross-sections of *Festuca* leaves will be similarly used. The index has been much reduced, saving space by not listing the Latin names of species. Genera are listed so usually species can be located quickly, but if the genus contains many species, as in *Carex*, it takes time to check through the key to find the species sought.

The taxonomy used in the *Flora* is based on DNA sequence studies, which has resulted in a number of families and genera being split into two or more. These splits will be familiar to users of editions 3 and 4 of the *New Flora*. They can make it harder to find a species if its new genus is unknown to you, but genera resulting from a split are usually to be found near each other and sometimes still included in the same genus key. The *Flora* contains various photographs of leaves which show the shapes well but don't always show secondary and tertiary venation. This venation is, in my view, useful for identification and is one of the most reliable vegetative characters. However, the keys in the *Flora* use mainly floral characters and the author's distrust of some 'field' characters is stated in the Preface. Clearly, no concessions are made despite this being a flora for use in the field.

An interesting question is whether Floras intended for field use will soon have had their day. For on-the-spot naming there are now apps for smart phones that claim to identify plant species with 98% accuracy. DNA sequencing is already used in the field by institutions with sufficiently skilled staff and a lot of money. But it will be a long time before we have DNA sequencing tests as quick and easy to perform as Covid lateral flow tests, and they will be much more expensive. Perhaps one day we will send difficult specimens to a DNA sequencing lab rather than to an expert referee. But these methods, even if they supply a name, teach you little else about the plant and seem unlikely to put much into your long-term memory. So, the *Concise Flora* will be the item to have with you in the field if you want to take responsibility for correct identification and learn more about a plant than just its name.

This is a book not only for expert botanists who will no longer need to carry the *New Flora* around with them, but also for people looking to move on from picture books – to move out of their comfort zone and identify the rare, obscure and difficult species they haven't got to grips with before.

Obituary

Barry Goater (1930–2022)

By Martin Rand



Barry Goater was born in Southampton and educated at Peter Symonds School, Winchester and University College, Southampton, gaining an Honours degree in Botany in 1952. After completing National Service in 1954 he took a teaching post at Haberdashers' Aske's School where he must have made a great impression, becoming Head of Biology after just four years and continuing in that post until 1988, when he took early retirement. He was clearly an inspirational teacher: the alumni he taught included the renowned ecologist George Peterken, Richard Pryce (a leading light in Welsh botany) and, perhaps most famously, the naturalist and writer Roger Deakin who in his book *Wildwood* celebrated the 'wild camping' field trips to the New Forest that Barry organised for Haberdashers' students. The living arrangements may have been informal, but the teaching aspect was by all accounts rigorous, with every pupil working to a project along good scientific lines.

However, in the world of naturalists, Barry is best known for his wide-ranging work on Lepidoptera. He became an international expert on micro-moths, travelling widely in Europe especially in France and Spain, with many papers and informal articles to his name in British and European journals and major contributions to standard works on many moth groups. One genus of moths (*Goateria*), eight species and four subspecies are named after him; my favourite is *Armada goateri*, which conjures up visions of a warlike crew of Goaters sailing up the Channel. Local naturalists will probably know him best for *The Butterflies and Moths of Hampshire and the Isle of Wight*, published in 1974; and *Moths of Hampshire and the Isle of Wight* (2001), in which he shared authorship with Tim Norriss. He was an honorary member of several of the main European scientific societies and served as President or Vice-president of two.

He continued an interest in botany which was maintained to the end of his life, joining the Botanical Society of the British Isles (as it was then known) in 1960 and the British Bryological Society in 1961. In 1991 he returned to Hampshire and took up residence in the parental house in Chandler's Ford where he remained until his death. I first came to know him at the other end of that decade when I resumed a serious interest in botany, and we became friends and collaborators.

Unsurprisingly Barry with his botanical hat on was, as in all things related to natural history, a good and careful observer and recorder, although he was often diffident about his own talents. He participated in the life of the Flora Group and in many of the BSBI recording projects. For these, he methodically and without complaint covered some of the least exciting areas of the county with his wife Jane. They nearly always found something unusual and of interest which he would share, sometimes over a glass of red wine, later in the day. He was a stalwart attendee of the 'Wednesday club' at the Hampshire County Museums Service collections at Chilcomb House; much of this time was spent dealing with the entomological collections, but he also remounted and catalogued important sections of the herbarium, and on the occasions when I turned up we would puzzle over dubious or indecipherable identifications of the botanists who had preceded us.

Barry was the person who proposed that we should have an index for *Flora News*, and then developed and maintained it right up until the Spring 2022 issue. Given that he had been on the editorial board of at least six

learned journals I should perhaps not be surprised at the thoroughness and above all the speed at which he did this for each new issue, but I remain in awe. He has set a very high standard for us who remain, and there can be few similar newsletters that are so well served.

Field trips with Barry were always enjoyable, if occasionally hair-raising. He was very much of the persuasion that 'that which is not forbidden, is permitted', with the odd extension to 'that which I have taken care not to notice is forbidden'. He had a great reserve of charm and old-fashioned schoolmasterly politeness which helped him out of awkward situations and made him some new friends. Trips farther afield in Britain and the Continent were usually undertaken with a camper van, and he was very proud of the fact that he had never paid for a camp site in his life. He had a story that they had once driven the van to the summit of Canigou (the easternmost big mountain in the Pyrenees, at over 9,000 feet), overnighted there, and awoken at dawn to the sight of a wild boar sow and her piglets trotting in single file across the landscape. Having driven to the top mountain refuge on Canigou, which can be stress-inducing in itself at times, then walked or scrambled on from there on the easiest approach, I was a bit sceptical about this and used to chaff him about it. I also wonder what a wild boar would be doing on the summit. But I would love it to be true.

In the last few years the infirmities of old age reduced his capacity for long walks, but he remained a keen bird watcher and avid 'twitcher' for anything unusual in the local area, and with the help of friends and family managed to continue getting out on short jaunts for a long time, ending with an Eastern Olivaceous Warbler. He died quietly at home in the small hours of July 29th, attended by his son Rick. His family and many of his friends were able to make their goodbyes in the preceding weeks, when he was accepting the end that was inevitable. Thanks to Rick for providing some of the family photographs shown here.



Barry with his wife Jane



Moth-trapping with Brian Elliott



Barry at Dibden Bottom in the New Forest in 2008.
Martin Rand

Recording

Bryophytes

A note by John Norton

Jonathan Sleath has now taken over from Fred Rumsey as the British Bryological Society regional recorder for VC12 (North Hampshire). Please send your records to Jonathan at jonathan.sleath@btinternet.com.

As was the case last winter I am no longer organising a regular programme of bryophyte field meetings for the BBS Southern Group; but I may organise informal site surveys at short notice over the coming winter. Please let me know if you are interested in these (email john@jnecology.uk). There will, however, be the usual joint meeting with the Wessex Group in the New Forest to be held on Sunday 30 October at Ogdens, to investigate the Latchmore Brook area. Let me know if you wish to come. Car parking arrangements are not yet finalised but we are likely to meet at Frogham car park, SU 1780 1280.

Hampshire lichen report 2022–23

A report by Neil Sanderson

Introduction

Again the New Forest keeps on producing surprises and, in addition, several outstanding problems have been solved. The latter include a new species to science, a lichenicolous fungus in the genus *Lecidella* with its known distribution centred on the New Forest, and a long known *Cladonia* taxon resolved as the southern Atlantic-Mediterranean species *Cladonia firma* by gene sequencing. This was new to southern England and inland heaths. The biggest surprise by far was the discovery of a substantial population of *Cladonia peziziformis*, a beautiful little species, which is very rare in Britain and rare in Europe; a major new addition to the value of the New Forest.

New species to science

***Lecidella parasitica* Sanderson:** this taxon has been known from the New Forest since 2016, but took some time to sort out and has finally been named in time to get it into Volume 25 of the Revisions of British and Irish Lichens (<https://britishlichensociety.org.uk/identification/lgbi3>). It is an obligate fungal parasite of the widespread epiphytic lichen *Pyrrhospora quernea*, but has only been found where the host is growing on well-lit trunks and dead wood in lichen-rich pasture woodlands and parklands. On the host, it is easily overlooked as young apothecia of the lichen, but these are rarely pure black, usually having some reddish tinges apparent,

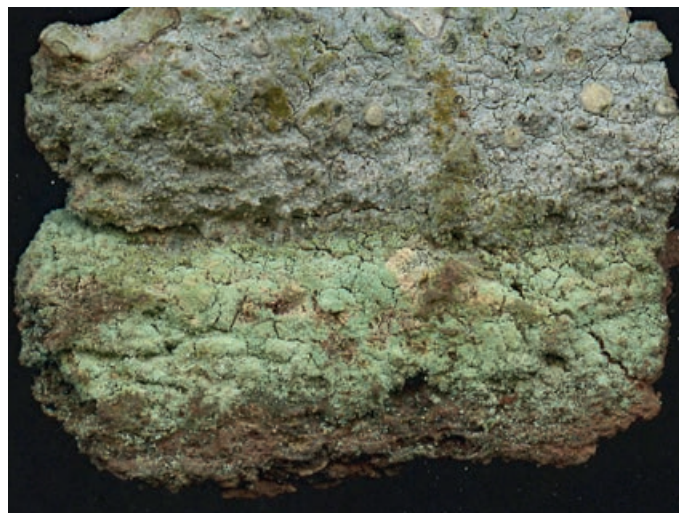


Lecidella parasitica apothecia parasitic on *Pyrrhospora quernea* thalli. Left: typical smaller apothecia on Beech, Denny Wood. Right: larger mature apothecia on Beech, Mark Ash Wood. Neil Sanderson

which are absent in *Lecidella parasitica*. Internally the apothecia are very different from those of the host, with blue colours dominant and lacking the reddish-brown granules, which are K+ dissolving, purplish, found in *Pyrrhospora querneae* apothecia. *Lecidella parasitica* has proved to be rare but widespread in the New Forest and has also been recorded in parklands in Hereford and Cumberland. It seems likely to be a rare species. The New Forest's sites are listed below; all were on the thallus of *Pyrrhospora querneae*: Beech, Rushpole Wood, SU3009, SU3109, April 2016; Beech, Denny Wood, VC11, SU3306, April 2016; Beech, Stricknag Wood, SU2612, May 2016; Oak, Bartley Green, SU3012, May 2016; Beech, The Ridge, Busketts Wood, SU3111, June 2016; Beech, Wooson's Hill, SU2507, September 2018; Beech, Mallard Wood, SU3209, May 2020; Burley, August 2020; Beech, Mark Ash Wood, SU2407, August 2022; all recorded by N.A. Sanderson.

Taxonomic problems sorted

***Andreiomycetes obtusaticus*:** a pale yellow-green colour leprous lichen growing deep in bark crevices on older Oaks has been long known to be widespread across lowland Britain, including the New Forest, and parks such as Hurstbourne Park. This was recorded under the name *Lepraria ecorticata*, but it has become apparent that it is not conspecific with that taxon, which is now known as *Lithocalla ecorticata*, which is an obligate saxicolous species. The identity has now been solved by Alan Orange by gene sequencing and TLC (thin layer chromatography); it is *Andreiomycetes obtusaticus*. This had a single previous record for Britain, recorded from an old Hazel stem in Dorset. *Andreiomycetes obtusaticus* has a fully leprose thallus, with a distinctive pale yellow-green colour and no obvious spot tests. It can be mistaken for *Lecanora expallens*, which can grow in similar habitat, but this is brighter yellower and usually C+ orange and always K/UV(wet)+ bright mint-yellow. Most records of '*Lepraria corticola*,' from bark are probably of *Andreiomycetes obtusaticus*. The specimen confirmed was collected from crevices in dry bark dominated by *Lecanactis abietina* on an older mature Oak in pasture woodland, Hollands Wood, New Forest, VC11, S. Hampshire, SU3031 0388, December 2021, N.A. Sanderson.



Part of the specimen from Hollands Wood, with *Andreiomycetes obtusaticus* below and *Lecanactis abietina* above. Neil Sanderson

***Cladonia firma*:** a relatively distinctive *Cladonia* which has been known from lichen rich sites in the New Forest since 2012, which was similar to *C. subcervicornis* but with brownish squamules, rather than bluish tinged ones. Initially this was thought to be *Cladonia firma*, but this was not confirmed and it was given the herbarium name *Cladonia* 'brown *subcervicornis*'. In 2019, however, R. Pino-Bodas of Kew, collected some material and sequenced it and confirmed that it was in fact *Cladonia firma* and it was conspecific with Mediterranean material of the species. This was the first inland record of a species, which previously had been thought to be only coastal in Britain. Subsequent reinvestigation of material from the New Forest collected as *Cladonia* 'brown *subcervicornis*', rechecking records of *Cladonia subcervicornis* on anomalously dry habitats and searching new potential sites, have shown *C. firma* to be widespread, if scarce, in the New Forest heaths, especially on the higher terraces to the north. It has been now recorded from 30 1km squares in the New Forest. It is found in acid but more productive short grazed grassy heaths, especially where disturbed in the past, ranging from mediaeval hollow ways to WWII airfields. The species should be searched for in other inland heaths, see <https://www.britishtichensociety.org.uk/resources/species-accounts/Cladonia%20firma> for more details and photographs. The sequenced specimen collected from a very locally abundant population on open short grazed heathland in pans in a shallow 19th century quarry, White Moor, Lyndhurst, New Forest, VC11, S. Hampshire, SU 3127 0820, alt. 35m, November 2019, R. Pino-Bodas & N.A. Sanderson.

New species to Hampshire

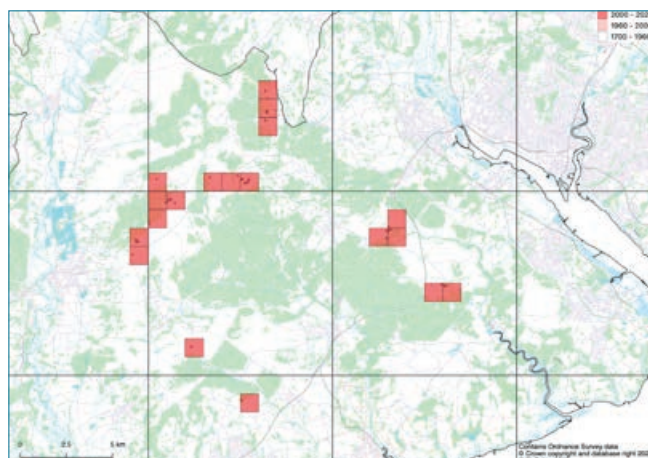
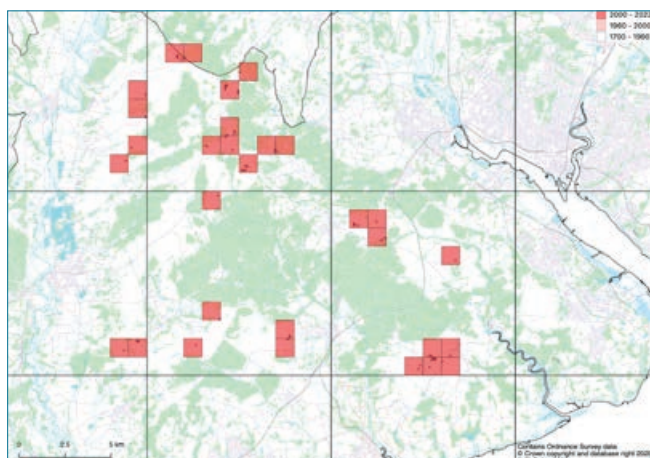
Biatora chrysantha: an unexpected find of an upland epiphytic species resembling *Mycobilimbia epixanthoides*, but with a fleeting C+ red spot test, new to lowland England. On mildly base rich bark on a veteran Oak in Oak-Beech old growth woodland, Burley Old Inclosure, New Forest, VC11, S. Hampshire, SU 2475 0412, December 2021, N.A. Sanderson.

Cladonia peziziformis: a remarkable and unexpected find. The New Forest now supports the most extensive known population of this rare lichen in Britain. It grows in quite productive grassy heaths, which are otherwise not lichen rich, so had not previously been looked at much. It is light-demanding and requires short swards, so is mainly dependant on quite hard grazing to survive. Some stands are occasionally control burned as part of a heather burning programme, but fire is not the important factor for the ecology of this species as was assumed in the past, at least in this area. See <https://www.britishlichensociety.org.uk/resources/species-accounts/cladonia-peziziformis> for more details and pictures. Since February 2022 found on hummocks, mounds or hollow way sides, in short open grassy and damp herb rich heath (M16b, M24c, H3 and H2) on more productive soils, on either slightly base rich clays (Barton Clay and Headon Beds) or, on poorer soils, in herb rich heathland developed on former medieval farmland, in 19 1km squares within the extensively grazed heathland of the New Forest. The first records were from two sites in herb-rich heath on a pillow mound and a scuffed area, King's Garden, SU2009, February 2022, N.A. Sanderson and on 11 hummocks in short grazed tussock heath, Milkham Bottom SU2109, February 2022 N.A. Sanderson & A.M. Cross.



***Cladonia peziziformis* on a mound in species rich wet heath at Milkham Bottom, New Forest, February 2022. A remarkable and unexpected find. The New Forest now supports the most extensive known population of this rare lichen in Britain. Neil Sanderson**

Cladonia pulvinata: new to the New Forest and lowland England. A difficult to spot lichen, as it often consists of sterile squamule mats, but these have a distinct look and it can be confirmed by the Pd+ yellow spot test. Certainly, overlooked but still likely to be uncommon. See <https://www.britishlichensociety.org.uk/resources/species-accounts/Cladonia%20pulvinata> for more details and photographs. Found in six locations in very open short heaths, two in the bases of old gravel pits and four in or on the edges of trampled paths, all in



Left: distribution of *Cladonia firma* on the New Forest. Right: Distribution of *Cladonia peziziformis* on the New Forest. The belt across the north-west of the Forest is on Barton Clay outcropping on slopes, also on Headon Beds to the south and on former medieval farmland in the east.

heaths; base of gravel pit, Black Bush Plain, SU250 159, December 2021; on the edge of path in hollow way, Rushy Flat, SU216 173, January 2022; on trampled ironstone slab on floor of hollow way, Rock Hills, SU239 030, January 2022; in a little used path, Stony Cross, SU266 121, March 2022; base of gravel pit, Goatspen Plain, SU226 017, May 2022; open ground on edge of path in short grazed heath, SU240 148, June 2022; all N.A. Sanderson.

***Micarea subviridescens*:** *Micarea* species are not easy, especially those in the *Micarea prasina* group. However, modern bright UV lamps have 'illuminated' a previously obscure species. This taxon was picked up on banks on mildly acidic loamy soils in old woodland in the New Forest area, by its very bright UV+ bright blue-white fluorescence and was thought to potentially be a new species. The literature did not mention any bright UV+ fluorescence for any *Micarea prasina* group. TLC analysis by Alan Orange, however, showed that the lichen contained prasinic acid and it seems this was responsible for the previously unreported fluorescence and that it was hence *Micarea subviridescens*. Previously this lichen was recorded occasionally in the west, but now it is findable, it turns out to be local but widespread on wood banks, stream banks and root plates in old woodland on acidic soils in the south. First Hampshire record: on acid loamy soil on a boundary bank in old woodland, Holly Hatch Inclosure, New Forest, SU218122, January 2021, N.A. Sanderson, Det. A. Orange.

Other records of special interest

***Lobaria pulmonaria*:** this charismatic ancient woodland species has been struggling in the New Forest and appears to have had difficulty in recovering from acidifying air pollution of the 20th century. It was therefore exciting to find a strongly grown healthy patch of *Lobaria* on an old Sallow in a small mire, adjacent to a known population on an ancient Beech. The Sallow colony was not present in 2009, when the colony on the Beech was last seen. Until recently Sallow in the New Forest area was too acidic to support species such as *Lobaria pulmonaria*, but in the last few years crustose base-demanding woodland lichens have increasingly been found on it. This is the first record of a sensitive large foliose species colonising Sallow in this area and the first for *Lobaria pulmonaria* for southern England east of Devon. *Lobaria pulmonaria* on Sallow bush, Mark Ash Wood, New Forest, SU248075, November 2021, N.A. Sanderson.



The new *Lobaria pulmonaria* colony on a Sallow in Mark Ash Wood. Neil Sanderson

***Wadeana dendrographa*:** this lichen is a specialist of veteran Ash trees and as such is likely to be severely threatened by Ash Dieback Disease. It has been rarely recorded from Oak, with the New Forest supporting the majority of British records from this tree, but there are few recent records from this habitat. Populations on Oak are likely to become important for its survival as Ash Dieback Disease runs its course. In Bramshaw Wood, where there are no old Ash trees, it was recorded from Oak in 1967 and 1976 in different locations by F. Rose, but was not seen again until 2002, when it was re-found at a third location. This suggests a sustained population on Oak here. The species is more difficult to spot on Oak, so there may be larger overlooked populations on the New Forest Oaks. *Wadeana dendrographa*, on damp base rich bark on a veteran Sessile Oak, with *Porina hibernica*, in Beech – Sessile Oak pasture woodland, Bramshaw Wood, New Forest, SU2588 1647, January 2022, N.A. Sanderson.

VC11 notes and records

Compiled by Phil Collier and Martin Rand

These are the records that were due to appear in the Spring 2022 issue of *Flora News*. 2022 records will follow in the Spring 2023 issue, as normal.

The most dramatic find of the year must be the single spike of Lizard Orchid *Himantoglossum hircinum* on a lane side: the first record for 90 years in South Hampshire. However, this has been outdone in 2022, when not only did the original plant flower again, but two new sites were discovered, one of which had 17 flowering spikes. I have no reason to think that it was deliberately introduced to any of these sites, and suspect it is part of a natural recolonisation from the Continent such as occurred across southern Britain in the 1920s. Periods of warm persistent southerlies in mid-summer would certainly provide the seed source.



Lizard Orchid in VC11. Martin Rand

Stoneworts don't get a lot of press in this report, as there are so few people recording them. Nevertheless, it was something of a surprise to find a population of Fragile Stonewort *Chara globularis* actually growing in the River Avon, as this is almost exclusively a plant of ponds and other still water; and this is the case in Hampshire, at least in those records that are well enough localised. But the identification was made under the microscope, and in fact the stretch of water it was growing in was a bay at the back of a sharp turn in the river with no visible flow and a good carpet of Stonewort, so as near to a pond as a river can be. The same trip to a private estate in the Avon valley gave us several other good records and a chance to look at some recently discovered Small Fleabane *Pulicaria vulgaris*, for which we also found a couple of new small populations in damp tracks.

A record for Oblong-leaved Sundew *Drosera intermedia* wouldn't be exceptional from the New Forest, but John Buckley's find in a site just east of Southampton tells a remarkable story of his work to recover parts of a mire that was threatened with becoming totally overgrown. An area of spring-line bog now sports two species of Sundew and other good species after clearance work and scraping. It is difficult to appreciate now how rich in mire and heathland south Hampshire east of Southampton Water once was, right up to the eastern parts of Southampton city. Those places which haven't disappeared under urban or suburban sprawl are now fragmentary and mostly degraded. John has been investigating another historic site farther east and is in talks with the landowner about restoration work there; I hope this eventually proves as successful, but the site is even more challenging. Sadly, the Shedfield Common population of Round-leaved Sundew *Drosera rotundifolia* which I last saw in 2011 was not to be found this year on a revisit.

As is his wont, Tristan Norton has continued to make many interesting records of scarce arable plants in both halves of the county, and in 2021 he added another site for the rare Martin's Ramping-fumitory *Fumaria reuteri* to the county tally. Another curiosity at the same site was Madder *Rubia tinctoria*, about which Tristan wrote in the last issue of *Flora News*.

Pheasant's-eye *Adonis annua* is one of the most prized arable archaeophytes that we have almost completely lost, and its fortunes in large parts of northern Europe are not much better. Plantlife is attempting to put it back in some of the places where it used to be, and for that reason I've listed records from one of those places. Is this sustainable for the long term? It's hard to say, but there's only one way to find out, and that's to try. It is of course well-known, at least amongst botanists, that the come-back of many species like Corn Marigold *Glebionis segetum* is an entirely artificial one promoted by temporary 'wild flower sowings', while it continues to decline to extinction in its former farming habitat in our part of the world, and now largely relies on allotments for its feral existence.

A rather more ambiguous case is Thorow-wax, *Bupleurum rotundifolium*, which had reached extinction point as a farming weed. But in the last decade or so it has turned up a few times, although less commonly than some of its close relatives. I'm not sure that any of these were deliberate introductions expressly of this species, although one at Houghton patently came as part of a 'wild flower' sowing in a formal estate garden. David Caal's record at North Charford is actually on farm property, but I do note that this is close to one of Plantlife's arable plant reintroduction schemes.

Given how well-worked the county is, it's not surprising that such a large proportion of the records are of neophyte non-natives expanding (or at least being noticed) in new territory. Many of these will be casuals at many of the places noted, but one can also see a trend for more species to persist, especially along the coast and in areas with much human activity. I remember when Orange Mullein *Verbascum phlomoides* near Portsmouth was largely confined to the warm southern slopes of the M27 cutting at Portsdown. Now it makes a spectacular flowerscape down the M275 onto Portsea Island in early summer. With a shift towards more Mediterranean weather patterns, there will surely be plenty more contenders.

Method

The data sources used to generate this report were all records dated in the last year in South Hampshire as held on the BSBI's Distribution Database towards the end of the year, and not marked by a validator as 'Rejected'. Unfortunately, we still live in a world where gathering all relevant records in a timely way is difficult, so we apologise to anyone whose records didn't make it into this report. Be assured that they are still contributing to knowledge of our flora.

To process many thousands of records (20-30,000 in a quiet year, 40-60,000+ during major recording projects, on average over the last 10 years about 38,000), automated support has been developed in the last two years. There is a list of common non-notable taxa that are normally filtered out, but a record is kept locally of any hectads where they have not been recorded previously or since 2000, and these are then reported on. The rest (typically around 3-5,000) go into the candidate records for reporting, on the basis described under the coding conventions below, and we then review them and make a judgement to eliminate some, for instance because there are repetitious records for the same reporting area or because the evidence is very strong that they exist only as plantings in highly artificial habitats. We may allow some records to be reported that have previously been validated as 'Dubious' or 'Needs Checking', or that we now consider dubious, on the basis that a record is a record and it may encourage one of you to go and check it out. In future reports we shall try to highlight these.

Records (Phil and Martin)

The codings at the front of each plant are:

*** = Hampshire notable (** = British or English Red List with a Threat status).** We list these whenever we have a record for a tetrad that is either new, or the first for 'a long time' (usually taken as 20–25 years, but for endangered species it can be shorter). However, the account would be long and tedious in the case of some plants now on the Hampshire Notables list that are widespread in Hampshire, so we sometimes summarise tetrads for these unless the record is a significant extension to the known range. First records for a long time then have the last recorded year; new tetrads are simply listed.

NA = Native or Archaeophyte. We list these if they are new vice-county records, new to a hectad or the first for 'a long time' as defined above.

IN = Invasive, or Potentially Invasive, Non-native. We use the IUCN's three-pronged definition of 'Invasive', so that a plant like *Artemisia ambrosiifolia* (Ragweed), which hasn't actually invaded anywhere in Hampshire yet but will pose a health hazard if it does, are included. We also list these for new tetrads, but when you are recording, we would like as precise a grid reference and as many supporting details as possible.

NN = Neophyte Non-native. Defining Neophyte (arrived after 1500) or Archaeophyte (arrived by 1500) in a local context is beset with difficulty, but we use this category if the plant in the given location is outside its generally agreed native range and can reasonably be inferred to have got there recently by human agency whether intentional or not. That includes plants that are native elsewhere in Britain, or even nearby in other habitats. We list these if they are new vice-county records, new to a hectad or the first for a long time. For some,

we simply list new hectads. We exclude most planted trees and shrubs occurring in gardens, municipal parks and cemeteries unless they are also self-establishing or very likely to do so. However, records for them stay on the database, and such records are welcome, provided you state that they are 'Planted' if the only individuals clearly are planted, or 'Introduced' if they are spreading naturally from original plantings.

Abbreviations for recorders and determiners are: AHP=Andrew Powling, AMC=Andy Cross, ARGM=Tony Mundell, AS=Anna Stewart, BBu=Brian Burrows, CC=Clive Chatters, CRi=Charlotte Rimmer, CSh=Cath Shellswell, DC=David Caals, DDi=David Dickenson, DHub=David Hubble, DL=David Leadbetter, DN=Dawn Nelson, EJC=Eric Clement, GCo=Ginnie Copsey, GK=Geoffrey Kitchener, GKn=Gareth Knass, ILR=Ian Ralphs, JAN=John Norton, JBuck=John Buckley, JCu=Jeremy Cullen, JGood=John Goodspeed, JMill=Joel Miller, JPol=John Poland, JTM=Jez T Martin, MPa=Mary Parker, MR=Martin Rand, MR & VCR team=Martin Rand and various team members (Phil Collier, Ginnie Copsey, Robin Garnett, Sophie Lancaster, Bob Wardell), MWR=Mike Rowe, NAS=Neil Sanderson, NWA=Nick Aston, PAB=Phil Budd, PCo=Phil Collier, PM=Peter Marston, PMac=Peter Mackie, PS=Paul Stanley, RCR=Clare Rand, RDR=Rob Randall, RGa=Robin Garnett, RHWa=Robert H Wardell, RHa=Rachel Hardy, RLo=Robert Lord, RMas=Roger Maskew, SDe=Susan Denness, SRW=Stuart Woodley, TGR=Tim Rich, TN=Tristan Norton, VB=Vincent Blood.

NN *Acer palmatum* (Smooth Japanese-maple): The Queen's Inclosure, SU6958 1059; 13 Apr 21; RHWa. **1st for SU61.**

NN *Acer saccharinum* (Silver Maple): Mill Rytte to Tournurbury Public Bridlepath, SU7267 0018; 03 Aug 21; RHWa. **1st for SU70.**

****NA *Adonis annua* (Pheasant's-eye):** Broughton, NW of, SU2933; 17 May 21; CSh, TN. Reintroduced in autumn 2019. 1 plant present in 2020. 213 plants [in 2021]. Colour in the margins Project Plantlife/RSPB. **1st for SU23W.**

NN *Aesculus carnea* × *hippocastanum* = *A. × plantierensis* (Pink Horse-chestnut): W of Marrelmore Copse, Purbrook, SU660 080; 03 Jun 21; MR & VCR team det. MR. **1st for VC.**

NN *Agave americana* (Centuryplant): Eastney Beach - Caravan Park Bund, SZ6760 9890; 03 Jul 21; RHWa. **1st for SZ69.**

***NA *Agrimonia procera* (Fragrant Agrimony):** Dibden (The Old Manor) area (All 4 quarters of monad), SU3939 0803; 25 Sep 21; MWR. Hypanthium typical. 2 plants by track (Manor Road), SU3939 0803. **1st for SU30Z.** Westwood LNR, SU457 097; 14 May 21; MR & VCR team. Forming large patch. **1st for SU40P.** Lakeside Country Park, Eastleigh, SU447 175; 13 Jul 21; MR. **1st for SU41N.**

NN *Akebia* × *pentaphylla* (Hybrid Chocolate-vine): Winchester Road, Chandler's Ford, SU434 206; 24 Apr 21; MR. In hedgebank between Winchester Road and Springhill Road. **1st for VC.**

IN *Allium paradoxum* (Few-flowered Garlic): Knapp, SU406 238; 02 Apr 21; MR. Lane verge by forestry plantation. Knapp, SU4070 2392; 10 May 21; MR. Lane bank. **1st for SU42.** Broadmarsh (under trees on alongside shore path), SU703 053; 29 Mar 21; JGood. Woodland surrounding landfill site. 3m square patch of ground cover; photo. **1st for SU70.**

NN *Allium subhirsutum* (Hairy Garlic): Tangier Park West - SU6689 0123; 30 Mar 21; RHWa. Tangier Park West - SU6689 0125; 29 Apr 21; RHWa. **1st for SU60.**

NN *Allium trifoliatum* (Hirsute Garlic): Hilsea Lines - Compartment 3 (East Moat), SU660 043; 29 Apr 21; RHWa. **1st for SU60.** Kingsley Road Open Space, SZ6736 9948; 02 May 21; RHWa. In full flower. **1st for SZ69.**

NN *Alstroemeria aurea* (Peruvian Lily): Beachlands S - Beach huts E of Inn on the Beach, SZ707 988; 11 Jul 21; RHWa. det. MR. **1st for SZ79.**

***NA *Althaea officinalis* (Marsh-mallow):** Curbridge, SU5224 1171; 14 Oct 21; PM. Small clump fruiting at SU5224 1171. Curbridge, SU5233 1168; 14 Oct 21; PM. Large clump fruiting at SU5233 1168. **1st for SU51F since 1990s.**

NN *Amaranthus retroflexus* (Common Amaranth): Northwood Lane, SU7239 0243; 12 Aug 21; RHWa. **1st for SU70 since 1990s.**

IN *Amelanchier lamarckii* (Juneberry): Penjar Avenue, SU6721 0779; 21 Apr 21; RHWa. **1st for SU60.**

NN *Ammi majus* (Bullwort): Southsea Rock Gardens, SZ6475 9808; 03 Jul 21; RHWa. **1st for SZ69 since 1990s.**

NA *Anacamptis pyramidalis* (Pyramidal Orchid): A31 Stoney Cross (Central reservation A31), SU268 119; 23 Jun 21; TN. Observed from vehicle. Two flower spikes noted. **1st for SU21 since 1990s.**

NN *Anemone apennina* (Blue Anemone): Brockenhurst Church Lane, SU30529 01625; 01 Apr 21; PCo. On road verge outside rural property. Scattered amongst bluebells in scrubby herbfield. **1st for SU30.**

NN *Anemone blanda* (Balkan Anemone): Ashley Heath, Dorset, SU13518 04734; 08 Apr 21; PCo. On road verge opposite garden with similar cultivated plants. Sepals glabrous on lower side. **1st for SU10.** Baffins Pond, SU6667 0132; 30 Mar 21; RHWa. **1st for SU60.**

NN *Anemone hupehensis* × *vitifolia* = *A. × hybrida* (Japanese Anemone): Hayling Billy Line, SU7170 0515; 24 Aug 21; RHWa. **1st for SU70.**

***NN *Anisantha madritensis* (Compact Brome):** Bitterne Manor (Quayside Road), SU4388 1321; 12 Sep 21; MWR. Roadside, by house. Panicle 102 × 46mm, erect, dense; lemmas 15, 15, 16mm. 1 plant, SU 4388 1321. **1st for SU41G since 1990s.** Eastney Beach, SZ676 989; 03 Jul 21; MR. **1st for SZ69U.** Land East of Sandy Point SINC, SZ7509 9847; 17 Sep 21; RHWa. **1st for SZ79P.**

****NA *Anthemis cotula* (Stinking Chamomile):** Ashtrim Meadows, Eastleigh, SU465 186; 28 May 21; MR, RHa. det. MR. South field, cattle-trod approach to ford. SU464 188; 28 May 21; MR, RHa. det. MR. South field (weedy patch in gateway). **1st for SU41U.** Ford E of Lye Heath, SU650 087; 03 Jun 21; MR & VCR team. **1st for SU60P since 1950s.**

NN *Apтения cordifolia* (Heart-leaf Iceplant): Southwood Road Play Area, SZ7387 9821; 13 Jul 21; RHWa. Escaping through panel fence. **1st for VC.**

***NA *Artemisia absinthium* (Wormwood):** Harts Farm Way Landfill, SU7000 0565; 01 Jun 21; RHWa. **1st for SU70C since 1950s.**

NN *Artemisia scoparia* (Redstem Wormwood): Lymington (centre), SZ3280 9546; 12 Oct 21; MWR det. EJC. 1 plant, roadside gutter, Nelson Place. **1st for VC.**

NN *Artemisia verlotiorum* (Chinese Mugwort): 207 Havant Road, SU7190 0350; 26 Oct 21; RHWa. **1st for SU70 since 1990s.**

NN *Arum italicum* subsp. *italicum* (Italian Lords-and-ladies garden form): Henderson Road Bransbury Mews, SZ6726 9922; 02 Feb 21; RHWa. Henderson Road Bransbury Mews, SZ6725 9920; 23 Feb 21; RHWa. **1st for SZ69.** Earnley Triangle - Boatyard Patch SINC, SZ7461 9878; 08 Apr 21; RHWa. **1st for SZ79.**

NN *Astilbe chinensis* × *japonica* = *A. × arendsii* (Red False-buck's-beard): Bourne Stream nr Branksome Wood Road, SZ075 917; 27 Sep 21; DL. Several patches ... by Bourne stream and looking naturalised, SZ 07547 91709. **1st for SZ09.**

NN *Aubrieta deltoidea* (Aubretia): Longshore Way promenade, SU6784 0003; 17 Jan 21; RHWa. **1st for SU60.**

NN *Aucuba japonica* (Spotted-laurel): Warblington Cemetery - Langstone to Emsworth FP 56, SU7287 0538; 25 Sep 21; RHWa. **1st for SU70.**

NN *Berberis aggregata* (Clustered Barberry): Battamsley, SZ3020 9896; 16 Oct 21; MWR det. EJC Nov 2021. Scrub just S of Setley Pond, 'B. aggregata is best fit, but other parents could be inbred' (EJC). **1st for SZ39.**

NN *Berberis darwinii* (Darwin's Barberry): Wimbledon Park, SZ6504 9866; 14 Mar 21; RHWa. **1st for SZ69.** Beachlands N - Opposite Staunton Avenue, SZ7090 9895; 01 May 21; RHWa. **1st for SZ79.**

NN *Berberis gagnepainii* (Gagnepain's Barberry): Marchwood, SU3865 1022; 21 Sep 21; MWR. Urban roadside, Main Road. **1st for SU31.**

?NA *Berberis vulgaris* (Barberry): Up Somborne (Hedge on N side of Moor Court Lane), SU405 319; 03 Jan 21; TN. Present in c.5m length of hedge. Mature hedgerow plant with numerous fresh growth at base. **1st for SU43 since 1980s.**

NN *Borago officinalis* (Borage): Southwood Road, SZ7336 9850; 13 Jul 21; RHWa. **1st for SZ79.**

***NA *Briza media* (Quaking-grass):** Holy Trinity churchyard, Colden Common, SU485 215; 06 Jun 21; MR, GCo. det. MR. **1st for SU42V.**

***NA *Bromus secalinus* (Rye Brome):** Glidden farm land (Margin of arable field), SU658 152; 23 Jul 21; NWA det. MR. Along margins and in arable field of oats. Photo taken, emailed to MR, hundreds of plants at this site. **1st for SU61.** Arable field N of Pound Marsh permissive footpath, SU7254 0076; 03 Aug 21; RHWa. Mill Rythe Coastal Village entrance drive (S of Pound Marsh), SU7259 0055; 03 Aug 21; RHWa. Manor Farm Public Footpath No. 87, SU7234 0063; 06 Sep 21; RHWa. **1st for SU70F.**

NN *Brunnera macrophylla* (Great Forget-me-not): Knapp, SU406 238; 02 Apr 21; MR. Lane verge. Perhaps cv. Jack Frost but rather less heavily marked with silver than typical. **1st for SU42.**

***NA *Bupleurum rotundifolium* (Thorow-wax):** North Charford, SU192 193; Jul 2021; DC. Hale, turned up in a vegetable plot on a farm; at least 6 plants, several still in flower. **1st for SU11Z.**

****NA *Bupleurum tenuissimum* (Slender Hare's-ear):** Tye Yacht Haven Foreshore Public Footpath No. 86 E, SU7311 0180; 28 Jul 21; RHWa. **1st for SU70F.**

***NA *Butomus umbellatus* (Flowering-rush):** River Stour, SZ1336 9396; 13 Aug 21; JTM. **1st for SZ19G.**

NN *Calendula officinalis* (Pot Marigold): Cadnam, SU2972 1353; 23 Sep 21; MWR. Roadside by garden, Old Lyndhurst Road. **1st for SU21.**

***NA *Callitriche brutia* subsp. *brutia* (Pedunculate Water-starwort):** Portland Coppice, Southwick, SU656 086; 03 Jun 21; MR & VCR team. **1st for SU60 for subsp.**

NA *Callitriche obtusangula* (Blunt-fruited Water-starwort): Lumley (Brook) Meadow LNR, SU7506 0593; 17 Nov 21; RHWa. **1st for SU70.**

NN *Calystegia silvatica* subsp. *disjuncta* Tatchbury area, SU3314; 18 Sep 21; MWR. Marchwood, SU3810; 21 Sep 21; MWR. **1st for SU31 for subsp.**

NN *Capsella rubella* (Pink Shepherd's-purse): New Milton, SZ23586 95205; 11 Mar 21; PCo. Growing in crack between brick wall and tarmac pavement beside urban reserve. Satisfies criteria in Clapham, Tutin and Moore 3rd ed 1987 for rubella: fl buds red margined, petals just exceeding sepals, concave sides and shallow notch in fruit. Images of fruiting taken 4 April 2021. **1st for SZ29.**

NA *Cardamine amara* (Large Bitter-cress): Farlington Marshes (edge of pond), SU685 046; 09 Jun 21; NWA. Muddy edge of pond. **1st for SU60.**

***NA *Carduus tenuiflorus* (Slender Thistle):** Tipner Ranges South, SU6352 0322; 16 Jun 21; RHWa. **1st for SU60G.**

NA *Carex canescens* (White Sedge): Longdown Inclosure, SU361 085; 18 May 21; MR & VCR team. **1st for SU30 since 1950s.**

***NA *Catabrosa aquatica* (Whorl-grass):** Stour Valley LNR (N of visitor centre), SZ096 960; 04 Sep 21; MR & VCR team det. MR. **1st for SZ09.**

NN *Cedrus atlantica* (Atlas Cedar): Staunton Country Park (Formal Park N & Car Park), SU7221 0908; 20 Jul 21; RHWa. Staunton Country Park (Formal Park S.), SU7217 0891; 20 Jul 21; RHWa. **1st for SU70.**

NA *Centaurea debeauxii* (Chalk Knapweed): Minstead, SU2811; 20 Sep 21; MWR. Capitulum 9mm across; lower phyllaries with very narrow central part. Cadnam, SU2913; 23 Sep 21; MWR. Capitula 10, 11, 11mm across; lower phyllaries with narrow central part. **1st for SU21.**

NA *Centaurea scabiosa* (Greater Knapweed): Beachlands E - Royal Hotel, SZ7122 9888; 02 Jul 21; RHWa. **1st for SZ79 since 1990s.**

***NA *Centaureum pulchellum* (Lesser Centaury):** Garden of Beechcroft House (Lawn), SU523 134; 16 Aug 21; CC. A single specimen right by the path that crosses the lawn. **1st for SU51G.** Milton Common, SU6753 0098; 01 Aug 21; RHWa. **1st for SU60Q.**

NN *Cerastium tomentosum* (Snow-in-summer): Eastoke Corner car park, SZ7292 9850; 11 Jul 21; RHWa. **1st for SZ79.**

***NA *Ceratophyllum submersum* (Soft Hornwort):** West Southbourne, SZ129 914; 07 Oct 21; DL. Frequent in Fisherman's Walk Pond, SZ 12980 91432. **1st for SZ19F.**

NN *Cerinthe major* (Greater Honeywort): Eastney Beach - Caravan Park Bund, SZ6789 9895; 14 May 21; RHWa. **1st for SZ69.** Earnley Triangle - Boatyard Patch SINC, SZ7468 9880; 08 Apr 21; RHWa. **1st for SZ79.**

NN *Chaenomeles speciosa* (Chinese Quince): College Park, SU6579 0261; 28 Mar 21; RHWa. **1st for SU60.**

NN *Chamaecyparis pisifera* (Sawara Cypress): Tatchbury area, SU3314 1487; 18 Sep 21; MWR. Roadside hedge, Loperwood. Eling, SU3657 1238; 16 Sep 21; MWR. Planted in cemetery. **1st for SU31.**

***NA *Chara globularis* (Fragile Stonewort):** River Avon, Lower Bisterne, SU139 001; 14 Oct 21; MR, CC, PCo et al. det. MR. Forming mats in quiet shallow water on silt. **1st for SU10F.**

NN *Choisya ternata* (Mexican Orange): Lumley (Brook) Meadow LNR, SU7501 0626; 17 Nov 21; RHWa. **1st for SU70.** Waverley Park, SZ6510 9873; 14 Mar 21; RHWa. **1st for SZ69.**

NA *Chrysosplenium oppositifolium* (Opposite-leaved Golden-saxifrage): Lyndhurst (Picket Farm area), SU2993 0902; 17 Sep 21; MWR. Stream. **1st for SU20.**

NN *Clematis montana* (Himalayan Clematis): Nob's Crook, SU4850 2120; 12 May 21; PM. Flowering in hedge on south side of road north of Leyland's Farm at SU4850 2120. **1st for SU42.**

NN *Clematis tangutica* (Orange-peel Clematis): Selsmore Foreshore - Mengham Beach Salterns, SZ7397 9915; 15 Jul 21; RHWa. **1st for SZ79.**

***NA *Clinopodium ascendens* (Common Calamint):** Bishop's Waltham, SU552 171; 06 Sep 21; PM. Separate plants flowering on bank on north side of Bishop's Lane at SU5526 1718 and SU5521 1719. **1st for SU51N.**

IN *Cornus sericea* (Red-osier Dogwood): Parson's Field, Catherington, SU693 144; 11 May 21; MR & VCR team. **1st for SU61.**

NN *Cosmos bipinnatus* (Mexican Aster): Mill Rythe to Tournbury Public Bridlepath, SU7267 0004; 03 Aug 21; RHWa. Tye to Stoke Public Footpath No. 84, SU7248 0241; 12 Aug 21; RHWa. Warblington new cemetery, SU7301 0542; 25 Sep 21; RHWa. **1st for SU70.**

NN *Cota austriaca* (Austrian Chamomile): Catherington Village Pond area, SU695 144; 11 May 21; MR & VCR team. Evidently part of a 'wild flower' sowing on bank of pond and persisting in quantity on bare ground. **1st for SU61.**

NN *Cotoneaster divaricatus* (Spreading Cotoneaster): Field S of Portsdown Hill Road - Havant, SU6891 0628; 23 Jun 21; RHWa. **1st for SU60.**

NN *Cotoneaster frigidus* × *salicifolius* = *C. × watereri* (Waterer's Cotoneaster): Sinah Gun Site W, SZ6996 9946; 26 Oct 21; RHWa. **1st for SZ69.**

IN *Cotoneaster integrifolius* (Entire-leaved Cotoneaster): Eastern Road, SU6740 0304; 09 Jun 21; RHWa, JAN. **1st for SU60.**

NN *Cotoneaster lacteus* (Late Cotoneaster): Eling, SU3649 1277; 16 Sep 21; MWR. Marchwood, SU3863 1037; 21 Sep 21; MWR. 2.5m bush, hedge round recreation ground. **1st for SU31.**

NN *Cotula coronopifolia* (Buttonweed): Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40.**

***NA *Crambe maritima* (Sea-kale):** S of Sturt Pond, SZ2985 9091; 29 May 21; MWR. 7 plants on shingle on Hurst Spit. **1st for SZ29V.**

***NA *Crassula tillaea* (Mossy Stonecrop):** Clay Hill, New Forest (Low bank of N edge of old road), SU2320 0240; 23 Jun 21; TN. At path edge/base of bank. **1st for SU20G.**

NA *Crepis capillaris* var. *glandulosa* (Smooth Hawk's-Beard): Kings Close, Chandlers Ford, SU435 210; 10 Aug 21; MR. Frequent in untended lawn. **1st for SU42 for var.**

NN *Crocus angustifolius* × *flavus* = *C. × luteus* (Yellow Crocus): Meon Shore, SU526 027; 01 Mar 21; DHUB. **1st for SU50.** Victoria Avenue triangle, SZ6371 9917; 28 Jan 21; RHWa. Highland Road, SZ6596 9900; 08 Mar 21; RHWa. Ave. de Caen, SZ6436 9823; 05 Feb 21; RHWa. Kingsley Road Open Space, SZ6732 9951; 02 Feb 21; RHWa. Milton Park - SZ663998, SZ6651 9964; 06 Mar 21; RHWa. Bransbury Road, SZ669 993; 22 Jan 21; RHWa. **1st for SZ69.**

NN *Crocus chrysanthus* (Golden Crocus): Hordle recreation ground, SZ26534 95127; 15 Feb 21; PCo. Three dense groups in grassland near urban fence. **1st for SZ29.**

NN *Crocus tommasinianus* (Early Crocus): Southsea Skatepark, SZ6457 9822; 05 Feb 21; RHWa. Ave. de Caen, SZ6433 9822; 05 Feb 21; RHWa. **1st for SZ69.**

***NA *Cruciata laevipes* (Crosswort):** St Stephen's, Sparsholt (W edge of graveyard), SU4348 3123; 22 Apr 21; TN. Several large flowering patches noted. **1st for SU43F since 1930s.** W of Newlands Farm. Purbrook, SU663 085; 03 Jun 21; MR & VCR team. **1st for SU60U since ?1930s.**

NN *Cucurbita pepo* (Marrow): Northney Rec to St. Peters Church Public Footpath No. 116, SU7300 0309; 06 Aug 21; RHWa. **1st for SU70.**

NN *Cyclamen coum* (Eastern Sowbread): Hordle, SZ26923 94259; 05 Mar 21; PCo. Road verge near Apple Court Garden. **1st for SZ29.**

NN *Cynara cardunculus* (Globe Artichoke): Lakeside North Harbour IBM North, SU6416 0521; 28 Mar 21; RHWa. Throw-out. **1st for SU60.** Kingsley Road Open Space, SZ6744 9950; 21 Mar 21; RHWa. Kingsley Road Open Space, SZ6745 9949; 18 Apr 21; RHWa. **1st for SZ69.** Sea Front, SZ7073 9904; 08 Apr 21; RHWa. Sea Front, SZ7074 9905; 22 Aug 21; RHWa. **1st for SZ79.**

NN *Cyperus eragrostis* (Pale Galingale): The Pallant, Havant (Pavement edge), SU7186 0633; 24 Aug 21; TN. Single flowering specimen against wall of dwelling. **1st for SU70.** Sea Front, SZ705 991; 22 Aug 21; RHWa. Typical garden escape scenario. **1st for SZ79.**

NA *Dactylorhiza fuchsii* × *Gymnadenia conopsea* s.s. = *X Dactylodenia heinzliana* Broughton Down, SU2888 3295; 30 Jun 21; VB. Broughton Down (Immediately east of path by hedgerow), SU2888 3288; 30 Jun 21; VB. Spotted flowers and leaves. Long spurs and distinct fragrance; photo. *X D. st-quintinii* now renamed × *D. heinzliana* (Chalk Fragrant × Common Spotted).

NA *Daphne laureola* (Spurge-laurel): Highcliffe and Mundeford, SZ1924 9272; 02 Jan 21; PCo, RGA. Highcliffe, SZ19144 92791; 02 Jan 21; PCo. Edge of pine woodland near urban fences. Several small shrubs noted. Small erect shrub with dark glossy leaves. **1st for SZ19.**

NA *Daucus carota* subsp. *gummifer* (Sea Carrot): North Common NE, SU7350 0405; 15 Sep 21; RHWa. **1st for SU70 for subsp.**

NN *Diplotaxis muralis* (Annual Wall-rocket): Tatchbury area, SU3366 1407; 18 Sep 21; MWR. Garden edge, California Close. Marchwood, SU3866 1014; 21 Sep 21; MWR. Edge of garden, Mulberry Road. **1st for SU31.**

NA *Dipsacus fullonum* × *laciniatus* = *D. × pseudosilvester* Westwood LNR, SU456 095; 31 Aug 21; MR & VCR team. A single plant that was obviously hybrid. **1st for SU40.**

NN *Dipsacus laciniatus* (Cut-leaved Teasel): Westwood LNR, SU456 095; 31 Aug 21; MR & VCR team. A large population over an area of scrub margin and glade c. 70m × 50m. **1st for SU40.**

***NA *Drabella muralis* (Wall Whitlowgrass):** Soberton (Corner of Crookham Lane and Station Road), SU612 176; 27 May 21; NWA. On grassy verge at the bottom of retaining garden wall. **1st for SU61 since 1990s.**

****NA *Drosera intermedia* (Oblong-leaved Sundew):** Pewit Hill, Lowford, SU4814 1148; 07 Oct 21; JBuck, MR, JPol (after report from JBuck). Scraped area on spring line. **1st for SU41V.**

NN *Echium pininana* (Giant Viper's-bugloss): Hayling Billy Line, SU7121 0057; 22 Aug 21; RHWa. **1st for SU70.**

NN *Elaeagnus macrophylla* × *pungens* = *E. × submacrophylla* (Ebbinge's Oleaster): Anchorage Park, SU6713 0378; 19 May 21; RHWa. Scratchface Lane POS, SU6860 0760; 05 Apr 21; RHWa. Littlepark Wood Bridlepath (Scratchface Lane), SU6940 0700; 03 Apr 21; RHWa. Waverley Park, SZ6509 9874; 14 Mar 21; RHWa. **1st for SZ69.**

NA *Elymus repens* f. *aristatus* (Common Couch): E of Alsfordmoor Coppice, Purbrook, SU668 082; 03 Jun 21; MR & VCR team. **1st for SU60 since 1930s for forma.**

NA *Epilobium ciliatum* × *montanum* = *E. × interjectum* Curbridge, SU5203 1117; 14 Oct 21; PM. Petals pink with dark edges; intermediate stigma; few seeds developed and these with tiny appendage. Flowering/fruiting beside young tree in recently planted woodland. **1st for SU51.**

NA *Epilobium tetragonum* × *ciliatum* = *E. × mentiens* Lymington (Buckland), SZ3190 9672; 31 Jul 21; MWR det. GK 22 Nov 2021. Roadside, 20 Bankview. **1st for SZ39.**

NN *Epimedium pinnatum* (Caucasian Barrenwort): Hiltingbury Lakes, SU440 217; 22 Apr 21; MR. Patch c. 1m across. **1st for SU42.**

***NA *Epipactis helleborine* (Broad-leaved Helleborine):** Colden Common, North-east, SU482 222; 19 Jul 21; PM. Large plant flowering on north side of Main Road. **1st for SU42W.** Front garden (gravel) (close to house), SZ2465 9391; 25 Jun 21; RLo. 'In 15 yrs living here this is the first time I've seen it in this location.' **1st for SZ29L.**

***NA *Erodium moschatum* (Musk Stork's-bill):** Cadnam, SU2973 1350; 23 Sep 21; MWR. Mericarp pits glandular. Several plants, roadside by shops, The Parade, by Southampton Road (A336). **1st for SU21W.** Eling, SU3627 1252; 16 Sep 21; MWR. Mericarp pits glandular. Roadside, Milverton Road. **1st for SU31R.** Tipner Lane, SU639 033; 02 Apr 21; RHWa. **1st for SU60G.**

***NA *Erophila glabrescens* (Glabrous Whitlowgrass):** Pine Road, Hiltingbury, SU432 219; 24 Mar 21; MR, RCR det. MR. **1st for SU42F.**

NN *Escallonia rubra* var. *macrantha* (Escallonia): Hayling Island, SZ688 999; 01 Jan 21; DN, SDe. **1st for SZ69 since 1990s.**

NN *Eucalyptus gunnii* (Cider Gum): Otterbourne Village Green, SU454 223; 28 Apr 21; RHWa det. PCo. **1st for SU42.**

NN *Eucalyptus pauciflora* (Snow-gum): Blackwater Arboretum, New Forest, SU26372 04917; 29 Mar 21; PCo. Many small seedlings close to mature trees that are planted. **1st for VC.**

NN *Euonymus fortunei* (Fortune's Spindle): Park Wood, SU6842 1036; 13 Apr 21; RHWa. **1st for VC.**

NN *Euonymus japonicus* (Evergreen Spindle): Warblington Cemetery - Langstone to Emsworth FP 56, SU7285 0542; 25 Sep 21; RHWa. **1st for SU70.**

NA *Euphorbia amygdaloides* (Wood Spurge): Sinah Stables Public Footpath, SZ7008 9945; 04 May 21; RHWa. **1st for SZ79.**

NN *Euphorbia characias* (Mediterranean Spurge): Lifeboat Station Saltmarsh SINC, SZ7497 9861; 17 Sep 21; RHWa. **1st for SZ79.**

***NN *Euphorbia cyparissias* (Cypress Spurge):** Ashley Heath, Dorset, SU13672 04904; 08 Apr 21; PCo. Under A31 roadside conifers in more or less bare ground. **1st for SU10H.**

****NA *Euphorbia exigua* (Dwarf Spurge):** Yew Hill, SU455 266; 29 Jul 21; PM. Fruiting at edge of field east of Yew Hill. **1st for SU42N.**

NN *Euphorbia maculata* (Spotted Spurge): Hester Road, SZ6686 9948; 12 Sep 21; RHWa. **1st for SZ69.**

IN *Fallopia baldschuanica* (Russian-vine): Hayling Billy Line, SU7197 0550; 24 Aug 21; RHWa. Lumley (Brook) Meadow LNR, SU7498 0622; 17 Nov 21; RHWa. **1st for SU70.**

NN *Fatsia japonica* (Fatsia): Henderson Road Bransbury Mews, SZ6725 9920; 23 Feb 21; RHWa. **1st for SZ69.**

NN *Festuca brevipila* (Hard Fescue): Fort Cumberland Open Space, SZ6790 9921; 02 May 21; RHWa. **1st for SZ69 since 1970s.** Beachlands E - Westfield Beach, SZ7170 9886; 13 May 21; RHWa. **1st for SZ79.**

***NA *Festuca filiformis* (Fine-leaved Sheep's-fescue):** Appleslade Bottom, SU183 092; 07 May 21; MR & VCR team. **1st for SU10Z since ?1990s.** S of Widden Bottom, SZ287 990; 30 Jul 21; MR, NAS, AMC. **1st for SZ29Z since ?1990s.**

NN *Festuca rubra* subsp. *megastachys* (Red Strong Creeping Fescue): Westwood LNR, SU456 095; 14 May 21; MR & VCR team. **1st for SU40 for subsp.**

NN *Ficus carica* (Fig): Romsey, SU3600 2201; 15 Jun 21; PM. Large plant with several fruit developing beside Barge Canal. **1st for SU32.**

***NN *Fritillaria meleagris* (Fritillary):** S of Tredgoulds Copse, Valley Park, SU413 205; 13 Apr 21; MR. S of Tredgoulds Copse, Valley Park, SU412 205; 13 Apr 21; MR. Every suspicion of being planted, but in considerable quantity in open woodland belt and now well-established and spreading. **1st for SU42A.**

***NA *Fumaria densiflora* (Dense-flowered Fumitory):** Bushfield Farm (Arable field NW of Bushfield Farm), SU465 272; 31 Mar 21; TN. Occasional plants, some in flower, along N edge in very weedy field. **1st for SU42T.**

***NA *Fumaria reuteri* (Martin's Ramping-fumitory):** Highcliffe Community Allotments, Winchester, SU4918 2885; 17 Sep 21; TN conf. TGCR. One plant within brassica cage. ID confirmed BSBI referee Tim Rich 27 Sep 21. **1st for SU42Z.**

NN *Galinsoga parviflora* (Gallant Soldier): Hunts Pond Road Allotments, Park Gate, SU5258 0596; 09 Oct 21; TN. Very few plants noted amongst allotment crop in weedy bed. Receptacle scales tri-lobed. **1st for SU50.**

NN *Garrya elliptica* (Silk-tassel): Basepoint Business Centre, Central Bridge, SU4280 1122; 22 Jan 21; DHub. **1st for VC.**

NN *Geranium macrorrhizum* (Rock Crane's-bill): Holy Trinity Churchyard, Colden Common, SU486 215; 06 Jun 21; MR, GCo det. MR. **1st for SU42.**

NA *Geranium pratense* (Meadow Crane's-bill): Earnley Triangle - Boatyard Patch SINC, SZ7471 9887; 08 Apr 21; RHWa. **1st for SZ79.**

***NA *Glebionis segetum* (Corn Marigold):** Hunts Pond Road Allotments, Park Gate, SU5257 0597; 09 Oct 21; TN. Small patch in grassland near apple trees. Possibly planted? **1st for SU50H.** Tye Yacht Haven Foreshore Public Footpath No. 86 E, SU7310 0181; 28 Jul 21; RHWa. **1st for SU70F.** Northney Rec to St. Peters Church Public Footpath No. 116, SU7302 0323; 06 Aug 21; RHWa. **1st for SU70G.** Warblington Farm (NW corner of arable field S of Solent Way/...), SU7312 0537; 29 Jan 21; TN. Large spoil heap in corner of field. Single flowering plant noted. Warblington new cemetery, SU7304 0542; 25 Sep 21; RHWa. **1st for SU70H.**

***NA *Gymnadenia borealis* (Heath Fragrant-orchid):** Holmsley Ridge, SU2122 0147; 28 Jun 21; TN. 50+ flowering plants scattered within and near a flush. Includes pure white example. **1st for SU20A since 1990s.**

NN *Helianthus annuus* (Sunflower): Hayling Billy, SU7172 0292; 10 Sep 21; RHWa. Northney Rec to St. Peters Church Public Footpath No. 116, SU7299 0312; 06 Aug 21; RHWa. Tye to Stoke Public Footpath No. 84, SU7249 0239; 12 Aug 21; RHWa. Tye to Stoke Public Footpath No. 84, SU7301 0233; 28 Jul 21; RHWa. Warblington new cemetery, SU7304 0543; 25 Sep 21; RHWa. **1st for SU70.**

NN *Helianthus tuberosus* (Jerusalem Artichoke): St. Peters Road, SU7308 0308; 06 Aug 21; RHWa. **1st for SU70.**

NN *Helleborus argutifolius* (Corsican Hellebore): Driftwood Gardens, SZ6721 9892; 02 Feb 21; RHWa. **1st for SZ69.**

***NA *Helleborus foetidus* (Stinking Hellebore):** Milton Common West - SU669007, SU6696 0054; 22 Mar 21; RHWa. **1st for SU60Q.** Field S of Portsdown Hill Road - Havant, SU6908 0631; 23 Jun 21; RHWa. **1st for SU60Y.** Havant Road, SU7182 0287; 12 Aug 21; RHWa. **1st for SU70B.**

NN *Helleborus orientalis* (Lenten-rose): Hilsea Lines West - Compartment 1 (Lido), SU6533 0436; 27 Feb 21; RHWa. Possibly planted. **1st for SU60.**

NN *Hemerocallis fulva* (Orange Day-lily): Selsmore Foreshore - Mengham Beach Salterns - SZ7399, SZ7379 9921; 15 Jul 21; RHWa. **1st for SZ79.**

NN *Hieracium argillaceum* (Southern Hawkweed): S of Little Stubby Hat, SU3084 1053; 17 Aug 21; MR & VCR team det. MR. On N bank by ford, many young rosettes and about a dozen flowering plants. **1st for SU31.** Sandy Lane, Shedfield, SU5539 1376; 17 Jul 21; PMac det BBu. Small group of plants on roadside bank just opposite entrance to Meon Valley Golf Course. **1st for SU51.**

NA *Hieracium sabaudum* (Autumn Hawkweed): Nr Potkiln, Cranbury Estate, SU435 233; 05 Sep 21; MR, RCR det. MR. S of Home Farm, Cranbury Park, SU440 230; 05 Sep 21; MR, RCR det. MR. Under trees by farm drive on slope. Allbrook Brickworks, SU453 214; 27 Sep 21; MR. **1st for SU42.**

***NA *Himantoglossum hircinum* (Lizard Orchid):** VC11 South Hampshire, SU41; Jun 2021; JCu. **1st for VC since 1931.**

NN *Hirschfeldia incana* (Hoary Mustard): Hayling Island, SZ750 984; 01 Jan 21; DN, SDe. **1st for SZ79.**

NN *Hordeum vulgare* (Six-rowed Barley): Mill Rythe to Tournerbury Public Bridlepath, SU7263 0053; 03 Aug 21; RHWa. **1st for SU70.**

NN *Hyacinthoides hispanica* (Spanish Bluebell): Eastney Beach West, SZ6685 9869; 20 Apr 21; RHWa. **1st for SZ69.**

NN *Hyacinthus orientalis* (Hyacinth): Wecock Common N, SU6810 1186; 14 Apr 21; RHWa. **1st for SU61.**

NN *Hylotelephium 'Herbstfreude'* (Autumn Stonecrop): Boscombe, SZ125 913; 07 Oct 21; DL. **1st for SZ19.**

***NA *Hylotelephium telephium* (Orpine):** Mill Rythe Junior School entrance, SU7248 0071; 03 Aug 21; RHWa. **1st for SU70F.**

NA *Hypericum hirsutum* (Hairy St John's-wort): Cadnam, SU2919 1371; 23 Sep 21; MWR. Roadside, Cadnam Lane. **1st for SU21.** Southsea Rock Gardens, SZ6476 9808; 03 Jul 21; RHWa. **1st for SZ69.**

****NA *Hypopitys monotropa* (Yellow Bird's-nest):** Leydene Bottom, Hyden, SU6754 1865; 28 Aug 21; MPa. About 35 spikes, mostly going over but a couple in flower. East Meon Sustainability Centre natural burial ground. **1st for SU61U.**

NN *Jacobaea maritima* (Silver Ragwort): New Milton urban and Coast, SZ2424 9414; 03 Jan 21; PCo, RGa. **1st for SZ29.**

NN *Jacobaea maritima* × *vulgaris* = *J. × albescens* S edge Beachlands Golf Course, SZ7036 9898; 02 Jul 21; RHWa. **1st for SZ79 since 1980s.**

NN *Jasminum officinale* (Summer Jasmine): Copse Lane, SU7217 0182; 28 Jul 21; RHWa. **1st for SU70.** Lock Lake - Ferry Road, SZ6750 9924; 02 Jan 21; RHWa. **1st for SZ69.** Earnley Triangle - Boatyard Patch SINC, SZ7473 9887; 13 Jul 21; RHWa. Escaping through panel fence. **1st for SZ79.**

NA *Juncus acutiflorus* × *articulatus* = *J. × surrejanus* Yewtree Hill area (stream and margins), SU308 105; 17 Aug 21; MR & VCR team det. MR. **1st for SU31 since 1960s.** Widden Bottom, SZ289 993; 30 Jul 21; MR, NAS, AMC. **1st for SZ29.**

NN *Kerria japonica* (Kerria): Ladybridge Park SE, SU6752 0776; 21 Apr 21; RHWa. **1st for SU60 since 1990s.**

***NA *Knautia arvensis* (Field Scabious):** Hayling Billy, SU7177 0393; 09 Aug 21; RHWa. **1st for SU70B since 1990s.** Warblington new cemetery, SU7302 0541; 25 Sep 21; RHWa. **1st for SU70H.**

***NA *Lamium hybridum* (Cut-leaved Dead-nettle):** Bushfield Farm (Triangular field NW of Bushfield Farmyard), SU4664 2718; 24 Feb 21; TN. Very weedy arable field over chalk. Scattered plants at E end of field, several dozen plants. **1st for SU42T.**

NN *Lamium maculatum* (Spotted Dead-nettle): North End Nature Park, Chandler's Ford, SU433 191; 21 Apr 21; MR. **1st for SU41 since 1990s.**

***NN *Laphangium luteoalbum* (Jersey Cudweed):** Lyndhurst, SU2947 0837; 06 Nov 21; DDi det. MR. Several tall (30 cm) plants in early seed. **1st for SU20.** Cheesefoot Head, South A272 (Semi dry slurry enclosure), SU5302 2757; 25 Nov 21; ASt. Several plants in good condition. **1st for SU52.**

***NA *Lemna gibba* (Fat Duckweed):** Ripley Brook, Lower Bisterne, SU143 001; 14 Oct 21; MR, CC, PCo et al. **1st for SU10K.**

***NA *Lepidium heterophyllum* (Smith's Pepperwort):** Beacon Hill (edge of round barrow cemetery), SU607 225; 06 Jun 21; NWA. **1st for SU62B.**

***NN *Leucojum aestivum* subsp. *aestivum* (Summer Snowflake):** Hordle, SZ26934 94289; 09 Feb 21; PCo. In roadside ditch outside Applecourt Garden, mostly likely garden escape. **1st for SZ29S.**

NN *Limonium procerum* (Tall Sea-lavender): M3 Shawford, SU469 251; Jul 2021; PS. Central reservation visible S-bound c. 30m S of Winchester Road bridge. **1st for SU42.**

***NA *Limonium vulgare* (Common Sea-lavender):** Hilsea Lines West - Compartment 1 (Lido), SU6529 0442; 27 Feb 21; RHWa. **1st for SU60M since 1990s.**

***NA *Linum bienne* (Pale Flax):** Tipner Ranges South, SU6362 0310; 16 Jun 21; RHWa. **1st for SU60G since 1990s.**

NN *Lobularia maritima* (Sweet Alison): Havant Road - Stoke Common E, SU7189 0345; 26 Oct 21; RHWa. **1st for SU70.**

NN *Lonicera caprifolium* × *etrusca* = *L. × italica* (Garden Honeysuckle): Woodland edge N of Fryern Hill rec, SU439 208; 03 May 21; MR. Presumed garden outcast. **1st for SU42.**

NN *Lonicera japonica* (Japanese Honeysuckle): Ferry Road Open Space, SZ6750 9926; 21 Mar 21; RHWa. Ferry Road, SZ6751 9927; 16 Apr 21; RHWa. Bransbury Park, SZ6690 9943; 28 Apr 21; RHWa. **1st for SZ69.**

NN *Lonicera pileata* (Box-leaved Honeysuckle): Chandler's Ford (SW side), SU429 192; 01 Oct 21; MR. By FP W of North End Nature Park, E of Bournemouth Road. **1st for SU41.** Portsbridge substation green, SU6551 0465; 27 Feb 21; RHWa det. MR. Lakeside North Harbour IBM North, SU6471 0529; 28 Mar 21; RHWa. Sandy Dell N, SU6789 0730; 21 Apr 21; RHWa. Ladybridge Park N, SU6746 0788; 21 Apr 21; RHWa. Farlington Marshes, SU6856 0521; 25 May 21; RHWa. Littlepark Wood Bridlepath (Scratchface Lane), SU6940 0701; 03 Apr 21; RHWa. **1st for SU60.** Wecock Common, SU6833 1147; 14 Apr 21; RHWa. The Queen's Inclosure, SU6928 1069; 13 Apr 21; RHWa. **1st for SU61.** Longwood (Idlewood), SU6903 1159; 14 Apr 21; RHWa. **1st for SZ69.**

***NA *Lotus subbiflorus* (Hairy Bird's-foot-trefoil):** Fawley Quarry - Badminton Lake restoration area (Central area), SU4619 0202; 11 Jun 21; TN. Restored quarry. Colonised sands/gravels. Single plant noted, flowering. Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40R.**

***NA *Lotus tenuis* (Narrow-leaved Bird's-foot-trefoil):** Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40R.** North Common NE, SU7343 0390; 15 Sep 21; RHWa. **1st for SU70G.**

***NA *Ludwigia palustris* (Hampshire-purslane):** Ipley Manor (cattle pond), SU3762 0758; 20 Jul 21; CC. **1st for SU30T since 1990s.**

***NA *Luzula forsteri* (Southern Wood-rush):** Brownhill Road, Chandler's Ford, SU436 213; 13 Apr 21; MR. In unknown verge at junction of Carlyn Drive and Brownhill Road. Patch c. 1m × 1m. **1st for SU42F.** Holy Trinity churchyard, Colden Common, SU485 215; 06 Jun 21; MR, GCo det. MR. **1st for SU42V.**

***NA *Luzula sylvatica* (Great Wood-rush):** Otterbourne Park Wood, SU4611 2181; 26 Apr 21; MR & VCR team. One small patch and another nearby. **1st for SU42Q.**

NN *Lysimachia ciliata* (Fringed Loosestrife): Cadnam, SU2913 1382; 23 Sep 21; MWR det. EJC Nov 2021. 1 plant, roadside by garden, Cadnam Lane. **1st for VC.**

NN *Lysimachia punctata* (Dotted Loosestrife): Eastoke - Lakeside Holiday Village - Foreshore, SZ7387 9887; 15 Jul 21; RHWa. **1st for SZ79.**

***NA *Lythrum portula* (Water-purslane):** Minstead, SU2837 1109; 20 Sep 21; MWR. **1st for SU21V.** Awbridge Hill Nature Sanctuary (Henge Field, pond), SU3271 2361; 05 Jul 21; MR & VCR team. **1st for SU32G.** Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40R.** Catherington Village Pond area, SU695 144; 11 May 21; MR & VCR team. **1st for SU61X.**

NN *Mahonia aquifolium* × *repens* = *M. × decumbens* (Newmarket Oregon-grape): Ashley Heath, Dorset, SU13711 04935; 08 Apr 21; PCo. On A31 roadside bank in mixed shrubbery. Probably planted but long unmanaged. **1st for VC.**

NN *Mahonia japonica* (Japanese Oregon-grape): Chewton Common, SZ21213 94267; 19 Mar 21; PCo. Shrub branched at base and recently pruned. Presumably planted. **1st for SZ29.**

NN *Malcolmia maritima* (Virginia Stock): Bransbury Road, SZ6711 9927; 18 Feb 21; RHWa. **1st for SZ69.**

NN *Malva alba* × *thuringiaca* = *M. × clementii* (Garden Tree-mallow): St. Peters Road, SU7310 0310; 06 Aug 21; RHWa. Possibly planted. **1st for SU70.** Alver Valley Country Park SE - SU5899, SZ5860 9996; 07 Jul 21; RHWa. **1st for SZ59.**

NN *Matthiola incana* (Hoary Stock): Milton Park, SZ6642 9986; 06 Mar 21; RHWa. Self sown, at edge of path. **1st for SZ69.**

***NA *Medicago polymorpha* (Toothed Medick):** Lumps Fort - Southsea Rose Garden, SZ6572 9827; 28 Jun 21; MR, RHWa, GCo. **1st for SZ69P.**

***NA *Mentha arvensis* (Corn Mint):** Cadnam, SU2982 1336; 23 Sep 21; MWR. Among Rubus by track (Old Cross Road). **1st for SU21W.** Allbrook Brickworks, SU454 215; 27 Sep 21; MR. **1st for SU42K.**

****NA *Mentha pulegium* (Pennyroyal):** Abbotswood, SU365 231; 27 Aug 21; CRI. **1st for SU32R.**

NN *Miscanthus sinensis* (Chinese Silver-grass): West Southbourne, SZ129 914; 07 Oct 21; DL. 1 in stonework near Fisherman's Walk Pond, self-sown from nearby flower bed. **1st for SZ19.**

****NA *Moenchia erecta* (Upright Chickweed):** Netley Abbey, SU4528 0899; 14 May 21; MR & VCR team. Small population on cloister walls. **1st for SU40P.**

***NA *Montia fontana* subsp. *chondrosperma* (Blinks):** Otterbourne Reservoir, SU453 224, SU453 225; 26 Apr 21; MR & VCR team. **1st for SU42L.**

IN *Muehlenbeckia complexa* (Wireplant): Ferry Road - Sinah Warren, SZ6969 9953; 26 Oct 21; RHWa. **1st for SZ69.**

NA *Myosotis arvensis* var. *sylvestris* (Field Forget-Me-Not): Westwood LNR, SU458 093; 14 May 21; MR & VCR team. **1st for SU40 for var.**

NA *Myosotis sylvatica* (Wood Forget-me-not): Bransbury Road, SZ6710 9928; 28 Apr 21; RHWa. **1st for SZ69 since 1990s.**

NN *Narcissus cyclamineus* × *tazetta* = *N. × cyclazetta* (Head-to-head Daffodil): Kingsley Road Open Space, SZ6733 9955; 21 Feb 21; RHWa. **1st for SZ69.**

NN *Narcissus jonquilla* × *tazetta* = *N. × intermedius* (Intermediate Jonquil): Barton Common, Barton on Sea, SZ25175 93455; 27 Feb 21; PCo. Near fence beside golf course work area. Shaded earth bank. Small cluster of leaves presumably from discarded bulb. **1st for VC.**

NN *Narcissus papyraceus* (Paper-white Daffodil): Weston Shore, Southampton, SU4363 1006; 28 Feb 21; PAB. **1st for VC.**

NN *Narcissus poeticus* (Pheasant's-eye Daffodil): Candy's Pit and The Pantry Cave, SU6665 0636; 02 Apr 21; RHWa. **1st for SU60.**

NN *Narcissus tazetta* (Bunch-flowered Daffodil): Milton Common, SU672 008; 22 Mar 21; RHWa. Probably planted; one specimen in a roadside swathe of standard hybrids. **1st for SU60.** Ferry Road, SZ6782 9941; 16 Apr 21; RHWa. **1st for SZ69.**

NN *Nassella tenuissima* (Argentine Needle-grass): Woodgaston Lane N, SU7317 0229; 28 Jul 21; RHWa. **1st for SU70.**

NN *Nicandra physalodes* (Apple-of-Peru): Hayling Dirt Jumps, SZ7096 9990; 17 Aug 21; TN. Single plant recorded on side of one BMX jump. **1st for SZ79.**

NN *Nicotiana sylvestris* (Woodland Tobacco): Langstone (Langstone High Street, northern side), SU7180 0491; 06 Nov 21; TN. Single flowering plant. **1st for VC.**

NN *Nigella damascena* (Love-in-a-mist): S. Shore - Hayling Island Beach - Coastguard - Bound Lane CP, SZ7208 9876; 11 Jul 21; RHWa. Earnley Triangle - Boatyard Patch SINC, SZ7475 9889; 13 Jul 21; RHWa. **1st for SZ79.**

****NA *Oenanthe fistulosa* (Tubular Water-dropwort):** Holmsley Walk, SU2101; 29 Jul 21; AHP, EJC. **1st for SU20A.**

***NA *Oenanthe pimpinelloides* (Corky-fruited Water-dropwort):** Milton Common, SU6715 0101; 31 May 21; RHWa. **1st for SU60Q since 1990s.**

NN *Olearia avicenniifolia* (Mangrove-leaved Daisy-bush): Boscombe, SZ123 914; 07 Oct 21; DL. 1 large bush at Boscombe Overcliff Drive. **1st for SZ19.**

***NA *Onobrychis viciifolia* (Sainfoin):** Westwood LNR, SU456 097; 14 May 21; MR & VCR team. **1st for SU40P.**

NA *Ophrys apifera* (Bee Orchid): A31 Stoney Cross (Central reservation A31), SU268 119; 23 Jun 21; TN. One flowering plant. **1st for SU21 since 1930s.**

***NA *Orobanche hederæ* (Ivy Broomrape):** Totton (Landscaping of Morrisons), SU337 138; 20 Jul 21; CC. The 'normal' colour form. **1st for SU31G.** Tuckton Gardens, SZ1506 9209; 09 Jul 21; SRW. **1st for SZ19L.** Eastney

Barracks Entrance, SZ6681 9870; 05 Jun 21; RHWa. **1st for SZ69U.**

NN *Osteospermum jucundum* (Osteospermum): New Milton to Downton, SZ243 937; 01 Jan 21; RGa, PCo. **1st for SZ29.** Beachlands E - Norfolk Crescent - Beach huts, SZ7108 9883; 13 May 21; RHWa. **1st for SZ79.**

NN *Oxalis incarnata* (Pale Pink-sorrel): Waverley Road S, SZ6498 9844; 14 Mar 21; RHWa. Waverley Road N, SZ6517 9887; 14 Mar 21; RHWa. Henderson Road, SZ6680 9908; 25 Feb 21; RHWa. Henderson Road, SZ6664 9900; 08 Mar 21; RHWa. **1st for SZ69.**

NN *Panicum capillare* (Witch-grass): Denhill Close, SU7131 0035; 22 Aug 21; RHWa. **1st for SU70.**

NA *Papaver dubium* (Long-headed Poppy): Canoe Lake Park, SZ6547 9840; 28 Jun 21; MR, RHWa, GCo. **1st for SZ69 since 1990s.**

***NA *Papaver lecoqii* (Yellow-juiced Poppy):** S. Shore - Hayling Island Beach - Coastguard - Bound Lane CP, SZ7250 9858; 11 Jul 21; RHWa. **1st for SZ79J.**

NN *Papaver setiferum* (Oriental Poppy): Lumps Fort - Southsea Rose Garden, SZ6582 9831; 05 Jun 21; RHWa. **1st for SZ69.**

***NA *Parapholis incurva* (Curved Hard-grass):** Selsmore Foreshore - Mengham Beach Salterns, SZ7356 9942; 15 Jul 21; RHWa. **1st for SZ79J.**

NN *Pastinaca sativa* subsp. *urens* (Eastern Parsnip): M27 J8, Bursledon, SU485 111; Jul 2021; PS. M27 J8 onbound S slip, SU485 110; Jul 2021; PS. M3 Highcliffe, Winchester, SU495 286; Jul 2021; PS. Central reservation. **1st for VC for subsp.**

NN *Phalaris canariensis* (Canary-grass): Mill Rythe to Tournbury Public Bridlepath, SU7262 0042; 03 Aug 21; RHWa. **1st for SU70 since 1990s.**

NN *Physalis peruviana* (Cape-gooseberry): Cheesefoot Head, South A272 (Semi dry slurry enclosure), SU5302 2757; 14 Nov 21; ASt. Many large plants. **1st for SU52.**

NA *Picris hieracioides* (Hawkweed Oxtongue): Southwood Road, SZ7361 9832; 13 Jul 21; RHWa. **1st for SZ79.**

NN *Picris hieracioides* subsp. *villarsii* (Hawkweed Oxtongue): Highcliffe Castle (coast), SZ204 930; 13 Jul 21; DL. By zig-zag path S of Highcliffe Castle. **1st for VC for subsp.**

***NA *Platanthera chlorantha* (Greater Butterfly-orchid):** Dundridge, SU5796 1802; 08 Jun 21; PM. Flowering in Phrympt Copse. **1st for SU51U since 1980s.**

***NA *Poa bulbosa* (Bulbous Meadow-grass):** Eastney Beach, SZ6775 9891; 14 May 21; RHWa. **1st for SZ69U since 1990s.**

***NA *Poa infirma* (Early Meadow-grass):** Otterbourne Reservoir, SU453 225; 26 Apr 21; MR & VCR team. **1st for SU42L.** Ports Creek - N bank - opp. Halsea Lines Cpt 3, SU6603 0449; 02 Mar 21; RHWa. **1st for SU60S.** Broadmarsh Cycle Path (Solent Way), SU6992 0551; 01 Apr 21; RHWa. **1st for SU60X.** Highcliffe, Chewton Common Road, SZ20971 94265; 19 Mar 21; PCo. Mat of small prostrate herbs in front lawn. **1st for SZ29C.** Milford on Sea, SZ27472 91924; 05

Mar 21; PCo. Beside tarmac coastal path in compressed earth. **1st for SZ29Q.** Eastney Beach West - SZ667986, SZ6680 9867; 08 Mar 21; RHWa. **1st for SZ69U since 1990s.**

***NA *Polycarpon tetraphyllum* (Four-leaved Allseed):** The Pallant, Havant (Kerb edge of N side of The Pallant), SU7193 0631; 24 Aug 21; TN. Single plant noted. The Pallant, Havant (Kerb and wall base on S side of The Pallant), SU7196 0628; 18 Sep 21; TN. Single large plant, in seed. **1st for SU70D.**

***NA *Polygala serpyllifolia* (Heath Milkwort):** Pewit Hill, Lowford, SU481 114; 07 Oct 21; MR, JPol. **1st for SU41V.**

***NA *Polygonatum multiflorum* (Solomon's-seal):** Hall Lands Copse (David's. Shaded sunken trackway to field), SU499 193; 15 May 21; GCo. Occasional. **1st for SU41Z.** Ampfield Wood, SU401 238; 06 May 21; MR. **1st for SU42B since 1980s.**

***NA *Polypogon monspeliensis* (Annual Beard-grass):** Cadnam, SU2945 1367; 23 Sep 21; MWR. 1 clump on Old Romsey Road opposite gardens. **1st for SU21W.** Milton Common, SU6744 0110; 12 Jun 21; RHWa. **1st for SU60Q since 1930s.** Eastoke - Lakeside Holiday Village - Foreshore, SZ7387 9888; 15 Jul 21; RHWa. **1st for SZ79J.**

NN *Polystichum polyblepharum* (Japanese Shield-fern): Sandy Dell N, SU6793 0741; 21 Apr 21; RHWa det. MR. Naturalised throw-out in ancient woodland near habitation. **1st for VC.**

NN *Populus* × *canadensis* 'Heidemij' Nr R Avon, Avon Tyrell, SZ140 998; 14 Oct 21; MR, CC, PCo et al. **1st for SZ19.**

***NA *Potamogeton lucens* (Shining Pondweed):** R Avon, Bisterne, SU139 003; 14 Oct 21; MR, CC, PCo et al. det. MR. **1st for SU10F since 1970s.**

NA *Potentilla anglica* (Trailing Tormentil): S. Shore - Hayling Island Beach - Coastguard - Bound Lane CP, SZ7229 9871; 11 Jul 21; RHWa. **1st for SZ79.**

NA *Potentilla anglica* × *erecta* = *P.* × *suberecta* Portland Coppice, SU653 085; 03 Jun 21; MR & VCR team. **1st for SU60.**

NA *Potentilla anglica* × *reptans* = *P.* × *mixta* Holy Trinity Churchyard, Colden Common, SU486 215; 06 Jun 21; MR, GCo det. MR. **1st for SU42.**

NN *Poterium sanguisorba* subsp. *balearicum* (Fodder Burnet): North Common - Central banded saltmarsh, SU7307 0427; 15 Sep 21; RHWa. **1st for SU70.**

NA *Prunus domestica* × *spinosa* = *P.* × *fruticans* (Cherry): Stour Valley LNR, SZ098 962; 04 Sep 21; MR & VCR team det. MR. **1st for SZ09.**

(NA) *Prunus padus* (Bird Cherry): Minstead, SU2866 1104; 20 Sep 21; MWR. Roadside hedge, Football Green (road). **1st for SU21.** Catherington Lith, SU701 141; 11 May 21; MR & VCR team. **1st for SU71.**

IN *Pseudosasa japonica* (Arrow Bamboo): Littlepark Wood East, SU6950 0710; 03 Apr 21; RHWa. 1 large clump near habitation. **1st for SU60.**

***NA *Puccinellia distans* (Reflexed Saltmarsh-grass):** Sinah Common S - Gunner Point - SZ6998, SZ6937 9882;

06 Sep 21; RHWa. **1st for SZ69Z since 1990s.** Sandy Point LNR (Southern Boundary Fence), SZ7500 9815; 17 Sep 21; RHWa. **1st for SZ79P since 1990s.**

NN *Puschkinia scilloides* (Striped Squill): Bransbury Road, SZ669 993; 23 Mar 21; RHWa. Probably planted but well established in verge. **1st for SZ69.**

***NA *Ranunculus hederaceus* (Ivy-leaved Crowfoot):** Ripley Brook, North End, SU141 004; 14 Oct 21; MR, CC, PCo et al. **1st for SU10K.**

***NA *Ranunculus parviflorus* (Small-flowered Buttercup):** Farlington Playing Field S. ditch, SU6756 0442; 22 May 21; RHWa. **1st for SU60S.** East Lodge Park, SU6862 0564; 22 May 21; RHWa. **1st for SU60X.**

***NA *Ranunculus penicillatus* subsp. *pseudofluitans* (Stream Water-crowfoot):** River Itchen, Bishopstoke, SU467 185; 28 May 21; MR, RHa det. MR. West bank. **1st for SU41U since 1990s.** R Avon, Avon Tyrell, SZ139 999; 14 Oct 21; MR, CC, PCo et al. **1st for SZ19J.**

***NA *Ranunculus sardous* (Hairy Buttercup):** Cadnam Green and Lanes (Lawn to E of Kewlake Lane triangle), SU2881 1413; 06 Sep 21; TN. Occasional plants in S half of the verge. **1st for SU21X.** Lakeside North Harbour IBM West, SU6418 0523; 09 Jun 21; RHWa, JAN. **1st for SU60M.** Southsea Common, SZ6400 9857; 08 Jun 21; RHWa. **1st for SZ69P.**

IN *Reynoutria sachalinensis* (Giant Knotweed): Westwood LNR, SU4482 0924; 14 May 21; MR & VCR team. **1st for SU40 since 1980s.**

NN *Rhus typhina* (Stag's-horn Sumach): Southwood Road, SZ7342 9842; 13 Jul 21; RHWa. Escaping from adjoining garden. **1st for SZ79 since 1990s.**

NA *Rorippa sylvestris* (Creeping Yellow-cress): Copse Lane, SU7259 0193; 28 Jul 21; RHWa. Staunton Country Park (Formal Park N & Car Park), SU7221 0909; 20 Jul 21; RHWa. **1st for SU70 since 1990s.**

***NA *Rosa corymbifera* (Hairy Dog-rose):** Deacon Hill, SU494 275; 27 May 21; MR & VCR team det. MR. **1st for SU42 since 1980s.**

***NA *Rosa stylosa* (Short-styled Field-rose):** Hillier's Arboretum, SU378 241; 08 Sep 21; MR, RCR det. MR. **1st for SU32S since 1930s.**

NN *Rosa virginiana* (Virginian Rose): Shawford Down, SU46794 24858; 03 Jul 21; GK det. RMas. Shawford Down Car Park off Otterbourne Road. Large patch at the entrance to the car park. **1st for SU42.**

NN *Rosmarinus officinalis* (Rosemary): Ferry Road Open Space, SZ6752 9921; 23 Feb 21; RHWa. Ferry Road Open Space, SZ6750 9931; 21 Mar 21; RHWa. **1st for SZ69.**

NN *Rubia tinctorum* (Madder): Highcliffe Community Allotments, Winchester, SU4931 2887; 24 Sep 21; TN. Flowering. Several stems in overgrown allotment. Hunts Pond Road Allotments, Park Gate, SU524 060; 09 Oct 21; TN. Single patch noted in obviously tended raised bed. Planted for home-dyeing. **1st for VC.**

IN *Rubus armeniacus* (Giant Blackberry): Stour Valley LNR (River bank and old river cliff), SZ091 960; 04 Sep 21; MR & VCR team det. MR. **1st for SZ09.**

NA *Rubus pistoris* (Dwarf Bramble): Butts Lawn, Brockenhurst, SU294 029; 06 Jul 21; DL det. RDR. **1st for SU20 since 1930s.**

NA *Rumex crispus* × *obtusifolius* = *R. × pratensis* Langstone Meadows, SU7193 0498; 24 Aug 21; RHWa. **1st for SU70.**

NN *Rumex cristatus* (Greek Dock): M3 near Chandler's Ford, SU4420; 02 Jul 21; MR. M3 Twyford Down, SU482 270; Jul 2021; PS. **1st for SU42.**

***NA *Rumex pulcher* (Fiddle Dock):** Colden Common, SU476 215; 24 Sep 21; PM. Young plant in garden lawn. **1st for SU42Q since 1930s.** Eastern Road, SU6734 0323; 09 Jun 21; RHWa, JAN. **1st for SU60R.** Selmore Foreshore - Mengham Beach Salterns, SZ7346 9933; 15 Jul 21; RHWa. **1st for SZ79J.**

***NA *Ruscus aculeatus* (Butcher's-broom):** Jopps Corner by Avon Valley Path, SZ1672 9595; 15 Oct 21; JTM. **1st for SZ19S.**

***NA *Sagittaria sagittifolia* (Arrowhead):** Ripley Brook, Lower Bisterne, SU144 000; 14 Oct 21; MR, CC, PCo et al. **1st for SU10K.**

NN *Salix alba* × *babylonica* = *S. × sepulcralis* (Weeping Willow): Staunton Country Park (Formal Park S.), SU7217 0891; 18 Jul 21; RHWa. Lumley (Brook) Meadow LNR, SU7511 0598; 17 Nov 21; RHWa. **1st for SU70.** Alver Valley Country Park SESZ5852 9991; 07 Jul 21; RHWa. **1st for SZ59.**

NA *Salix aurita* × *cinerea* = *S. × multinervis* Nr Lower Side Copse, Bisterne, SU140 005; 14 Oct 21; MR, CC, PCo et al. **1st for SU10.** Yewtree Hill area (stream and margins), SU308 105; 17 Aug 21; MR & VCR team det. MR. Single large bush on stream bank. **1st for SU31 since 1980s.** Little Stubby Hat to Yewtree Hill Stream, SU3083 1056; 17 Aug 21; RHWa. **1st for SU31 since 1980s.**

NA *Salix cinerea* subsp. *cinerea* (Grey Willow): Westwood LNR, SU456 094; 31 Aug 21; MR & VCR team. Single bush, presumed planted. **1st for SU40.**

***NA *Sanicula europaea* (Sanicle):** Home Farm Wood, Hedge End, SU4837 1212; 28 Mar 21; PAB. **1st for SU41W.** Flexford NR, Chandler's Ford, SU425 212; 20 Apr 21; MR. **1st for SU42F since 1990s.**

***NA *Sarcocornia perennis* (Perennial Glasswort):** North Common NE, SU7340 0399; 15 Sep 21; RHWa. **1st for SU70G since 1990s.**

NN *Sasa veitchii* (Veitch's Bamboo): Clanfield Drive and neighbourhood, Chandlers Ford, SU438 207; 03 May 21; MR. Presumed garden outcast: variegated form. **1st for SU42.**

NA *Schoenoplectus lacustris* (Common Club-rush): Staunton Country Park (The Lake), SU7175 0920; 18 Jul 21; RHWa. **1st for SU70.**

***NA *Schoenoplectus tabernaemontani* (Grey Club-rush):** Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40R since 1990s.**

NN *Scilla forbesii* (Glory-of-the-snow): Apollo Drive, SU6877 0731; 06 Apr 21; RHWa. **1st for SU60.**

***NA *Scutellaria minor* (Lesser Skullcap):** Lyndhurst (Picket Farm area), SU2909; 17 Sep 21; MWR. **1st for SU20Z since 1990s.**

NN *Sempervivum tectorum* (House-leek): Eastney Beach - Caravan Park Bund, SZ6760 9890; 03 Jul 21; RHWa. **1st for SZ69.**

NN *Silene coronaria* Cadnam, SU2925 1363; 23 Sep 21; MWR. 1 plant, roadside opposite gardens. **1st for SU21.**

NN *Silene dichotoma* (Forked Catchfly): Milford (Studland Common area), SZ2734 9239; 07 Sep 21; MWR det. EJC Nov 2021. Roadside, West Road. Sown with other 'wild' flowers. **1st for SZ29.**

***NA *Silene flos-cuculi* (Ragged Robin):** Parson's Field, Catherington, SU693 144; 11 May 21; MR & VCR team. Perhaps introduced with reseeding of part of the meadow. **1st for SU61X.**

NA *Sinapis alba* (White Mustard): Lumps Fort - Southsea Rose Garden, SZ6582 9831; 28 Jun 21; MR, RHWa, GCo. **1st for SZ69.**

NN *Sisyrinchium striatum* (Pale Yellow-eyed-grass): Hawkhill Inclosure, SU3502 0207; 23 Jun 21; PM. Large plant with 5 flowering stems. **1st for SU30.**

NN *Solidago gigantea* (Early Goldenrod): St. Peters Road, SU7308 0308; 06 Aug 21; RHWa. **1st for SU70.**

NN *Sorghum bicolor* (Great Millet): Lymington (Buckland), SZ3188 9673; 14 Oct 21; MWR det. EJC Nov 2021. Birdseed alien, under bird table, garden. **1st for SZ39.**

****NN *Spergula arvensis* (Corn Spurrey):** Bushfield Farm (Arable field NW of Bushfield Farm), SU4664 2716; 16 Mar 21; TN. **1st for SU42T.**

***NA *Spiranthes spiralis* (Autumn Lady's-tresses):** Dibden Bay near Southampton, SU410 100; 26 Jan 21; PAB. **1st for SU41A.**

NN *Stachys byzantina* (Lamb's-ear): Denhill Close, SU7131 0035; 22 Aug 21; RHWa. **1st for SU70.** Victoria Road, SU7199 0295; 12 Aug 21; RHWa. **1st for SU70.**

NA *Stellaria pallida* (Lesser Chickweed): Black Common, Linwood, SU190 106; 07 May 21; MR & VCR team. **1st for SU11 since 1990s.**

***NA *Succisa pratensis* (Devil's-bit Scabious):** Avon water meadows, Avon Tyrell, SZ141 998; 14 Oct 21; MR, CC, PCo et al. **1st for SZ19P since 1930s.**

NN *Symphoricarpos microphyllus* × *orbiculatus* = *S. × chenaultii* (Hybrid Coralberry): Lakeside North Harbour IBM North, SU6416 0523; 28 Mar 21; RHWa. **1st for SU60.**

NN *Symphytum* × *hidcotense* 'Hidcote Blue' Compton Down, SU465 251; 24 Mar 21; MR, RCR det. MR. **1st for SU42.** Tipner Lane, SU6398 0332; 02 Apr 21; RHWa. **1st for SU60.**

NN *Syringa vulgaris* (Lilac): Beachlands N - Opposite Staunton Avenue, SZ7089 9895; 01 May 21; RHWa. Beachlands N - Opposite Staunton Avenue, SZ7090 9895; 19 May 21; RHWa. Eastoke - Lakeside Holiday Village - Foreshore, SZ7392 9901; 15 Jul 21; RHWa. **1st for SZ79.**

NN *Tamarix africana* (African Tamarisk): Highcliffe, SZ211 931; 13 Jul 21; DL. Several large bushes by cliff path E of Highcliffe Castle. **1st for VC.**

NN *Tellima grandiflora* (Fringecups): Westwood LNR, SU449 094; 14 May 21; MR & VCR team. **1st for SU40 since 1990s.**

NA *Tilia cordata* (Small-leaved Lime): Staunton Country Park (Beacon Field), SU7239 0919; 20 Jul 21; RHWa. Staunton Country Park (Lower Beacon Field), SU7219 0915; 20 Jul 21; RHWa. **1st for SU70 since 1990s.**

***NA *Torilis nodosa* (Knotted Hedge-parsley):** Hayling Island, Hampshire, SU737 005; 20 Feb 21; PAB. **1st for SU70F.**

NN *Trachystemon orientalis* (Abraham-Isaac-Jacob): Lakeside North Harbour IBM North, SU6416 0521; 28 Mar 21; RHWa. Throw out - very large area 20 × 4 m. **1st for SU60.**

***NA *Trifolium glomeratum* (Clustered Clover):** Fawley Quarry - Badminton Lake restoration area, SU462 020; 11 Jun 21; TN. Scattered widely but locally frequent. Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40R.** Otterbourne Hill Reservoir, SU4535 2254; 26 Jun 21; TN. Small patches at edges of concrete, where grassland is very parched. **1st for SU42L.**

NA *Trifolium medium* (Zigzag Clover): Westwood LNR, SU457 097, SU455 097; 14 May 21; MR & VCR team. **1st for SU40.**

***NA *Trifolium scabrum* (Rough Clover):** Milton common (short rough grassland), SU673 006; 09 Jun 21; NWA. **1st for SU60Q.** Ferry Road RNLI Beach, SU6843 0008; 19 Jun 21; RHWa. **1st for SU60V since 1980s.**

***NA *Trifolium subterraneum* (Subterranean Clover):** Knightwood Leisure Centre, SU419 202, SU418 202; 01 May 21; MR. Verge of entrance road. **1st for SU42A.** Farlington Marshes, SU6822 0445; 25 May 21; RHWa. **1st for SU60X since 1990s.** Eastney Beach - Caravan Park Bund, SZ6767 9893; 14 May 21; RHWa. **1st for SZ69U since 1990s.**

***NA *Trifolium suffocatum* (Suffocated Clover):** Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40R.** Southsea Common, SZ6378 9877; 08 Jun 21; RHWa. **1st for SZ69J since 1990s.**

NA *Trisetum flavescens* (Yellow Oat-grass): S. Shore - Hayling Island Beach - Coastguard - Bound Lane CP, SZ7184 9880; 11 Jul 21; RHWa. Beachlands E - E of Funland - Westfield Beach, SZ7164 9887; 02 Jul 21; RHWa. **1st for SZ79 since 1950s.**

NN *Tristagma uniflorum* (Spring Starflower): Milton Common, SU6714 0059; 22 Mar 21; RHWa. Farlington Marshes Car Park 1, SU6756 0431; 25 Mar 21; RHWa. **1st for SU60.**

NN *Triticum aestivum* (Bread Wheat): Beachlands N - Opposite Staunton Avenue, SZ7100 9889; 02 Jul 21; RHWa. Earnley Triangle - Boatyard Patch SINC, SZ7473 9887; 13 Jul 21; RHWa. Land East of Sandy Point SINC, SZ7509 9847; 17 Sep 21; RHWa. **1st for SZ79.**

NN *Tsuga heterophylla* (Western Hemlock-spruce): Staunton Country Park (Formal Park N & Car Park), SU7220 0907; 20 Jul 21; RHWa. **1st for SU70.**

NN *Tulipa gesneriana* (Garden Tulip): Barton Common, Barton on Sea, SZ25175 93451; 27 Feb 21; PCo. Near fence beside golf course work area. Cluster of leaves presumably from discarded bulb. **1st for SZ29 since 1990s.**

***NA *Ulmus minor* subsp. *angustifolia* (Cornish Elm):** Stour Valley LNR (River bank and old river cliff), SZ090 960; 04 Sep 21; MR & VCR team det. MR. **1st for SZ09Y since 1980s.**

***NA *Valeriana dioica* (Marsh Valerian):** Longdown Inclosure, SU361 085; 18 May 21; MR & VCR team. **1st for SU30U since 1930s.**

NN *Verbascum phlomoides* (Orange Mullein): Sunken gardens, Southsea, SZ6498; 03 Jul 21; RHWa, MR. Naturalised from planting. **1st for SZ69 since 1990s.**

NN *Verbascum phoeniceum* (Purple Mullein): Southsea Rock Gardens, SZ6476 9807; 03 Jul 21; RHWa, MR. Naturalised from planting. **1st for SZ69 since 1990s.**

NN *Verbena rigida* (Slender Vervain): Alver Valley Country Park NW, SU5727 0115; 07 Jul 21; RHWa. **1st for SU50.** Denhill Close, SU7130 0035; 22 Aug 21; RHWa. **1st for SU70.**

NA *Veronica anagallis-aquatica* (Blue Water-Speedwell): Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40.** Stour Valley LNR (River bank and old river cliff), SZ090 960; 04 Sep 21; MR & VCR team det. MR. **1st for SZ09.**

***NA *Veronica officinalis* (Heath Speedwell):** Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40R.** Purbrook Heath Road, SU663 080; 03 Jun 21; MR & VCR team. **1st for SU60U.**

NN *Veronica salicifolia* (Narrow-leaved Hebe): Highcliffe Castle Grounds (Eastern glade), SZ204 931; 13 Jul 21; DL. 1 bush. **1st for SZ29.**

***NA *Veronica scutellata* (Marsh Speedwell):** Broad Bottom area, SU1966 0487; 13 Jun 21; MWR. Var. *scutellata*, abundant, hollow near road. **1st for SU10X since 1990s.**

NN *Viburnum farreri* × *grandiflorum* = *V. × bodnantense* Bransbury Park, SZ6679 9941; 06 Mar 21; RHWa. **1st for SZ69.**

NA *Viburnum lantana* (Wayfaring-tree): Minstead, SU2816 1124; 20 Sep 21; MWR. Hedge by footpath. **1st for SU21 since 1990s.**

NN *Viburnum opulus* subsp. *trilobum* (American Guelder-rose): E of Alsfordmoor Coppice, Purbrook, SU668 082; 03 Jun 21; MR & VCR team. **1st for SU60 for subsp.**

***NA *Vicia lathyroides* (Spring Vetch):** Fawley Gravel Workings, SU464 021; 14 Jul 21; ILR. **1st for SU40R.** Eastney Beach, SZ6769 9892; 16 Apr 21; RHWa. Eastney Beach, SZ6757 9886; 26 May 21; RHWa. Eastney Beach, SZ6767 9889; 03 Jul 21; RHWa. **1st for SZ69U since 1990s.**

NN *Vicia villosa* (Fodder Vetch): Alver Valley Country Park NW, SU5733 0108; 07 Jul 21; RHWa. **1st for SU50.**

NA *Viola arvensis* × *tricolor* = *V. × contempta* New Milton to Downton, SZ237 941; 01 Jan 21; RGa, PCo. **1st for SZ29.**

NN *Yucca gloriosa* (Spanish-dagger): Milton Common, SU6771 0056; 17 Jan 21; RHWa. Milton Common, SU6763 0035; 21 Feb 21; RHWa. **1st for SU60.**

NN *Zantedeschia aethiopica* (Altar-lily): Saltmarsh Lane Public Footpath No. 521, SU7132 0043; 22 Aug 21; RHWa. **1st for SU70.** Locks Sailing Club footpath, SZ6776 9989; 17 Jan 21; RHWa. **1st for SZ69.**

VC12 records

Compiled by Tony Mundell

(Records for 3 November 2021 to 25 July 2022)

As mentioned in the previous edition of *Flora News*, please remember that if you would like to see your records published here, they must be on my database within around 6-8 months of the record date. Even restricting it like that I have over two thousand records to look through and consider whether to include. Records with a more precise grid reference (6 or 8 digits) and a 'Comment' or 'Note' adding extra information are far more likely to be included. If you send me records made say a year ago then those records are still very welcome but will not get considered for *Flora News*.

Please don't forget that we are using plant names from 'Stace', edition 4 (2019) so you may find your record under a relatively unfamiliar name like *Logfia*, *Laphangium*, *Roemeria* or *Hylotelephium*, etc.

I am delighted that Carolyn Doorbar has re-found Wild Liquorice *Astragalus glycyphyllos* at Micheldever Wood. The only previous two records that I have for it there were both in 1940 and one of them says 'probably destroyed by forestry work'. I also have another record for 'Stratton Wood, near Micheldever Station' and that is for 1873!

In early spring Caroline Reid found a new extensive patch of the very rare Green Hound's-tongue *Cynoglossum germanicum* in the same general area as all previous Hampshire records, but in a location where Rhododendron scrub had been cleared away. Initially the plants were healthy but later they were looking sickly and deformed. Caroline returned on 16 May 2022 and found many aphids on the plants. The adults look like photos on the web of *Brachycaudus bicolor*, which is specific to *Cynoglossum*. The problem by then was getting worse with the

affected plants also attacked by moulds. Many plants had completely died off. However, I do wonder whether the aphid is rarer than the plant and needs conserving!

In early June I took a few people to Eelmoor Marsh (where HFG has visited in the past) to see an excellent example of boggy heathland that for over 25 years has been managed by Marwell Zoo, with grazing using a combination of Highland Cattle and Przewalski's horses. The landowner, QinetiQ, funds their management and this includes an extensive annual winter works programme of scrub cutting, tree felling, mowing and scrape-making using a tracked excavator. Whilst there I showed people colonies of Early Marsh-orchid and other Orchids, but it was Fred Rumsey who realised that one plant was special. I dismissed it as a nice colour form of Heath Spotted-orchid, but Fred's photo was confirmed by Ian Denholm as *Dactylorhiza* × *carnea* (*D. maculata* × *incarnata*) which is new for VC12.

Tristan Norton continues to add many records, especially of uncommon species found beside arable fields like Fine-leaved Fumitory *Fumaria parviflora*, Night-flowering Catchfly *Silene noctiflora* and Field Woundwort *Stachys arvensis*. Meanwhile, Anna Stewart has also added many records including uncommon grasses like Meadow Fescue *Schedonorus pratensis* and its hybrids with both Tall Fescue *S. arundinaceus* and with Perennial Rye-grass *Lolium perenne*.

The Common Valerian *Valeriana officinalis* subsp. *collina* listed below has not been recorded in Hampshire since the records given in Townsend's 1883 'Flora of Hampshire'. This is because in those days *Valeriana collina* was treated as a separate species to *Valeriana officinalis*. Nowadays few people check the subspecies, though I try to encourage that. In fact, this species now has three British subspecies but a fourth, subsp. *officinalis* has not been confirmed in Britain. Subspecies *sambucina* with stolons is scattered across North Hampshire and prefers damp places, but subsp. *collina* with no stolons and a different leaf shape is restricted to dry calcareous soils, which is consistent with the site where it was found.

As always there has been a crop of interesting records of alien plants. Steve Povey reported a splendid flowering patch of Narrow-leaved Arrowhead *Sagittaria subulata* at Shortheath Pond. For many years this was the only known British site for it, but there were no records after 1980 and 'Stace' (2019 edition) states that it is gone from Hampshire (but has been found in West Sutherland). That changed when Fred Rumsey found a small surviving patch at Shortheath Pond in 2019, presumably from seed, and it is clearly now hanging on. I recall how it completely dominated much of this large pond in the 1970's but sadly the once clear water is now opaque and hardly any submerged aquatic plants can grow there.

A few aliens listed below are new for VC12 (although all are known from VC11, some of them in multiple sites). These are Spanish Stonecrop *Sedum hispanicum*, Lesser Caucasian-stonecrop *Phedimus stoloniferus*, Blue Eryngo *Eryngium planum* and Fortune's Spindle *Euonymus fortunei*.

***Acanthus mollis* (Bear's-breeches)** Shoe Lane, Farnborough SU8626 5333, two flower spikes, Caroline Reid 11 Jul 2022

***Achillea millefolium* (Yarrow)** Chilbolton Down Farm SU4196 3677, a remarkable form with dark pink flowers, beside a track, HFG 2 Jul 2022 (see photo on front cover).

***Achillea ptarmica* (Sneezewort)** Hartley Mauditt SU743361, large clump on verge by pond opposite Hartley Mauditt Church. This is the double-flowered form, 'The Pearl' (I first recorded this here in 1981), Steve Povey 13 Jul 2022.

***Ajuga chamaepitys* (Ground-pine)** Field beside Freefolk Wood SU5040 4393, a single flowering plant on bare soil on arable field edge, Sue Bell 9 Jul 2022.

***Alisma lanceolatum* (Narrow-leaved Water-plantain)** Fleet Pond SU8232 5515, a single plant in ditch immediately north of Cold Stream Marsh, Tony Mundell & John Sutton 8 Jul 2022.

***Allium triquetrum* (Three-cornered Garlic)** Yateley SU8082 6086, a single flowering plant on grassy verge

of Firgrove Road, beside a telephone/broadband fibre distribution box, Tony Mundell & Dave Pearson 6 May 2022. Ashmansworth, Sidley Wood SU4055, along footpath, Peter Billingham 8 May 2022.

***Anacamptis pyramidalis* (Pyramidal Orchid)** Crawley SU4242 3481, single flowering plant, a result of deliberate relaxed mowing, Tristan Norton 7 Jun 2022. Hook SU7312 5376, at the northern side of Griffin Way South. One with flower spike partially strimmed, two with flower spike completely strimmed off, Peter Vaughan 13 Jun 2022. Brockley Warren SSSI SU4187 3690, several flowering plants in remnant of chalk grassland, HFG 2 Jul 2022. Upper Inhams Copse SU622615, first record for site, unusual in acid woodland, Graham Dennis 30 Jun 2022. Yateley Country Park SU8169 5894 & SU8168 5895, west end, near old car park, Jean Cheadle 19 Jun 2022. Magdalen Hill Down SU5083 2901, 100+ flower spikes, HFG 18 Jun 2022. Newnham SU7054 5411, first record in the SU75C tetrad, plants were at the side of a pond where the vegetation had been kept short in previous years but left to grow in 2022, Peter Vaughan 23 Jul 2022.



Left to right: Bear's-breeches *Acanthus mollis*, Shoe Lane, Farnborough, Caroline Reid; Sneezewort (double form) *Achillea ptarmica* 'The Pearl', Hartley Mauditt, Steve Povey; Lords-and-Ladies *Arum maculatum*, unusual form with yellow spadix, Steep, Ron Allen.

***Anemone apennina* (Blue Anemone)** Winchester, Fairdown Close SU4930 2942, one flowering plant in roadside grass, David Leadbetter 15 Mar 2022.

***Anthemis cotula* (Stinking Chamomile)** Chilbolton Down Farm SU4167 3703, edge of Rape field, HFG 2 Jul 2022.

***Aphanes australis* (Slender Parsley-piert)** Woodside Farm SU6797 2953, SU6800 2954 and SU6822 2974, on footpath, very locally common, Andrew Powling & Eric Clement 7 Jul 2022.

***Arabis hirsuta* (Hairy Rock-cress)** Ladle Hill Fort SU477568, a single flowering stem on earthworks, Caroline Reid 2 Jun 2022.

***Arum maculatum* (Lords-and Ladies)** An unusual form on the east verge of Steep Hill at about SU7472 2519, Ron Allen 29 Apr 2022. Originally thought to be *A. italicum* subsp. *neglectum* but Steve Povey visited the site on 1 May 2022, and it proved to be the unusual form of *Arum maculatum* with a yellow spadix growing near normal purple spadix forms.

***Asplenium ceterach* (Rustyback)** Alton SU7112 3847, doing well here on the wall of the French Horn pub, with 28-30 plants, June Chatfield 1 Dec 2021. Liss SU776278, on front garden wall SE side of Western Road, Andrew Powling & Eric Clement 16 Dec 2021.

***Astragalus glycyphyllos* (Wild Liquorice)** Kings Worthy Rail Path SU4796 3521, plants in a decayed condition, shown to me by Bruce Graham, Anna Stewart 6 Dec 2021. Micheldever Wood, on north side of grassy ride at SU53036 37205 near a Box shrub, and at SU53032 37243 near a Gorse bush. Also, on south side at SU53032 37192. Flowers now over and starting to die back. Carolyn Doorbar 28 Jun 2022 and 28 Jul 2022.

***Barbarea verna* (American Winter-cress)** Church Crookham, Conifer Close SU8103 5208, several plants on grass verges or growing at pavement edge, Tony Mundell 12 Jun 2022. [It has persisted on this road verge for two years. There are few VC12 records, but it may be under-recorded.

To separate it from the very similar *B. intermedia* requires measuring the fruit and petal lengths.]

***Berberis vulgaris* (Barberry)** Leckford, Old golf-course north bank, 1 at 3708 3650, 1 at 3707 3652 (hybrid or cultivar also at latter location), Glynne Evans 14 May 2022. [These bushes were planted to conserve the rare Barberry Carpet moth – Tony Mundell]

***Berula erecta* (Lesser Water-parsnip)** Hawkley SU7368 2881, several plants in pond by entrance to 'Doscombe', Steve Povey & Laura Gravestock 27 May 2022.

***Blackstonia perfoliata* (Yellow-wort)** Magdalen Hill Down SU5093 2900 & SU5095 2900, several plants on earlier scrapes, HFG 18 Jun 2022.



Wild Liquorice *Astragalus glycyphyllos*, Micheldever Forest. Carolyn Doorbar

***Blysmus compressus* (Flat-sedge)** Chilbolton Cow Common SU3891 3999, a small patch on the southern bank where a ditch joins the main stream, Dave Pearson 2 Jun 2022.

***Brunnera macrophylla* (Great Forget-me-not)** Ibthorpe, on verge of Doloman's Lane, next to garden at SU3808 5353, Peter Billingham 10 May 2022.

***Calamagrostis epigejos* (Wood Small-reed)** Dogmersfield SU7850 5301, patch on grassy road verge, Tony Mundell 28 Jan 2022.

***Campanula glomerata* (Clustered Bellflower)** Winchester, St Giles Hill SU4929, one plant flowering, Anna Stewart 2 Jan 2022.

***Campanula rotundifolia* (Harebell)** Magdalen Hill Down SU5077 2917, on bare chalk of a scrape, HFG 18 Jun 2022.

***Cardamine raphanifolia* (Greater Cuckooflower)** Fleet Pond SU8192 5484, a few scattered patches of flowering plants in the reed-beds where the Brookly Stream enters Fleet Pond, no doubt spread from a garden somewhere in Fleet that borders with Brookly Stream, Tony Mundell 3 May 2022.



Greater Cuckooflower *Cardamine raphanifolia*, Fleet Pond. Tony Mundell

***Carex canescens* (White Sedge)** Fleet Pond SU8212 5527, single plant beside gate onto the reed-beds where contractors were supposed to make a shallow pond (as compensation for the horrendous new very wide 'cycle' track) but they have barely scraped the reed-bed surface, Tony Mundell 3 May 2022. Shortheath Common SU7756 3666, one plant in swampy area just west of path, plus single plants at SU7760 3667 & SU7762 3667 on northern edge of ditch, Dave Pearson & Helen Boyce 13 Jun 2022. Fleet Pond, Fugelmere Marsh, scattered plants at SU8226 5479, SU8226 5478, SU8228 5481 and SU8230 5482 amongst

much *Carex echinata*, Tony Mundell & John Sutton 8 Jul 2022.

***Carex caryophyllea* (Spring-sedge)** Magdalen Hill Down SU5019 2924, Anna Stewart 4 May 2022.

***Carex distans* (Distant Sedge)** Eelmoor Marsh SU8404 5359, SU8413 5308, SU8407 5331, SU8386 5363 and SU8371 5334, this species seems to be spreading at Eelmoor, noted in many places where I have not seen it before, Tony Mundell, Fred Rumsey et al. 9 Jun 2022.

***Carex disticha* (Brown Sedge)** Southwood Country Park, east part SU8535 5550, a surprisingly large colony, Tony Mundell 15 Jun 2022.

***Carex echinata* (Star Sedge)** Fleet Pond, Fugelmere Marsh, locally plentiful at SU8230 5482, SU8226 5479 and SU8228 5481, Tony Mundell & John Sutton 8 Jul 2022.

***Carex hostiana* (Tawny Sedge)** Eelmoor Marsh SU8372 5309, several plants including one of its hybrid with *C. demissa*, Tony Mundell, Fred Rumsey et al. 9 Jun 2022.

***Carex muricata* (Prickly Sedge)** Shortheath Common SU7750 3678, three plants close together on southern bank of pond. Also, at SU7756 3666, two plants on edge of pool by swampy area, Dave Pearson & Helen Boyce 13 Jun 2022.

***Carex pseudocyperus* (Cyperus Sedge)** Conford Moor SU808334, Dave Pearson & Helen Boyce 27 May 2022. Hollywater Pond SU808334, several plants along western and northern banks of pond, Dave Pearson 4 Jun 2022. Hartland Park SU839548, one plant on the edge of the pond, Caroline Reid 13 Jun 2022.

***Carex pulicaris* (Flea Sedge)** Eelmoor Marsh SU8394 5295, many plants scattered over a large area near the hut, Tony Mundell, Fred Rumsey et al. 9 Jun 2022.

***Carex rostrata* (Bottle Sedge)** Fleet Pond, Cold Stream Marsh SU8244 5506, scattered plants, Tony Mundell 8 Jul 2022.

***Carex strigosa* (Thin-spiked Wood-sedge)** Gibbs Lane, Shortheath SU784367, one plant by western side of lane, Dave Pearson & Helen Boyce 13 Jun 2022.

***Carex vesicaria* (Bladder-sedge)** Shepherds Meadows SU8462 6054, locally abundant in damp meadow, also SU8468 6059 many plants in stream bed, Tony Mundell & Dave Pearson 6 May 2022.

***Carex* × *fulva* (*C. hostiana* × *demissa*)** Eelmoor Marsh SU8372 5309, Tony Mundell, Fred Rumsey et al. 9 Jun 2022.

***Cephalanthera damasonium* (White Helleborine)** Magdalen Hill Down SU5138 2913, not flowering, leaves distinctive, Anna Stewart 6 May 2022. Three Maids Hill SU4624 3352, at least 30 plants, many flowering, Tristan Norton 9 May 2022. Upton Grey SU6926 4880, 100 plants in small triangular patch of Beech trees between Tunworth Road and a bridle path running off to the north east, Peter Vaughan 28 May 2022. Alton Station SU7272 3931, several spikes (not counted, seen from car) under trees by pavement on industrial estate, Cathy Wilson 17 Jun 2022. Magdalen Hill Down, two plants at wood edge, one at SU51386 29137 and one setting much seed at SU51370 29140. Four plants nearby are definitely *C. longifolia* and two others seem to be the hybrid between them, HFG 18 Jun 2022.

***Cephalanthera longifolia* (Narrow-leaved Helleborine)** Magdalen Hill Down SU5138 2913, not flowering, leaves distinctive, Anna Stewart 6 May 2022. Magdalen Hill Down, eight plants of genus *Cephalanthera* found scattered at wood edge, two are definitely *C. damasonium* at SU51386 29137 & SU51370 29140, and four are definitely *C. longifolia* at SU51398 29101, SU51398 29090, SU51386 29137 & SU51380 29151, plus two that seem to be the hybrid between them at SU51395 29135 & SU51386 29137, HFG 18 Jun 2022.

***Cerinthe major* (Greater Honeywort)** Worting SU6081 5259, single flowering plant noted. Google Streetview from May 2019 shows extensive patches. Presumably originally planted and self-seeded, Tristan Norton 7 Jun 2022.

***Chaenorhinum minus* (Small Toadflax)** Chilbolton Down Farm SU4186 3638, SU4166 3704, SU4172 3627 and SU4158 3630, arable field edges, HFG 2 Jul 2022.

***Cirsium acaule* (Dwarf Thistle)** Magdalen Hill Down SU4998 2930 and SU5051 2919, beside track, HFG 18 Jun 2022.

***Cirsium eriophorum* (Woolly Thistle)** Kings Worthy SU4848 3367, single large flowering plants just to west of footpath entrance to site, Tristan Norton 7 Jul 2022.

***Cotoneaster affinis* (Purpleberry Cotoneaster)** Ibthorpe, Windmill Lane SU3741 5356 - confirming continued existence of 2018 record, Peter Billingham 16 May 2022.

***Crassula tillaea* (Mossy Stonecrop)** Trottsford Farm SU8072 3840, growing with *Vicia lathyroides* and *Teesdalia nudicaulis* about 5-10m before the tarmac drive to the farm, Tony Davis 18 Apr 2022.

***Crataegus persimilis* (Broad-leaved Cockspurthorn)** Southwood Country Park, west part, SU8520 5475, a large shrub beside the main path, planted some years ago, presumably when this area was a golf course, Tony Mundell 15 Jun 2022.

***Cynoglossum germanicum* (Green Hound's-tongue)** Woodland triangle, Shoe Lane SU8621 5250, certainly

hundreds of healthy plants in a small area in a cleared patch of woodland, they may have been previously obscured by *Rhododendron* which has been cleared, Caroline Reid 8 Mar 2022. Farnborough SU8607 5269, hundreds of plants in flower in the site behind Blandford Cottage. They are spread out in little pockets of only half a dozen, or so, plants in most groups with a few larger groups. Many, perhaps 10%-20% of this population are looking quite sad and unhealthy, Caroline Reid 12 May 2022.

***Cyperus eragrostis* (Pale Galingale)** Crawley SU4301 3467, single plant noted, Tristan Norton 20 Jun 2022. Ewshot Lane, south of Humphrey Park SU8088 5118, 20 or so plants beside pond, Caroline Reid 3 Jul 2022.

***Dactylorhiza praetermissa* (Southern Marsh-orchid)** Longmoor, Warren Hill SU7868 2932, two spikes on village side of barbed wire fence, near gate to Warren Road, Helen McAra 14 Jun 2022. Southwood Country Park, east part, SU8535 5549, SU8535 5550, SU8546 5550 and SU8535 5545, a few flower spikes, Tony Mundell 15 Jun 2022.

***Dactylorhiza* × *carnea* (*D. maculata* × *incarnata*)** Eelmoor Marsh SU8394 5296, single plant with both parents nearby, Tony Mundell, Fred Rumsey et al., 9 Jun 2022. Fred Rumsey's photo was confirmed by Dr Ian Denholm.

***Daphne mezereum* (Mezereon)** Greywell Moors, six separate plants noted. Clump of 5 immediately adj. fence at SU71882 50902, these marked with red tape/ribbon. 1 large and 4 small plants at this location, largest with one flower and numerous ripening buds. Single smaller plant at SU71885 50902, numerous ripe buds, Tristan Norton 26 Feb 2022. Greywell Moors SU7189 5094, 11 plants in total. 7 within reserve (at locations previously identified) and 4 just north of fence on riverbank. All four riverbank plants flowering, multiple flowers, Tristan Norton 21 Mar 2022.

***Drosera intermedia* (Oblong-leaved Sundew)** Brock's Hill Heath SU828524, at least one plant within a 5m × 1m patch of *Drosera rotundifolia*, Sarah Smith 28 May 2022. Eelmoor Marsh SU8403 5347, hundreds of plants, some in bud, in shallow water in a large, relatively new, scrape just south



Green Hound's-tongue *Cynoglossum germanicum*, Farnborough.
Caroline Reid



Dactylorhiza × *carnea* (*D. maculata* × *incarnata*), Eelmoor Marsh. Fred Rumsey

of Dennis track, together with some flowering *Utricularia minor* but little else germinated yet, Tony Mundell, Fred Rumsey et al. 9 Jun 2022. Fleet Pond, Cold Stream Marsh, hundreds of plants in SU8249 5504 and SU8250 5503 etc, but surprisingly no *Drosera rotundifolia* found, Tony Mundell & John Sutton 8 Jul 2022.

***Echium plantagineum* (Purple Viper's-bugloss)** Wootton St Lawrence SU5958 5359, arable field to NE of village. Occasional plants including white-flowered form. Flowering, Tristan Norton 4 Jul 2022.

***Elaeagnus* × *submacrophylla* (*E. macrophylla* × *pungens*)** Southwood Country Park, west part, SU8522 5477, a shrub beside the main path, planted some years ago when this area was a golf course, Tony Mundell 15 Jun 2022.

***Eleocharis acicularis* (Needle Spike-rush)** Fleet Pond, Sandy Bay SU8238 5498, a few tiny plants surviving on the sandy bank a metre or two from the water's edge, where I have known it for many years, but now rapidly being suffocated by *Crassula helmsii*, Tony Mundell & John Sutton 8 Jul 2022.

***Elymus athericus* (Sea Couch)** Southwood Country Park, west part, SU8525 5482, voucher specimen collected. A large clump at the roadside pedestrian entrance to the park, possibly it originally arose via seed on a car tyre and has thrived due to winter salt spreading on the road. Not *E. repens* as the specimen has cilia on the outer margin of the leaf sheath. All leaves are very glaucous and are tightly rolled up. When opened up they are 5mm wide with their upperside ribs flat-topped (not with rounded tops as *E. repens*), Tony Mundell 15 Jun 2022.

***Elymus caninus* (Bearded Couch)** Edenbrook Country Park extension, a good colony of an uncommon grass, in woodland extending at least 30m from SU7927 5346 to SU7924 5344, smaller colonies also noted at SU7929 5348, SU7912 5368 & SU7897 5363, Tony Mundell & Helen Boyce 6 Jul 2022.

***Elymus repens* (Common Couch)** Southwood Country Park, east part, SU8549 5517, a patch of a very glaucous form. It was interesting to compare it with Sea Couch found elsewhere on the same day (see above). Common Couch has flat (not rolled) mature leaves and lacks any cilia on the leaf sheath margin, Tony Mundell 15 Jun 2022.

***Epilobium lanceolatum* (Spear-leaved Willowherb)** Kingsley, over a dozen droughted plants beside the old section of road cut off due to road straightening, scattered between SU7811 3789 and SU7814 3792, Tony Mundell, Eric Clement & Andrew Powling 25 Jul 2022.

***Epilobium* × *limosum* (*E. parviflorum* × *montanum*)** Shortheath Common SU775369, single large plant by car-park to Shortheath Pond, Steve Povey 12 Jul 2022.

***Epipactis phyllanthos* (Green-flowered Helleborine)** QinetiQ, Cody gate car park SU8440 5420, several plants amongst a few *Epipactis helleborine* in unmown parts of the grassland beside the car park. Some may even be the hybrid between them, Tony Mundell, Fred Rumsey et al. 9 Jun 2022. Hollywater Road, Bordon, 19 plants in all. On west verge, 2 at SU8061 3485, 1 at SU8057 3472, 3 at SU8055 3456, 4 at SU8053 3446 and 2 at SU8051 3430. On east verge, 3 at SU8060 3475 and 4 at SU8063 3486. The grass mowing at

the northern end of Hollywater Road was drastic and there were no plants of it found there, Bill & Chris Wain 24 Jul 2022.

***Epipactis purpurata* (Violet Helleborine)** Newnham/Up Nately SU708 524, on or near the footpath running alongside Heather Row. Most of the plants had multiple developing flower spikes, grazed on one plant but intact on the others, with the first flowers open on some of the plants, Peter Vaughan 24 Jul 2022.

***Erodium moschatum* (Musk Stork's-bill)** Aerospace Boulevard SU8653, stunted, undersized and growing in all the grassed roadside verges, Caroline Reid 26 May 2022.

***Erophila glabrescens* (Glabrous Whitlowgrass)** Edenbrook Country Park, BMX cycle track SU7877 5483, just one or two plants amongst hundreds of the much commoner *Erophila verna* in botanically-rich short vegetation near the cycle track car park, Tony Mundell & Giles Groome 30 Mar 2022.

***Eryngium planum* (Blue Eryngo)** A31, Alton SU7287 3864, Some striking plants on the Alton Bypass, westbound, on the southern verge, Pete Flood 14 Jul 2022.

***Euonymus fortunei* (Fortune's Spindle)** St Giles Hill Graveyard SU4911 2934, one shrub, David Leadbetter 24 Mar 2022.

***Euphorbia esula* (Leafy Spurge)** Chilbolton Down Farm, many plants in grassy track edge extending from SU4140 3674 to track corner at SU4141 3675, HFG 2 Jul 2022.

***Euphorbia oblongata* (Balkan Spurge)** Winchester, Beggars Lane SU4873 2956, David Leadbetter 24 Mar 2022. A33 Chineham SU6661 5527, single flowering plant behind crash barrier, Tristan Norton 24 May 2022.

***Euphrasia* × *areschougii* (*E. nemorosa* × *micrantha*)** Eelmoor Marsh, Leyland Track SU8382 5341 and SU8387 5346, one or two plants found in two separate spots. Flowers violet-purple (inherited from *E. micrantha*) but much too compact and strongly branched with aristate bracts (inherited from *E. nemorosa*) to be pure *E. micrantha*, Tony Mundell, Fred Rumsey et al. 9 Jun 2022.

***Filago lutescens* (Red-tipped Cudweed)** Fleet, Broomhurst Farm road verge, a total of 20 robust, flowering plants, most of them multi-stemmed. 5 plants at SU81247 56368, 3 at SU81251 56374, 3 at 81253 56365, 4 at SU81251 56369, 2 at SU81250 56370, 2 at 81249 56369 and 1 at SU81254 56393. This follows a splendid rotavating of the remaining part of the Red-tipped Cudweed site by Hampshire County Council in March 2022 (though over half of the former site is now lost under trees), Tony Mundell 9 Jul 2022 (see article, p. 19). B3013 Minley Road Verge SU812563, 32 plants (not flowering heads) counted, Andrew Powling 26 Jul 2022.

***Filipendula vulgaris* (Dropwort)** Brockley Warren SSSI SU4187 3692, scattered plants in remnant of chalk grassland, HFG 2 Jul 2022.

***Fritillaria meleagris* (Fritillary)** West Liss SU779287, 32 flowering plants scattered in small rough meadow near river, including the white-flowered variety, Steve Povey & Laura Gravestock 3 Apr 2022.

***Fumaria densiflora* (Dense-flowered Fumitory)** Chilbolton Down Farm SU4134 3650, SU4163 3623, SU4165 3699 & SU4167 3703, HFG 2 Jul 2022. South Wonston SU461355,

many flowering plants along field margin on S side of farm track, Tristan Norton 6 Jul 2022.

***Fumaria parviflora* (Fine-leaved Fumitory)** Chilbolton Down Farm SU4211 3661, arable margin at N edge of large cereal field. Single flowering plant noted, Tristan Norton 3 Jul 2022. Chilbolton Down Farm SU421366, total of 5 plants noted in c.20m stretch of margin at N/NE corner of field, Tristan Norton 7 Jul 2022.

***Galega officinalis* (Goat's-rue)** Kennels Lane SU8398 5457, at entrance to Hartland Park, many (perhaps 50) large plants in flower on the edge of woodland, Caroline Reid 13 Jun 2022.

***Genista anglica* (Petty whin)** Bartley Heath, 17 plants, two in SU728533, twelve in SU728534, one in SU728535, two in SU729533, not all were in flower. Area was not exhaustively searched, Peter Vaughan 31 May 2022. Eelmoor Marsh SU8450 5346, single bush with green seed pods, amongst many scattered plants of *Viola lactea*, Tony Mundell, Fred Rumsey et al. 9 Jun 2022.

***Geranium lucidum* (Shining Crane's-bill)** Chilbolton Down Farm SU41003674, several flowering plants in farmyard car park, HFG 2 Jul 2022.

***Gymnadenia conopsea* (Chalk Fragrant-orchid)** Magdalen Hill Down SU5093 2900 & SU5095 2900, over 100 plants on each of two earlier scrapes, HFG 18 Jun 2022.

***Hedera colchica* (Persian Ivy)** Hatch Warren, Woodbury Road SU6071 4856, along pavement at base of hedge for 25m, HFG 11 Jun 2022.

***Helleborus argutifolius* (Corsican Hellebore)** Winchester, Beggars Lane SU4873 2956, David Leadbetter 24 Mar 2022.

***Helleborus foetidus* (Stinking Hellebore)** Old Alresford, two separate plants each with one flower stem developing, beside footpath at SU5862 3408 and SU5865 3404, Peter Marston 22 Nov 2021. A34, Bradley Wood SU4652, on W bank of A34 below wood, Martin Rand 25 Feb 2022. M3, Old Basing SU6683 5185, about 20 plants in cutting on north side of the motorway, just west of a bridge, Tony Mundell 20 Mar 2022.

***Helleborus viridis* (Green Hellebore)** Squiresfield Hanger near Bradshott Hall SU7613 3219, 24 vigorous clumps on roadside, half in flower and half in bud, Bill & Chris Wain 23 Feb 2020.

***Herminium monorchis* (Musk Orchid)** Noar Hill SU7431, overall total of 2,589 plants counted. [Full details with each separate 8-digit grid reference in each pit were recorded but is only summarised here]. 9 in Pit A, 1 in Pit B, 34 in Pit D, 267 in Pit F, 176 in Pit G, 47 in Pit K, 898 in Pit N, 34 in Pit P, 75 in Pit Q, 453 in Pit R, 6 in Pit S, 50 in Pit X, 11 in the 'New Scrape' (made c. 2005) and 528 in the un-named pit north of the 'New Scrape'. None were found in the other pits. This compares well with the count of 2,939 made by Tony Mundell & Sue Clark on 12 Jul 2006.

***Hippocrepis comosa* (Horseshoe Vetch)** Magdalen Hill Down, starting to flower at SU5093 2900, SU5095 2899, SU5102 2898, SU5108 2898 & SU5110 2898, Anna Stewart 2 May 2022. Ladle Hill Fort SU477568, carpeting the slopes of the fort, Caroline Reid 2 Jun 2022.

***Hordeum secalinum* (Meadow Barley)** Edenbrook Country Park extension, a splendid colony of this relatively uncommon grass beside the mown path, extending over at least 20m from SU7903 5399 to SU7904 5397, and over at least 40m from SU7906 5396 to SU7909 5393, Tony Mundell & Helen Boyce 6 Jul 2022.

***Hylotelephium telephium* (Orpine)** Harewood Forest, Test Way SU3996 4279, Carolyn Doorbar 5 May 2022.

***Hypericum humifusum* (Trailing St John's-wort)** Birch Bottom SU770594, a few plants growing on edge of gravel path with conifer woodland, Caroline Reid 4 Jun 2022.

***Hypochaeris glabra* (Smooth Cat's-ear)** Edenbrook Country Park, Bicycle Track area, many dozens of plants along the top edge of the eroded steep sand slope, or along the bottom of the slope by the fence-line, at SU7871 5480, SU7872 5481, SU7873 5481, SU7874 5480, SU7875 5480 and SU7876 5481. The plants vary enormously in size from only about 1cm tall to an astonishing 58cm, but all seem to be setting viable seed, so I now doubt whether the extremely rare hybrid *H. × intermedia* is present (though its other parent *H. radicata* is present). This needs expert confirmation, so I collected a tall plant that just might be the hybrid to send to the BSBI *Hypochaeris* Referee. Many dozens of plants were found in the shorter vegetation of the grassy islands between the cycle tracks, scattered over a large area, e.g., SU7876 5478, SU7876 5479, SU7878 5478, SU7881 5479, SU7884 5478 and SU7885 5479. Edenbrook must be the best surviving site for it in North Hampshire, on a par with Slab Common near Bordon. We also visited SU7874 5478; this is the spot that had several very tall plants that were thought last year on 8 Jul 2021, to include the very rare hybrid *H. × intermedia*. This year all plants here are very small and typical of *H. glabra*, Tony Mundell & Helen Boyce 27 Jun 2022.

***Hypopitys monotropa* (Yellow Bird's-nest)** Bramshott Common SU8590 3297, a single spike, now in bud, has reappeared in the spot where this was previously recorded, but was absent last year, Andy Swan 16 Jun 2022.



Yellow Bird's-nest *Hypopitys monotropa*, Bramshott Common. Andy Swan

***Isolepis setacea* (Bristle Club-rush)** Shortheath Common SU7750 3678, one plant along southern bank of pond and two at SU7752 3693 on the north-west bank, Dave Pearson & Helen Boyce 13 Jun 2022. Edenbrook Country Park, Bicycle Track area SU7883 5477, 20 patches counted on a minor sandy track, also dozens of healthy plants in a wet area with *Typha latifolia* with some especially large flowering plants nearby at SU7881 5478, Tony Mundell & Helen Boyce 27 Jun 2022.

***Juniperus communis* subsp. *communis* (Common Juniper)** Brockley Warren SSSI SU4188 3688, one surviving female bush in remnant of chalk grassland, HFG 2 Jul 2022. (About 100 Junipers were recorded here in 1969).

***Kickxia spuria* (Round-leaved Fluellen)** Chilbolton Down Farm, hundreds of plants along edge of arable crop between SU4163 3623 and SU4162 3628 and beyond, HFG 2 Jul 2022.

***Koeleria macrantha* (Crested Hair-grass)** Magdalen Hill Down SU5022 2926, single clump found, HFG 18 Jun 2022. Chilbolton Down Farm SU4214 3662, on an ant-hill on a species-rich area of a grassy track, HFG 2 Jul 2022.

***Laphangium luteoalbum* (Jersey Cudweed)** St Giles Hill, Winchester SU4927 2928, five young, non-flowering plants on gravel drive, Anna Stewart 2 Dec 2021.

***Lathraea clandestina* (Purple Toothwort)** Liss, beside River Rother SU7797 2864, some clinging on to the river bank but others rather hidden in the Ramsons on the opposite side of the river to the footpath, Bill & Chris Wain 16 Feb 2022.

***Lathyrus sylvestris* (Narrow-leaved Everlasting-pea)** Wakefords Park SU8193 5101, a large patch of dozens of plants (where first found in 2020), Caroline Reid 25 Jul 2022.

***Legousia hybrida* (Venus's-looking-glass)** Chilbolton Down Farm SU4211 3661, arable margin at N edge of large cereal field. At least 6 plants noted within c.20m stretch along N margin, Tristan Norton 3 Jul 2022.

***Logfia minima* (Small Cudweed)** Edenbrook Country Park, Bicycle Track area SU7874 5477, dozens of plants growing with the *Scleranthus annuus*, Tony Mundell & Helen Boyce 27 Jun 2022.

***Lysichiton americanus* (American Skunk-cabbage)** Fleet Pond SU8192 5485, many scattered plants revealed in this area by recent scrub removal by contractors in the reed-beds. John Sutton and other Fleet Pond Society volunteers have been removing many hundreds, probably thousands, of American Skunk-cabbage plants from around Fleet Pond in the last few years, Tony Mundell 3 May 2022. Darby Green SU8350 6034, several plants infesting this area of secondary woodland that was formerly wet heathland, Tony Mundell & Dave Pearson 6 May 2022.

***Malva neglecta* (Dwarf Mallow)** Aerospace Boulevard SU8653, a single plant growing along the kerbside under bushes, Caroline Reid 26 May 2022. Worting SU6077 5259, single large flowering plant on edge of grassy verge, Tristan Norton 7 Jun 2022.

***Melilotus albus* (White Melilot)** Edenbrook Country Park, Bicycle Track area SU7878 5483, many flowering plants near the picnic table, Tony Mundell & Helen Boyce 27 Jun 2022. [But all mown off 30 mins after recording them!]

***Neottia nidus-avis* (Bird's-nest Orchid)** Crawley SU4278 3627, 26 flowering spikes noted, Tristan Norton 21 May 2022. Tunworth, two at SU6732 4798, one at SU6745 4793, four at



Narrow-leaved Everlasting-pea *Lathyrus sylvestris*. Caroline Reid

SU6748 4789, three at SU6750 4786, eight at SU6752 4785, two at SU6752 4783 and eight alongside track at SU6739 4801, Peter Vaughan 28 May 2022.

***Nepeta cataria* (Cat-mint)** Crawley SU432348, sown pollinator/bird seed margin to NE of Crawley Pond. Numerous patches throughout central and northern parts of margin. Flowering, Tristan Norton 4 Jul 2022.

***Nepeta x faassenii* (Garden Cat-mint)** Hurstbourne Tarrant SU384530, behind Parsonage Farm on excavated earth, Peter Billingham 31 May 2022.

***Nymphoides peltata* (Fringed Water-lily)** Hogmoor Inclosure SU7867 3522, in the small pond by the children's play area, no doubt introduced but now well established, Tony Mundell, Eric Clement & Andrew Powling 25 Jul 2022.

***Oenanthe pimpinelloides* (Corky-fruited Water-dropwort)** Little London SU6192 5922, three plants that have appeared in a meadow of a private garden, their origin is unknown, Paul Sterry 20 Jun 2022.

***Ophioglossum vulgatum* (Adder's-tongue)** Chilbolton Cow Common SSSI SU3871 4012, many dozens of plants within c.20m² area, Tristan Norton 8 May 2022. Ibthorpe, Kealties garden SU378538, 'No Mow' May & June. About 50 growing in an area c.1m across, Peter Billingham 5 May 2022.

***Ophrys apifera* (Bee Orchid)** Longmoor SU7942 2977, one spike with another nearby, Helen McAra 14 Jun 2022. Alton Station SU7268 3938, 28 spikes counted on grass

bank on industrial estate, Cathy Wilson 17 Jun 2022. Long Valley, Aldershot SU8388 5257, two flowering plants, David Dimmock 19 Jun 2022.

***Ophrys apifera* var. *belgarum* (Bee Orchid)** Greywell, fields next to Pumping Station SU7242 5149, six plants, all var. *belgarum*, Peter Vaughan 11 Jun 2022.

***Ophrys insectifera* (Fly Orchid)** Faccombe, South Road verge at SU3989 5710, Peter Billingham 21 May 2022. Noar Hill, two flowering plants at SU74263 31862 and one at SU74262 31847, Nigel Johnson 27 Jun 2022.

***Orchis mascula* (Early-purple Orchid)** Holt Copse, Hook SU738542, 214 plants, more than double the previous maximum number of flower spikes I've seen at the site since I started visiting it in 2017, Peter Vaughan 24 Apr 2022. Hampage Wood SU549312, grid reference approximate. On the bank on the east side the path between Hampage Farm and Lovington Lane, Mary Parker 24 Apr 2022. Hartley Mauditt SU7488 3680, 15 flowering spikes on E and W sides of Park Hanger footpath, in three groups, Tristan Norton 26 Apr 2022. Gravelly Wood, over 100 flower spikes in main colony between SU7763 4652 and SU7762 4653, but many scattered plants elsewhere in this narrow woodland strip extending north to SU7764 4654, but also further to south, Tony Mundell 27 Apr 2022. Lee Wood, Crondall, about 20 flower spikes at SU7868 4733 and dozens at SU7865 4734, Tony Mundell 27 Apr 2022. North of Candovers, SU7563 3628, at least 11 spikes beside damp track, Cathy Wilson 30 Apr 2022. Chineham SU6640 5475, at least fifty flowering plants in several groups. Associated with Pignut, Bluebell and Wood Anemone, Camilla Mitchell 6 May 2022.

***Orobancha elatior* (Knapweed Broomrape)** Tichborne SU5681 3076, two spikes close to several plants of *Centaurea scabiosa* in field margin by footpath. Cathy Wilson 3 Jun 2022. Magdalen Hill Down SU5018 2926, single spike on *Centaurea scabiosa* beside track, HFG 18 Jun 2022. Old Burghclere lime quarry SU471572, 30 plants, Graham Dennis 21 Jun 2022. Odiham SU7440 4980, four plants, now brown and dry, on north side of Snatchangers Farm lane. Not a public right of way but pedestrian access is tolerated,

Edel McGurk 25 Jun 2022. Chilbolton Down Farm SU4214 3662, several spikes on a species-rich area of a grassy track, HFG 2 Jul 2022.

***Orobancha hederaceae* (Ivy Broomrape)** Hook SU7285 5370, purple form, growing in ivy at the northern side of Griffin Way South, Peter Vaughan 13 Jun 2022.

***Osmunda regalis* (Royal Fern)** Fleet Pond, Coldstream Marsh, five impressive plants close together at SU82479 54910, SU82480 54910, SU82478 54910, SU82478 54905 and SU82476 54904, John Sutton & Richard Hellier 3 Jun 2022.

***Phedimus spurius* (Caucasian-stonecrop)** Kingsley 7819 3795, on verge of old section of road outside Sandybridge Farm, Tony Mundell, Eric Clement & Andrew Powling 25 Jul 2022.

***Phedimus stoloniferus* (Lesser Caucasian-stonecrop)** Winchester, St Giles Hill graveyard SU4906 2940, on grave of Emily Phillips on west side of the graveyard, non-flowering and very overgrown. Some plants transferred to east side of graveyard to SU4912 2942 where they flowered this year, Anna Stewart 7 Apr 2022, determined by John Poland.

***Plantago media* (Hoary Plantain)** Brockley Warren SSSI SU4189 3687, in remnant of chalk grassland, HFG 2 Jul 2022.

***Platanthera chlorantha* (Greater Butterfly-orchid)** St. Mary Bourne, Back Field SU4245 5040, Peter Billingham 28 Jun 2022.

***Poa angustifolia* (Narrow-leaved Meadow-grass)** Magdalen Hill Down SU5094 2931, erect panicle, narrow leaves, Anna Stewart 2 Jun 2022.

***Poa compressa* (Flattened Meadow-grass)** Kings Worthy Rail Path SU4796 3521, recently flowered, compact panicle, flattened stem, four nodes, Anna Stewart 6 Dec 2021.

***Polypodium cambricum* (Southern Polypody)** Winchester, Water Lane SU4861 2959, growing epiphytically on a Weeping Willow beside the River Itchen, too high to collect

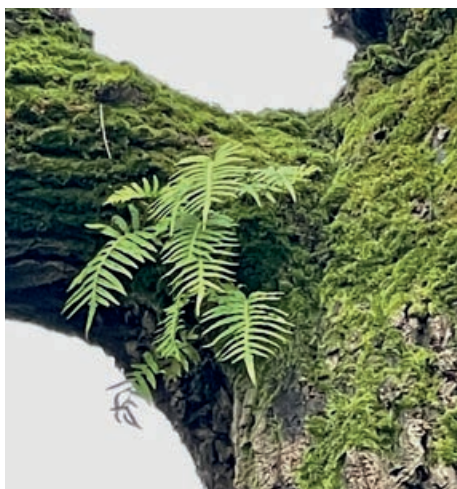


Royal Fern *Osmunda regalis*, Fleet Pond, Coldstream Marsh. John Sutton



Lesser Caucasian-stonecrop *Phedimus stoloniferus*, St Giles Hill, Winchester. Anna Stewart

a specimen. Photo shows the classic *P. cambricum* frond shape, broad and triangular, Anna Stewart 24 Dec 2021. Winchester, Water Lane SU4861 2944, by a Weeping Willow. Frond examined microscopically, sporangia with paraphyses, 3 basal cells, normal spores, Anna Stewart 28 Feb 2022.



Southern Polypody *Polypodium cambricum*, Water Lane, Winchester.
Anna Stewart

***Polypodium* × *shivasiae* (*P. cambricum* × *interjectum*)** Winchester, St Giles Hill graveyard SU4912 2942, one clump by east wall of churchyard where moved there by Anna Stewart. Plant previously det. by Rob Cooke, David Leadbetter 15 Mar 2022. Winchester, St Giles Hill, Alresford Road SU4913 2944, this is the original plant, still in a garden, that was previously det. by Rob Cooke, David Leadbetter 24 Mar 2022.

***Polypogon monspeliensis* (Annual Beard-grass)** Hartland Park SU838549, a dozen or so plants located along the bike trail, Caroline Reid 13 Jun 2022. Edenbrook Country Park, Bicycle Track area SU7879 5482, unusually small flowering plants near the picnic table. [But all mown off 30 mins after recording them!] Tony Mundell & Helen Boyce 27 Jun 2022.

***Polypogon viridis* (Water Bent)** Linden Avenue, Old Basing, growing in many small patches in Linden Avenue over approximately 50m of kerb, centred roughly on SU6697 52229, Rob Still 24 Nov 2021. Harestock SU4677 3164, large patch in tree pit and several plants scattered around paving, Tristan Norton 9 Jul 2022.

***Potamogeton lucens* (Shining Pondweed)** Hollywater Pond SU8086 3349, large patches on western end of the pond, Dave Pearson & Helen Boyce 4 Jun 2022.

***Pyrola minor* (Common Wintergreen)** Yateley Common SU810594, patch c. 1.5 square metres with 125 -150 plants and 30 flower spikes. Photo confirmed by Tony Mundell, Clare Andrews 12 May 2022.

***Ranunculus auricomus* (Goldilocks Buttercup)** Hurstbourne Tarrant SU394539, on verge of wooded footpath, Peter Billingham 1 Apr 2022. Gravelly Wood SU7750 4643, 20 flowering plants in two separate locations c.10m apart. Nearly all plants with mal-formed petals. Also at least 10 flowering plants at both SU7760 4653 and SU7759 4652, Tony Mundell 27 Apr 2022. Ibthorpe, Doloman's Lane

SU3753, scattered along lane, Peter Billingham 10 May 2022.

***Ranunculus hederaceus* (Ivy-leaved Crowfoot)** Shepherds Meadows SU8462 6059 and SU8466 6055, flowering plants on mud in a stream bed, Tony Mundell & Dave Pearson 6 May 2022.

***Ranunculus lingua* (Greater Spearwort)** Cove Brook SU8551 5496, one patch by bridge, Steve Bailey 17 Jun 2022. Hawley Meadows SU860589, 2 or 3 patches around the Cove Brook confluence, Steve Bailey 1 Jul 2022.

***Roemeria hispida* (Rough Poppy)** Chilbolton Down Farm SU4167 3703, edge of Rape field, and SU4186 3638, two plants on edge of arable crop, HFG 2 Jul 2022.



Narrow-leaved Arrowhead *Sagittaria subulata*, Shortheath Pond, 16 July 2022. Steve Povey

***Sagittaria subulata* (Narrow-leaved Arrowhead)** Shortheath Pond SU7753 3690, fine colony of plants flowering at pond margin, Steve Povey 12 Jul 2022.

***Salvia verbenaca* (Wild Clary)** Aldershot, A325 SU8605 5195, on the central reservation of the A325, just north of Potters Hotel, growing with one clump of *Linum austriacum*, det. E J Clement [which is not on the MapMate taxa list], Paul Stanley 7 May 2022.

***Saxifraga granulata* (Meadow Saxifrage)** Chilbolton, West Down, on SW slope, single patch c.60 cm wide at SU38363 38992, also on north slope, single 20cm patch at SU38651 39371, Glynne Evans 18 May 2022.

Scabiosa columbaria (Small Scabious) Magdalen Hill Down SU5085 2900, several plants, HFG 18 Jun 2022. Chilbolton Down Farm SU4214 3661, on a species-rich area of a grassy track, HFG 2 Jul 2022.

Schedonorus pratensis (Meadow Fescue) Magdalen Hill Down SU5038 2917, SU5041 2916, SU5052 2910 and SU5071 2909, few spikelets on panicle branches, glabrous auricles, no awns on lemmas, Anna Stewart 8 Jun 2022.

Schedonorus × aschersonianus (S. pratensis × arundinaceus) Magdalen Hill Down SU5076 2913, plant resembling *S. arundinacea*, but no hairs on auricles, awns small, spikelet number reduced, both parents in area, Anna Stewart 8 Jun 2022.

Scirpus sylvaticus (Wood Club-rush) Conford Moor SU821330, large areas close to the woodland edge, Dave Pearson & Helen Boyce 4 Jun 2022.

Scleranthus annuus (Annual Knawel) Edenbrook Country Park, Bicycle Track area SU7874 5477, only 33 very desiccated plants counted, where there was a huge colony last year at SU78739 54774 to SU78746 54773. Presumably they suffered in the April 2022 drought conditions, Tony Mundell & Helen Boyce 27 Jun 2022. Fleet, Broomhurst Farm road verge, a single plant at SU81247 56368. This follows a splendid rotavating of the remaining part of the Red-tipped Cudweed site by Hampshire County Council in March 2022 (though over half of the former site is now lost under trees) Tony Mundell 9 Jul 2022.

Sedum hispanicum (Spanish Stonecrop) Aldershot SU859509, one clump at foot of bank near to the car wash at Morrisons supermarket, Paul Stanley 7 May 2022.

Silene noctiflora (Night-flowering Catchfly) Crawley SU433348, two large patches of flowering plants, Tristan Norton 30 Jun 2022. Kings Worthy SU4809 3206, single flowering plant at west end of grasscrete layby, Tristan Norton 7 Jul 2022.

Silene viscaria (Sticky Catchfly) Aldershot SU858508, one plant on roadside bank by the underpass near Morrisons supermarket, Paul Stanley 7 May 2022.

Sorbus torminalis (Wild Service-tree) Pamber Forest, over a hundred seedlings, e.g., 70+ at SU6179 6217 and more at Bentley Green Copse, Paul Sterry 20 May 2022.

Stachys arvensis (Field Woundwort) Cowdown SU379433, single flowering plant noted. Not seen in this field previously, Tristan Norton 2 Jan 2022.

Stellaria pallida (Lesser Chickweed) Edenbrook Country Park, BMX cycle track SU7876 5483, confirmed where recently found by Giles Groome at the entrance to the BMX cycle track car park, Tony Mundell 27 Apr 2022.

Teesdalia nudicaulis (Shepherd's Cress) Bolley Avenue SU7876 3623, many plants scattered over a large area of short turf in Bordon Military Cemetery, Steve Povey & Laura Gravestock 3 Apr 2022. Trottsford Farm SU8072 3840, growing with *Vicia lathyroides* and *Crassula tillaea* about 5-10m before the tarmac drive to the farm, Tony Davis 18 Apr 2022. Sleaford SU8062 3834, on sandy bank by road. 10 plants counted but probably many more there, Cathy Wilson 28 Apr 2022.

Teucrium botrys (Cut-leaved Germander) Old Burghclere lime quarry SU471572, one plant, Graham Dennis 21 Jun 2022. Micheldever Chalkies SU519444, 20 plants, Graham Dennis 21 Jun 2022. Micheldever Spoil heaps, east SU5196 4447, 10 plants in flower, Anna P Stewart, Sue Bell & Dave Stewart 4 Jul 2022. Micheldever Spoil heaps, west SU5193 4468, numerous plants in flower, Anna P Stewart & Sue Bell 12 Jul 2022. Abbots Ann, Red Post Lane SU328451, in very large quantity along N. side of field, also in SU329451, Peter Billingham 27 Jul 2022.



Cut-leaved Germander *Teucrium botrys*, Micheldever Spoil Heaps east. Sue Bell

Trifolium ornithopodioides (Bird's-foot Clover) Bramshott Common SU8595 3288, doing well this year, Andy Swan 16 Jun 2022.

Turritis glabra (Tower Mustard) Isington Road, Kingsley SU778377, only two plants found, in green fruit, both on eastern part of the site, Joel Miller 23 Jun 2022.

Valeriana dioica (Marsh Valerian) Shepherds Meadows, patch 2m × 1m at SU84637 60533, mostly in bud, Tony Mundell & Dave Pearson 6 May 2022.

Valeriana officinalis subsp. collina (Common Valerian) Brockley Warren SSSI SU4187 3692, in a remnant of chalk grassland. Three plants checked but no stolons were found, HFG 2 Jul 2022.

Veronica polita (Grey Field-speedwell) Chilbolton Down Farm SU4165 3699, many plants among much *V. persica* in arable field corner, HFG 2 Jul 2022.

Vicia lathyroides (Spring Vetch) Trottsford Farm, about 15 plants on verge at SU80722 38405 about 5-10m before the tarmac drive to the farm and various other houses, growing with *Crassula tillaea* and *Teesdalia nudicaulis*, Tony Davis 18 Apr 2022. Edenbrook Country Park, Bicycle Track area SU7879 5482, a single small plant with one green seed pod near the picnic table, confirming an earlier record in 2021 by Giles Groome, Tony Mundell & Helen Boyce 27 Jun 2022. [It

was about to be mown off, but Helen persuaded the person mowing to spare it.]

***Vicia sepium* var. *ochroleuca* (Bush Vetch)** East of Well SU7852 4661, Sarah Smith 18 Apr 2022, a large 2m wide patch of the cream/white flowered variety. On the north verge of a minor road below a Horse Chestnut tree, close to Swanthorpe House, with the normal purplish colour form nearby, Sarah's photos identified by Tony Mundell (who also photographed it on 27 Apr 2022).

***Viola canina* (Heath Dog-violet)** Bartley Heath SU7285 5354, Peter Vaughan 3 May 2022. Bramshill SU7635 6030, 20 flowers in a grass strip between a fence and the gravel footpath. The main site where many plants were recorded in 1997 is fenced off and inaccessible, Caroline Reid 7 May 2022, photos confirmed by Tony Mundell.

***Viscum album* (Mistletoe)** Yavington Farm SU543323, on solitary Lime tree in field, Martin Rand 9 Mar 2022.

***X Dactylodenia heinzelliana* (*Gymnadenia conopsea* × *Dactylorhiza fuchsii*)** Noar Hill, has flowered at SU74514 31803 for the 4th successive year, Nigel Johnson 27 Jun 2022.

***X Schedolium loliaceum* (*Schedonorus pratensis* × *Lolium perenne*)** Magdalen Hill Down SU5038 2917, glabrous auricles, no or little branching of panicle, spikelets not sessile, no awns on lemmas, Anna Stewart 8 Jun 2022. Chilbolton Down Farm SU4214 3662, on a species-rich area of a grassy track, HFG 2 Jul 2022.



Spring Vetch *Vicia lathyroides*, Trottsford Farm, Bordon. Tony Davis



Bush Vetch, *Vicia sepium* var. *ochroleuca*, E of Well, near Bentley. Tony Mundell



Flora Group members exploring Magdalen Hill Down (see p. 14). Tony Mundell

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 to this issue. 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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