# **Flora News**

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

No. 55 Autumn 2018 Published September 2018





# In This Issue

Forthcoming Events		2
Reports of Recent Events		3
Features Charophytes (Stoneworts) – Our Neglected Plants Yew trees <i>Taxus baccata</i> in New Forest Wetlands	Martin Rand	11
News and Views		
<i>Equisetum</i> x <i>bowmanii</i> at Busketts Lawn Inclosure Roger Veall, A Tribute		
Recording		
Hampshire Lichen Report 2017–18	Neil Sanderson	21
Alien Bryophytes in Hampshire and Bryophyte Recording on the Isle of Wight	John Norton	24
New Vice-County Bryophyte Records for Hampshire and the Isle of Wight	John Norton	26
VC12 Records	Tony Mundell	28
Membership and Recording Information		

### Dear Flora Group member

In this issue we have details of events to be held during autumn/winter 2018 and spring 2019 and our usual round-up of reports of meetings held during spring and summer 2018.

Martin Rand and Alison Bolton will be leading a workshop on Stoneworts (Charophytes) on Sunday 21 October 2018. See Martin's introductory article on stoneworts in this newsletter and please contact him if you would like to receive further details about this event.

On Sunday 2 December 2018 we will hold our ever-popular, annual Flora Group / BSBI Exhibition Meeting at Testwood Lakes so do join us for this sociable opportunity to catch up with fellow botanists during the dark days of winter and look forward to botanising in the year ahead.

Next May we look forward to field visits to Headley Gravel Pit and Old Burghclere Lime Quarry. In response to requests from Flora Group members, Martin Rand has offered to lead a training day on sedge identification in early June 2019 and Andy Cross a training session on grass identification in mid June. Tony Mundell will be arranging a visit to the Cholderton Estate during July 2019. Full details of these and other events planned for next summer will be provided in the Spring 2019 edition of *Flora News*.

The Spring 2019 edition of *Flora News* will also include Part 2 of Martin Rand's 'Assessing decline in fluctuating populations' article.

We are very grateful to everyone who helps to organise Flora Group events and, as usual, we welcome your suggestions for meetings and other activities. Please raise your ideas with any of the Committee members: Sarah Ball (Chairman), Catherine Chatters, Clive Chatters, Ginnie Copsey, Andy Cross, Isobel Girvan, Gareth Knass, Tony Mundell, John Norton, Martin Rand or Neil Sanderson.

If you have enjoyed any of the Flora Group events and would like to write a report or article, or submit photographs, we would be very pleased to hear from you. Please contact Catherine Chatters (Flora Group Secretary) at Catherine.Chatters@hiwwt.org.uk or to her home address which is given at the end of this newsletter. The back page of this newsletter also includes information on how to submit plant records in Hampshire.

Catherine Chatters	John Norton
Flora Group Secretary	Editor

Cover photo: Large Venus's-looking-glass *Legousia speculum-veneris*, Malshanger Estate, near Basingstoke, 14 July 2018 (*Dave Pearson*).

# **Forthcoming Events**

There is normally no need to book a place on Hampshire Flora Group events beforehand, unless the text specifically requests it. A contact telephone number is only given in case you wish to know more about the event. The leader can be expected to turn up whatever the weather (although it may then be mutually agreed to cancel the event)! Bring a packed lunch and suitable footwear to all meetings.

Sunday 21 October 2018, 9.30am–c.3.30pm Workshop on Stoneworts, Testwood Lakes Education Centre, Totton (and field visit) Leaders: Martin Rand and Alison Bolton

This workshop will be a 1-day introduction to Stoneworts, starting indoors looking at their general features and the available literature, then spending some time in the field. If you are interested please contact Martin Rand (details on back page) to put you on the e-mailing list for further details.

### Sunday 2 December 2018, 11am–4pm Flora Group/BSBI Exhibition Meeting Testwood Lakes Education Centre, Totton

We will continue this traditional winter get-together/social event, so please bring along cakes and other goodies to eat, or sandwiches for us to share, plus your specimens, photos, material for display boards and any other botanical talking point. This is a splendid informal event for meeting others interested in Hampshire's wildflowers. A digital projector will be available, so **please can you bring a few digital photos** to show us (but only British plants and preferably species found in Hampshire!). **Note that we will start showing the plant photos at 1pm.**  If you don't wish to talk about your photos then please at least bring a few prints of photos (or pressed specimens) that you can put on the display tables – ideally annotated with where the photo was taken. Failing that, bring a few biscuits, etc. and help us munch them!

Testwood Lakes Education Centre is reached from Brunel Road, a turning off the A36 at a roundabout between Totton and Ower. After entering Brunel Road, look for a small turning on the left after the block of industrial units. Go along this track, ignoring the first (public) car park and the Sea Scouts' building on your right, until the Education Centre comes into view above the lake. Grid reference SU 344 155. There is plenty of parking there. No need to book a place.

Please note that this event will be on a Sunday (not a Saturday as in previous years).

Contact: Tony Mundell (details on back page).

### Saturday 25 May 2019, 10.30am–4pm Visit to Headley Gravel Pit and Old Burghclere Lime Quarry

### Leader: Tony Mundell

HIWWT would like the plant records updated for these two reserves. Headley Gravel Pit is well known for its impressive display of Green-winged Orchid *Anacamptis morio*, whilst Old Burghclere Lime Quarry has huge numbers of Fly Orchids *Ophrys insectifera*. However, our aim will be to make as complete a plant list as we can for both reserves. This meeting will be suitable for relative beginners as well as those experienced at plant recording.

We will start at Headley Gravel Pits before later moving on to Old Burghclere Lime Quarry after a lunch stop. Park and meet in Ashford Hill Road, Headley (off the A339) SU 5151 6268 at 10.30am

Contact: Tony Mundell (details on back page).

### Advance notice:

Saturday 27 July 2019, 10.30am–3pm Visit to Cholderton Estate at invitation of Henry Edmunds Leader: Tony Mundell

Full details in next issue of *Flora News*.

# **Reports of Recent Events**

# Working party for Heath Lobelia, Hinton Admiral, Saturday 17 February 2018

### A report by Gareth Knass

The Heath Lobelia *Lobelia urens*, listed on Schedule 8 of the Wildlife & Countryside Act, is both critically endangered and nationally rare, being found at just six known extant sites in the UK. One of these sites is in VC11 in an area of the western New Forest where it has

been known from for a long period of time, and continues to flower, but with just a small number of plants in 2017. The reason for the decline at its Hampshire location is a result of reduced land management practices, such as grazing, which creates the disturbed open poached damp heathland that is required by the plant. In fact in the main area of heathland where it has been historically known, there were no plants recorded in 2017; the sole remaining flowering plants (three) were recorded on an





Heath Lobelia *Lobelia urens* site at Hinton Admiral – before and after shots taken during the meeting on 17 February 2018 (*Gareth Knass*)



Work party volunteers (Dominic Price)

adjacent arable headland, where the plant has found a niche on the edge of a sandy agricultural field.

Following talks with the landowner and Natural England, the Species Recovery Trust (SRT) made contact with the Hampshire Flora Group about a work party aimed at reestablishing suitable conditions on the main heathland area, in order to kick start recovery of the population. In mid February 2018 a group of SRT and Flora Group volunteers got together to undertake a day of scrub bashing and opening up of the damp heathland areas where the main population was known, in order to bring the heathland back to the early successional stage required by the Lobelia.

The works coincided with a lovely sunny and warm late winter day, which certainly helped with the work. The twenty or so volunteers made good progress with hand tools, cutting away the willow, birch, and gorse scrub, as well as areas of over-mature heather. Ground disturbance was created directly with various tools, and indirectly through the trampling of the works area. Robin Walls from Dorset took some soil samples, in order to determine the exact conditions with which the plant is associated, and to compare with the Dorset site.

Hopefully the work, which was topped up by the SRT a few weeks later on a second bash, will allow for the Heath Lobelia to recover from the seedbank on the heath and we will see a flush of flowering plants in 2019. This sort of management cannot be a one-off, and it is hoped that measures can be put in place to ensure that longer term management continues to create and maintain the early successional heathland stages required by the species. According to a PhD on the subject by Dr Janet Dinsdale, this can best be achieved through appropriate grazing by cattle.

Thanks to Dominic Price from the SRT for organising the day and to the landowners and Natural England for their hospitality and for allowing for the habitat management works to take place.

## Winter annuals and spring urban flora, Port Solent, Sunday 15 April 2018 A report by John Norton

At Martin Rand's suggestion our now regular early spring meeting was held at Port Solent, the marina development at the north-eastern corner of Portsmouth Harbour. About 13 people attended on a bright and breezy, mild day.

The marina itself was built in the 1980s on a tidal lagoon (which held an important wader roost at the time), but much of the remainder of the site, including various boatyards, a cinema, car parks and a large area of amenity grassland was constructed on an old restored gravel pit and tip. This was formerly a good hunting ground for aliens, but now that the grassland has matured and very little disturbed ground remains the interest has waned. However, the site has a number of grass verges, known to support coastal legumes and other interesting species, so this seemed to be a good venue



Galium murale flowers, habitat and admirers at Port Solent, 15 April 2018 (John Norton)



The moss Scorpiurium circinatum with Bee Orchids Ophrys apifera (John Norton)

for a meeting, particularly as it would avoid visiting an area with busy roads.

Martin had provided me with some scanned notes from a recent visit carried out by Paul Stanley which included details of a colony of the newly arrived alien Galium murale (nicknamed by Paul as 'Yellow Wall Bedstraw'). We headed to the eastern end of the smaller of the two car parks to look at this first of all. It was growing in the interstices between the brick paviours used to surface the car park, a niche that is proving to be quite fruitful for small aliens as well as native species. Not surprisingly, a group of people on their hands and knees in the middle of a car park did draw some attention from other members of the public! In the same area we recorded Smallflowered Buttercup Ranunculus parviflorus, Early Forgetme-not Myosotis ramosissima, Parsley-piert Aphanes sp. and plentiful Sea Mouse-ear Cerastium diffusum. The buttercup was not in flower, but Dave Pearson returned a week or so later to photograph the plants in flower, and was also rewarded with a clump of Mousetail Myosurus minimus, growing nearby.

The southern edge of the car park is embanked to the main access road and had mostly been planted up with the usual grotty horticultural ground cover plants and a few trees. However, next to the bedstraw colony there were a few open sections of bank supporting regularly mown grassland. Two of these held a total of more than 200 leaf rosettes of Bee Orchid Ophrys apifera and a number of other plants of chalk grassland, including Ploughman'sspikenard Inula conyzae and Blue Fleabane Erigeron acris. Perhaps some of the landscaping of this area was done with imported chalk? Of interest to me were patches of the calcareous moss Scorpiurium circinatum, growing at the base of the bank at the edge of the car park kerb. This species is abundant on the Isle of Wight but inexplicably rare in Hampshire, where it has mostly been recorded on ancient monuments, including nearby Portchester Castle. This is only about the tenth record for VC11.

Along the planted-up border of the main car park we looked at the less common subspecies of Ivy-leaved Speedwell Veronica hederifolia subsp. hederifolia and a single plant of what I had presumed (when I found it during the reconnaissance visit) was Henbit Dead-nettle Lamium amplexicaule. However, Martin astutely realised it was in fact Cut-leaved Dead-nettle L. hybridum, a surprisingly rare species in the county. We did see proper Henbit later in the day. These three species are classed as archaeophytes (long-established aliens) in Britain.

We continued our walk past the southern end of the marina, and finally (after three years of promising these species on spring meetings) were able to see good quantities of Musk Stork's-bill *Erodium moschatum* and Knotted Hedge-parsley *Torilis nodosa*. These proved to be abundant over much of the site, as they are in other parts of the Gosport and Portsmouth area. Growing with these were Lesser Chickweed *Stellaria pallida*, Little Mouse-ear *Cerastium semidecandrum* and Field Madder *Sherardia arvensis*, also now common species of road verges in coastal parts of Hampshire. Nearby on a steep bank was a patch of Common Cudweed *Filago vulgaris*, one of the species that is also turning up on brick paviours.

We continued heading west through the site, admiring a large patch of Toothed Medick *Medicago polymorpha* in flower in front of an office building and basal leaf rosettes of Corn Parsley *Petroselinum segetum* on a verge between two sections of car park, both still where Paul Stanley had noted. Also here there was some Common Stork's-bill *Erodium cicutarium* in flower.

We reached the western end of the site where we walked along the sea wall and checked the grass verge and a clump of willow trees at the western end of the amenity grassland area. On the seaward side of the sea wall there are several naturalised patches of Thick-leaved Stonecrop *Sedum dasyphyllum*, a species which Paul Stanley had also noted in a nearby car park. This has almost certainly hopped over from the nearby Portchester Castle churchyard, where it has long been established on the gravel-covered graves and boundary walls. We



Little Mouse-ear Cerastium semidecandrum (John Norton)

also recorded Early Meadow-grass *Poa infirma*, Pink Shepherd's-purse *Capsella rubella* (a regular species now on spring meetings), Keeled-fruited Cornsalad *Valerianella carinata* and *Veronica hederifolia* subsp. *lucorum* in this area.

NB. A few of the photographs shown here were taken during my recon of the site on 11 April 2018.



Thick-leaved Stonecrop Sedum dasyphyllum naturalised on sea wall at Port Solent (John Norton)

# Visit to Ackender Wood, Alton, Sunday 22 April 2018

### A report by Tony Mundell

There was a bit of a problem a week before this meeting when I checked out the proposed route. The Cricket Club had closed off most of the car park with a new barrier where we were due to meet, so HIWWT kindly e-mailed as many HFG members as possible to let them know of a different meeting place for another entrance to the wood. Inevitably a few members did not receive that message so initially I manned the closed car park and re-directed two cars to the new meeting place before whizzing off there myself.

The extra advertising provided by that e-mail meant that we had a bumper turnout of 21 people (see back page of this newsletter). We started by looking at a few road verge plants, comparing the leaves of Hairy Violet *Viola hirta* and Sweet Violet *Viola odorata* and looking at a large patch of the unusual form of Greater Periwinkle *Vinca major* var. *oxyloba* that has flowers with very narrow petals. On the opposite roadside some locals had evidently marked off a large colony of Common Spottedorchid *Dactylorhiza fuchsii* in an attempt to protect them from the dreaded mowers. I wish them luck!

We then pottered slowly along through the wood looking in detail at typical woodland plants, both common and less common ones. I knew spots for just a few plants of relatively uncommon species like Toothwort *Lathraea squamaria* and Herb-Paris *Paris quadrifolia* but in fact we found quite a few extra patches of both of those that I was not aware of.

One plant of interest was Goldilocks Buttercup Ranunculus auricomus. The recent publication of Volume 1 of 'Sell & Murrell' (at c.£125!) shows that this is now split into a bewildering large number of microspecies. Apparently in Scandinavia more than 600 different microspecies have been distinguished of what until now has just been called Ranunculus auricomus! In fact the plant originally named by Linnaeus as R. auricomus (so now R. auricomus sensu stricto) does not occur in Great Britain or Ireland. So far, 57 different microspecies are known in Britain but it is pointed out that there are probably many more still to be named. Those 57 are distinguished mainly by their different basal leaves which are all illustrated in Sell & Murrell. Martin Rand told me that the plants we saw in Ackender Wood did not match any of the microspecies so far described for Britain. I think I will continue to be a 'lumper' rather than a 'splitter' and just call everything R. auricomus sensu lato!

We also saw examples of Moschatel Adoxa moschatellina (also known as Clock-tower Flower or Town Hall Clock), Nettle-leaved Bellflower Campanula trachelium and a host of common woodland plants like Pignut Conopodium majus. I talked about my childhood when we used to dig up the root of Pignut and peel it with our pen-knives. They



Hybrid Shield-fern *Polystichum x bicknellii* collected from Ackender Wood on 22 April 2018 (*Tony Mundell*)



A splendid display of bluebells (Tony Mundell)

tasted and looked just like Hazel nuts. Unfortunately I could not demonstrate this as the Wildlife & Countryside Act now makes it illegal to uproot any plant without the landowner's permission. Nigel Johnson pointed out that the nursery rhyme/song 'Here we go gathering nuts in May' can only refer to Pignuts.

The ferns were well represented, so the differences between Broad Buckler-fern *Dryopteris dilatata*, Lady-fern *Athyrium filix-femina*, Male-fern *Dryopteris filix-mas* and Scaly Male-fern *Dryopteris affinis* were pointed out. However, the star plant of the day was a clear example of the hybrid between Hard Shield-fern *Polystichum aculeatum* and Soft Shield-fern *P. setiferum*. It seems that this hybrid, called *P. x bicknellii,* is more frequent than previously realised, so it is under-recorded in Hampshire.

Later on we reached splendid displays of Bluebells *Hyacinthoides non-scripta* in full flower and cameras clicked away. I was puzzled by a young sapling tree that had still not opened any leaf buds but luckily John Poland was with us and he knew straight away that it was Aspen *Populus tremula*. By the time you read this it is likely that John's new book will be published that will allow me and others to identify more trees and shrubs before their buds burst.

### Heaths around Mockbeggar in the New Forest and Flora Group AGM, Sunday 20 May 2018

### A report by Clive Chatters

The group met as guests of the National Trust to walk parts of the western commons where heathland vegetation is recovering after various periods of upheaval. Meeting at the foot of the sandpit at Moyles Court we set off uphill to enjoy the parched grasslands of the old gravel workings. Once past the worst concentrations of dogfouling we crouched before the rich sward of Slender Trefoil *Trifolium micranthum*, Lesser Trefoil *T. dubium*, Bird's-foot Clover *T. ornithopodioides*, Blinks *Montia fontana*, Upright Chickweed *Moenchia erecta*, Mossy Stonecrop *Crassula tillaea* and was that Heath Pearlwort *Sagina subulata* or a particularly floriferous Procumbent Pearlwort *S. procumbens*?

Doubling back to the crown of the sandpit the arenaceous grasslands there presented us with Least Cudweed *Filago minima* together with Shepherd's Cress *Teesdalia nudicaulis* in this, its only New Forest station. Interestingly the botanically-rich sandy grasslands were present under the light shade of birch and spartan stands of bracken. This is fortuitous in extending the range of the species whose core open-grassland habitats on the edge of the pit have been eroded away through intensive use as a recreation site. The current intensity of use is such that there is an annual net loss of vegetation to erosion, there being few opportunities for anything to colonise the bare ground.

The gravel pit at Rockford has been worked within living memory but over a few decades has greened up in

the presence of continuous grazing by Forest stock. In crossing the bed of the old gravel works we looked into the few seasonal pools which had yet to completely dry out. The simplicity of Water-purslane *Lythrum portula* was a contrast to the tricky Water-starworts *Callitriche* spp. which were just coming into fruit so encouraging the sufficiently skilled members of our party to attempt a diagnosis to species level.

Having achieved an average speed of 250m/hr the group then accelerated across the plateau and down to the Dockens Water where lunch was taken and the official business of the AGM conducted. An extensive conifer plantation, Newlands, was established here in the 1960s but has been mostly removed and restored to the grazed Open Forest. The lawn of the floodplain of the recovering heath quickly yielded to acidic valley mire fed by vigorous springs rising below the plateau of Ibsley Common. A recently dug drain supported a strong population of the shaggy-stemmed Creeping Forget-me-not Myosotis secunda which could be studied without risking the perils of the mire. The bog itself still sported cut stumps of conifers between which a mat of Sphagnum has established crossed by runnels with Bog Pondweed *Potamogeton polygonifolius* and Bog Asphodel Narthecium ossifragum, with some Common Cotton-grass Eriophorum angustifolium and an array of sedges. The junction between the mire and the heath



Heath Pearlwort Sagina subulata (Tony Mundell)



Shepherd's Cress Teesdalia nudicaulis (Gareth Knass)



Greater Broomrape Orobanche rapum-genistae (Gareth Knass)

looked ideal for Marsh Clubmoss *Lycopodiella inundata* but we found none; the compensation was abundant Round-leaved Sundew *Drosera rotundifolia* together with a single root of Royal Fern *Osmunda regalis*.

At this point some of the party yielded to the siren call of ice creams whilst stalwarts climbed to the plateau of Ibsley Common to enjoy a landscape reddened with the flowers of Sheep's Sorrel. Our trek across the open plain was rewarded when we dipped down into the old gravel pit at Summerlug to pay our respects to a vast population of Greater Broomrape *Orobanche rapumgenistae*, an increasingly rare parasite of Gorse, here in what is regarded as its strongest British population.

Once again the call of dairy ices split our party, the afterguard making their way to the green at the Alice Lisle to be rewarded with Subterranean Clover *Trifolium subterranean* and Chamomile *Chamaemelum nobile* in the shorter swards together with Fiddle Dock *Rumex pulcher* and Round-leaved Dog-rose *Rosa obtusifolia* at the edge of the scrubs. All in all, rather a fine list for a day exploring what some may regard as 'brownfield' sites.

### Visit to Selborne Common, intended for Saturday 9 June 2018

Unfortunately this had to be cancelled a few days before the event.

### Visit to Bishop's Waltham Moors, Saturday 16 June 2018 A report by Andy Cross

The Moors at Bishop's Waltham is a Site of Special Scientific Interest (SSSI), chosen for its unimproved wet meadows, with a rich and diverse flora.

After gathering at the meeting place, we set off towards the Mill Pool on the western side of the Moors. The first part of our walk took us through herb-poor pastures – cattle-grazed – and onto one of the main spring-lines feeding into the Moors from the western side of the site. Here we could see through the shallow clear waters of the spring-fed stream the 'boiling sands' – small plumes of sand bubbling up under the pressure of the water issuing from the chalk. These 'boils' are tiny features in the landscape but drew our attention to the complexity of the geology of this area.

From then we walked on towards the northern edge of the Mill Pond and the adjacent mire habitat. We searched for Great Fen-sedge *Cladium mariscus* here but no luck. This species hasn't been recorded since 1960 – has it now gone from the Moors? – and, if so, why?

After the Mill Pond, the group looped back north – touching the edge of some fen meadow habitat with Water Avens *Geum rivale* and Bistort *Persicaria bistorta*, with grasses such as Smooth Brome *Bromus racemosus*, Hybrid Fescue X *Schedololium Ioliaceum* and sedges like Brown Sedge *Carex disticha* in evidence – and then east to enter the main area of the Moors from the north.

The main, central, area of the Moors is rich in plant species and it is where we had a chance to dip into the rich sedge flora mentioned by our leader, Martin Rand, in the meeting description. Of the more than 20 species of sedge known from there, we spent time looking out for the choicer species such as Flea Sedge *Carex pulicaris*, Long-stalked Yellow-sedge *C. lepidocarpa*, Tawny Sedge *C. hostiana*, Star Sedge *C. echinata*, Common Sedge *C. nigra* and Bottle Sedge *C. rostrata*. The group looked for Slender Tufted-sedge *C. acuta* (last recorded in 1963) but with no luck on this occasion – is it still there?

The mosaic of base-poor and base-rich habitats – one of the special features of the site – was marked by species such as Tormentil *Potentilla erecta*, Bog Pimpernel *Anagallis tenella*, Meadow Thistle *Cirsium dissectum*, Devil's-bit Scabious *Succisa pratensis*, Common Cottongrass *Eriophorum angustifolium* and Betony *Betonica officinalis* – not far from Marsh Valerian *Valeriana dioica* and Long-stalked Yellow-sedge. At one spot Broad and Narrow Buckler-ferns *Dryopteris dilatata* and *D. carthusiana* grew side by side, providing a useful educational experience for those unfamiliar with them. On drier ground there were fine flowering stands of Dyer's Greenweed *Genista tinctoria* and, in places, large stands of Corky-fruited Water-dropwort *Oenanthe pimpinelloides*.

The Moors is noted for its orchids and there were impressive displays of Marsh Orchid *Dactylorhiza* 



Sedge-rich vegetation at Bishop's Waltham Moors with Bottle Sedge Carex rostrata in foreground (Gareth Knass)



Flea Sedge Carex pulicaris (John Norton)

*praetermissa* with Heath Spotted-orchid *D. maculata* localised in more acidic areas and occasional hybrids. We did not see the Marsh Helleborine *Epipactis palustris* or the Marsh Fragrant Orchid *Gymnadenia densiflora,* though both were recorded there in 2011 and we had their last recorder with us to pick out the exact spot.

Once out of the central area of the Moors, the final part of the walk took us around a hay meadow with Yellow-rattle *Rhinanthus minor* in one of the fields north of the Moors area, along with a good display of common meadow plants, including Field Scabious *Knautia arvensis* and more Dyer's Greenweed.

Of the two great rarities of the site, Great Fen-sedge (last recorded in 1960) and Flat-sedge *Blysmus compressus* (last recorded in 1986), we saw neither. The former was searched for around the northern margin of Mill Pond, which is now quite densely scrubbed up, and it was not possible to get to the southern end of the site where the

latter was known. It is clear that the site has suffered from a lack of appropriate grazing over recent years, but with new grazing arrangements now in place, things will hopefully improve. We made a total of 234 records during the day, treating each compartment separated off for grazing purposes as a separate recording unit, and omitting only a small area of dry pasture of much less interest.



Presumed Heath Spotted x Southern Marsh-orchid Dactylorhiza x hallii (Gareth Knass)

# Training day on plants of chalk grassland, intended for Sunday 8 July 2018

Unfortunately this event had to be cancelled due to the risk of grassland fires.

# Visit to Malshanger Estate, near Wootton St Lawrence, Basingstoke, Saturday 14 July 2018

### A report by Lisa Malter

This very informative meeting to identify plants of arable field edges organised by Tony Mundell was attended by 12 Flora Group members. Alison Cross, the principal farm advisor of Arcadian Ecology and Consulting, a subsidiary of Hampshire and Isle of Wight Wildlife Trust, came along to help explain how the farm is managed to improve nature conservation.

We learned that Malshanger Farm is owned by the Coleman family (formerly of Coleman's mustard), and grows combine harvestable crops such as wheat, barley, and oilseed rape. It also grows organic lavender, Black Mitcham mint, for Summerdown mint tea and mint oil, and Chamomile for tea. They also grow oats for Jordans farm partnership. There is a conservation plan for the farm, and the hedgerows and arable field margins are managed in accordance with Natural England's Higher Level Stewardship scheme. Alison also explained that improvements in farming, such as minimum till and zero till (instead of ploughing) are good for maintaining soil structure, microbes and water in the soil, but the lack of disturbance is not good for arable field edge flora.

Due to the extremely hot and dry summer, many plants were much smaller than expected. Happily we did find several specimens of Large Venus's looking glass *Legousia speculum-veneris*, a plant that has been recorded on the Malshanger Estate since 1916. This is its only known site in Britain but Tony Mundell reports seeing it in abundance around cornfields in France. Other uncommon arable field plants we found included Narrow-fruited Cornsalad Valerianella dentata, Common Fumitory *Fumaria officinalis* ssp. *wirtgenii* (an uncommon subspecies), Henbane *Hyoscyamus niger* and Corn Spurrey *Spergula arvensis*. Corn Spurrey is a Red List species and a Notable Hampshire species. We also saw Weld *Reseda luteola* and Common Restharrow *Ononis repens* (which is not as common as it used to be).

We examined the margins around two sides of one field, crossed into a second field, where we found a bit of shade for lunch, returned to the first field and finished checking the other two sides of the field back to the gate where we had left our cars. We had the opportunity to walk through some of the mint crop, which left our boots smelling, as one person said, 'much better than what we usually walk through.' Towards the end of the very hot afternoon some of us drove to another part of the farm and walked around two additional fields looking for Annual Knawel *Scleranthus annuus*, which we could not find, although it had been plentiful in one spot in 2014. This is rather typical of arable plants that are so dependent on annual ploughing.

We were able to compare the *Carduus* and *Cirsium* thistles, as there were plants of Musk Thistle *Carduus* 



Henbane Hyoscyamus niger (Gareth Knass)



Corn Spurrey Spergula arvensis (Dave Pearson)



Narrow-fruited Cornsalad Valerianella dentata (Gareth Knass)

nutans with its nodding flowers and Creeping Thistle Cirsium arvense (with feathery pappus hairs) next to each other. Later we also found Welted Thistle Carduus crispus (with straight hairs). Other pairs we found to compare were Round-leaved Fluellen Kickxia spuria and Sharp-leaved Fluellen K. elatine; Hairy St John'swort Hypericum hirsutum and Perforate St John's-wort H. perforatum; Sun Spurge Euphorbia helioscopia and Dwarf Spurge E. exigua, and Scented Mayweed Matricaria chamomilla and Pineappleweed M. discoidea. We also found Scentless Mayweed Tripleurospermum inodorum. There were also three types of Goosefoot: Fat-hen Chenopodium album, Fig-leaved Goosefoot C. ficifolium and Many-seeded Goosefoot C. polyspermum.

Other plants on the field margins included Perennial Sowthistle Sonchus arvensis, White Campion Silene latifolia, Parsley-piert Aphanes arvensis, Colt's-foot Tussilago farfara, Black-bindweed Fallopia convolvulus, Marjoram Origanum vulgare, Lesser Burdock Arctium minus, Common Knapweed Centaurea nigra agg., Chicory Cichorium intybus, Small Toadflax Chaenorhinum minus, Field Madder Sherardia arvensis, Common Poppy Papaver rhoeas, Thyme-leaved Sandwort Arenaria serpyllifolia, Field Pansy Viola arvensis, Annual Mercury *Mercurialis annua*, Field Forget-me-not Myosotis arvensis, Ribbed Melilot Melilotus officinalis, Gallant Soldier Galinsoga parviflora, Red Bartsia Odontites vernus, Goat's-beard Tragopogon pratensis, Short-styled Field-rose Rosa stylosa, Greater Plantain Plantago major, Ribwort Plantain Plantago lanceolata, Common Amaranth Amaranthus retroflexus, Black Nightshade Solanum nigrum, Thyme-leaved Speedwell Veronica serpyllifolia, Marsh Cudweed Gnaphalium uliginosum, Agrimony Agrimonia eupatoria and Knotgrass Polygonum aviculare. It was a surprise to find Spurge-laurel Daphne laureola in the hedgerow as it is normally a woodland plant.

The grasses we identified included Black-grass Alopecurus myosuroides, Rye Brome Bromus secalinus, Barren Brome Anisantha sterilis, Creeping Bent Agrostis stolonifera, Common Couch Elytrigia repens, Red Fescue Festuca rubra, Perennial Rye-grass Lolium perenne, Wild-oat Avena fatua, Reed Canary-grass Phalaris arundinacea and Flattened Meadow-grass Poa compressa (try to roll it between your fingers – Anna showed us that it doesn't 'twizzle').

Thank you to Tony, farm manager Ian Margetts and Alison Cross for facilitating our visit to this unusual site.

### Visit to St Clair's Meadow, intended for Sunday 12 August 2018

Unfortunately this event had to be cancelled due to the very tall vegetation as a result of the weather conditions experienced this year and the delay in reinstating grazing management.

# **Features**

# Charophytes (Stoneworts) – Our Neglected Plants An article by Martin Rand

### INTRODUCTION



A 'Nitella meadow'

The way in which the plant kingdom became divided up between interest groups in the nineteenth century is a curious one, and it is hard not to draw parallels at times with the carving up of the globe between the European imperial nations in the same era. One feature that wasn't prominent in those greater empires was shared rule. But in the plant world, the Botanical Society of Britain and Ireland (BSBI) and its predecessor societies have always taken an interest in ferns and clubmosses, despite the foundation in 1891 of a society (the British Pteridological Society) devoted to them that is still going strong; and most Floras and comprehensive field guides include these groups.

More exceptional is the case of the Charophytes (Stoneworts), since these are a family of freshwater algae, and no other algae have been taken on board by societies whose main interest is 'higher plants'. (There is, of course, a society dedicated to algae of all kinds - the British Phycological Society.) One argument is that their relatively large size and obvious structure has given them a status of 'honorary higher plant'. This is not exactly a logical position, since many marine algae are even larger and have just as obvious a structure, and no-one has ever excluded marine flowering plants from the higher plant books just because they grow in the sea. In the end it boils down to three factors: the interests of the early members of the Botanical Exchange Club, which included people able and willing to identify them for others; their 'pressability', unlike many other freshwater algae; and the fact that they are often encountered when exploring for other water plants.

Stoneworts belong to a single family (Characeae), with just five genera in Britain. Of these, only three have

representatives that can be considered common; Stewart & Church (1992) consider that just 13 species account for 95% of all material encountered. Bryant, Stewart & Stace (2002) list 29 species that are not extinct in Britain. Not many people record them, for a variety of reasons. One is that they require forethought to collect: they can be dragged out of water with a grapnel or garden rake, but who carries those on a general botanising trip? The authors of Urbaniak & Gąbka (2014) go farther and suggest that '...for a complete record of charophytes, snorkelling and/or scuba diving are absolutely necessary.' Then, stoneworts have a very different morphology and reproductive system from flowering plants, and this entails getting familiar with their parts and learning a whole new technical terminology. Finally, there is the matter of where to go for information. National Floras and field guides don't deal with them; it is also now rare for county Floras to include them, and even the 1996 Hampshire Flora (Brewis et al. 1996) left them out while including basic coverage of bryophytes and lichens. This means that people are not made aware of their existence or distribution, so their interest isn't aroused.

But there are good reasons for studying them, which are well summed up in the Foreword to Stewart & Church (2002): '...they have great ecological significance, often carpeting vast areas in clear freshwater lakes and forming an important source of food for diving ducks. Furthermore, a worryingly high proportion of the group is regarded as threatened. This reflects the sensitivity of stoneworts to pollution and their value as indicators of pristine water bodies.'

### LEARNING STONEWORTS



Chara vulgaris

So where does one go to learn more about Stoneworts? Useful information is scattered across many publications.

• An obvious starting point is the BSBI Handbook, Moore (1986). It is very reasonably priced, fits in a pocket, and has one of the most complete modern British accounts of the family, with keys, detailed descriptions, excellent line illustrations and distribution maps. Unfortunately there have been some significant changes to taxonomy since its publication, and these make it harder to use in a modern context. And inevitably, the distribution maps are now somewhat out of date.

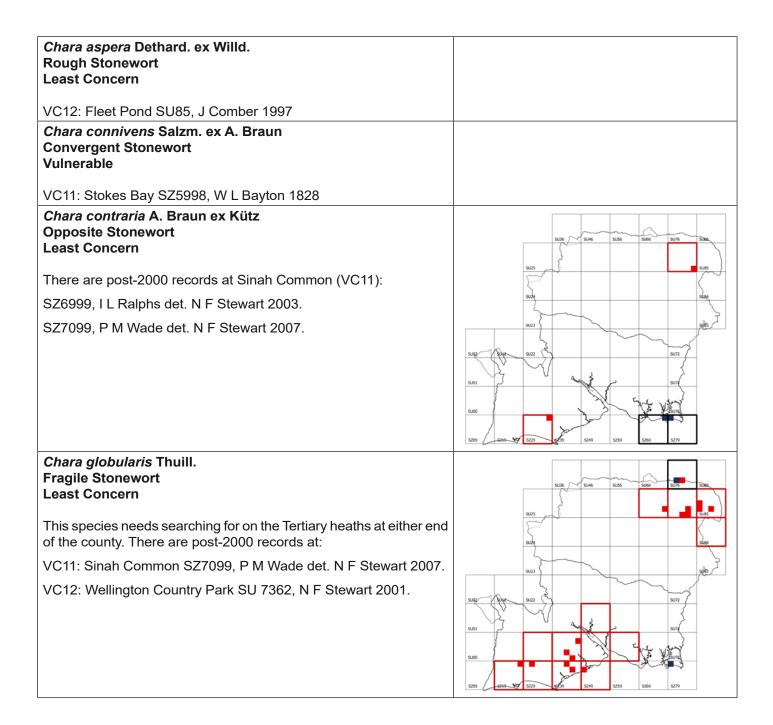
- For an update to the BSBI Handbook, the most complete account is that written by Jenny Bryant (née Moore of the BSBI Handbook) and Nick Stewart in John, Whitton & Brook (2011). It has keys to genera and species, species accounts and illustrations that are not quite as detailed or good as those in the Handbook, but usable. However, this is a large expensive book in which charophytes play only a small part.
- For keys to species, Stewart & Church (1992) is very good especially if you are just starting out. The glossary and use of technical terms is much less intimidating than that in many of the other works. Although this is a Red Data Book, the keys include all species occurring in Britain and Ireland. There is a simple 2-page key for the common species (the '95%') and a well laid out 9-page key for everything. The species accounts are very full and include good line drawings and distribution maps, but are limited to the red-listed species. It is available new for £15, and second-hand copies come up occasionally. If you just want the 2-page key, it is available (updated, and now claiming to cover 99% of the specimens found!) as a download from the BSBI web site: https://bsbi. org/download/4907/.
- If you are working exclusively in New Forest streams, then Lansdown (2009) has keys to the nine species likely to be found in flowing water, and useful identification notes. This obviously narrows things down a bit.
- Mouronval, Baudouin *et al.* (2015) has the disadvantage for some readers of being in French, but for huge numbers of superb close-up colour photographs alone (as well as habitat pictures) it justifies its cost. It covers 25 of our 29 extant species as well as others not found in Britain, and some now considered extinct here.
- Another set of fine photographs and habitat shots is found in Urbaniak & Gąbka (2014). It covers 23 of our extant species and others not known or extinct here.
- The AlgaeBase web site is a useful place for looking up some of the drier details of classification and distribution, but also has many close-up photos, some in 3D if you have the glasses to match!
- The BSBI Charophytes page is currently dominated by the Irish, but hopefully will become broader in scope over time.
- Finally, it is worth looking out for courses run occasionally by the BSBI or the Field Studies Council. This is a group of plants for which familiarisation in the company of an expert is a huge help.

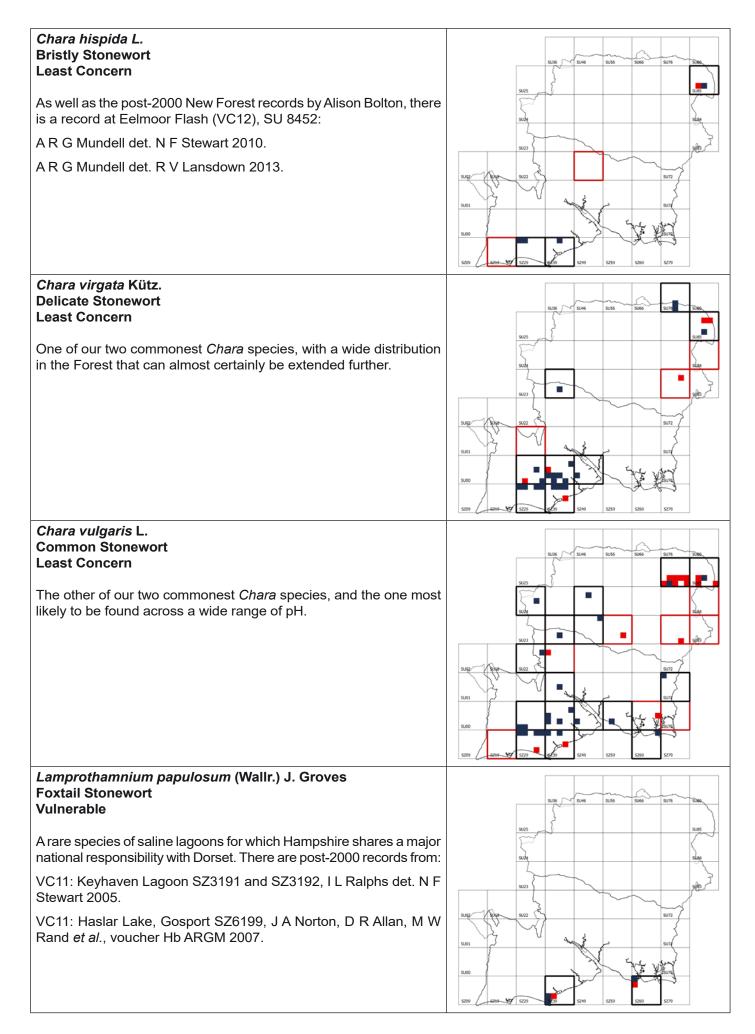
### STONEWORTS IN HAMPSHIRE

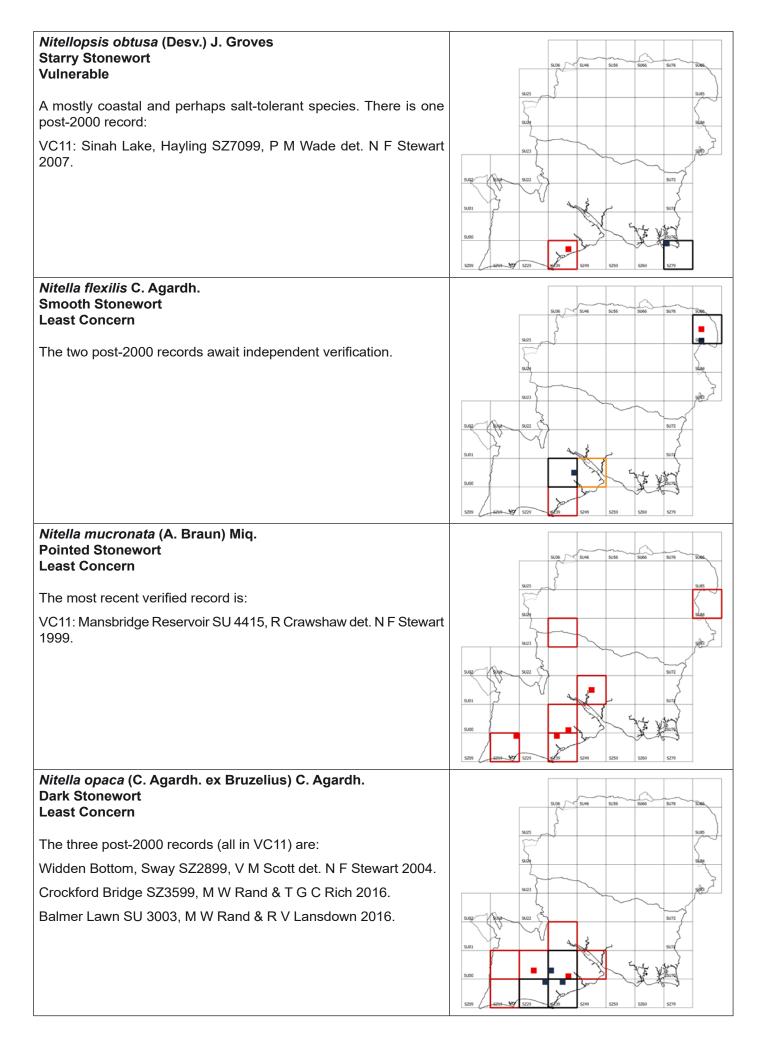
Our current data holdings for Hampshire stoneworts are rather slim. I am at least as much at fault here as anyone else in the county. Until very recently many of our records were those held on Nick Stewart's database at 10km resolution and more detailed records made in the 1970s by Alison Bolton, but in the last couple of years Alison has built up a more detailed record of plants in the New Forest and I have been able to retrieve more historic records from national sources. So, to encourage further recording, here is a summary of our current knowledge. Pre-1970 records on maps are shown in orange, pre-2000 in red, 2000 onwards in blue-black.



The red-listed Lamprothamnium papulosum







# Nitella translucens (Pers.) C. Agardh. **Translucent Stonewort** Least Concern This is our commonest Nitella and more records can almost certainly be added in the New Forest. As well as the numerous post-2000 records in VC11, mainly by Alison Bolton, there is a single post-2000 site in VC12, re-recorded up to 2017: Bramshill Common SU 7462, A R G Mundell det. R V Lansdown, 2013. Tolypella glomerata (Desv.) Leonh. **Clustered Stonewort** Least Concern Our only confirmed Tolypella: older records of T. nidifica have been reassigned here. The post-2000 records are: VC11: Crockford Marl Pits SZ3499, A E Bolton 2017. VC11: Standing Hat Marl Pit SU 3103, A E Bolton 2017. SU72 VC12: Eelmoor Flash SU 8452, A R G Mundell det. N F Stewart 2010.

### **REFERENCES AND FURTHER READING**

Bryant, J.A. (née Moore), Stewart, N.F. & Stace, C.A. (2002). A checklist of Characeae of the British Isles, *Watsonia* **24**: 203-208, BSBI, London. http://archive.bsbi.org.uk/Wats24p203.pdf

John, D.M., Whitton, B.A. & Brook, A.J. (2011). *The Freshwater Algal Flora of the British Isles*, 2nd edn., Cambridge University Press, Cambridge.

Lansdown, R.V. (2009). A Field Guide to the Riverine Plants of Britain and Ireland, Ardeola, Stroud.

Moore, J.A. (1986). Charophytes of Great Britain and Ireland (BSBI Handbook 5), BSBI, London.

Mouronval, J.-B., Baudouin, S. *et al.* (2015). *Guide des Characées de France méditerranéenne*, Office National de la Chasse et de la Faune Sauvage, Paris.

Schubert, H. & Blindow, I. (2003). *Charophytes of the Baltic Sea* (Baltic Marine Biologists Publication 19), A RG Ganter, Ruggell.

Stewart, N.F. & Church, J.M. (1992). Red Data Books of Britain and Ireland: Stoneworts, JNCC, Peterborough.

Urbaniak, J. & Gąbka, M. (2014). Polish Charophytes: An Illustrated Guide to Identification, UWP, Wroclaw.

#### AlgaeBase: http://www.algaebase.org/

BSBI Charophytes page: https://bsbi.org/charophytes

Nick Stewart's key to common Charophytes: https://bsbi.org/download/4907

# Yew trees *Taxus baccata* in New Forest Wetlands An article by Clive Chatters



Yew and Ramsons, Avon Water (Clive Chatters)

Yews are a familiar component of the New Forest's landscape. This native conifer is found throughout the Open Forest where the commoners' livestock are free to roam. Yews can be found in abundance in the holms which are scattered through the drier heaths. Holms are groves of Holly, Yew and Whitebeam, which are one of lowland Britain's rarest woodland types; a natural evergreen wood.

In their turn holms are a component of the much larger complex of wood-pastures of the Forest. Yew is scattered throughout these 'Ancient and Ornamental woods' but rarely in any abundance. In surveying the base-poor infertile Oak/Beech wood-pastures of Busketts Wood (SU3111) I found Yew trees at an average density of less than one tree per 10 hectares.

There are localised concentrations of Yews in the south-west of the Forest in the catchment of the Avon Water. Yews are relatively common in the riparian flood-woodlands of Wootton Bridge (SZ 243 999 to SZ 261 992) and within the base-rich mire complex of Stony Moors (SZ 215 995). The ecological literature describing Yews tends to associate them with skeletal, seasonally parched soils but does recognise their presence as sub-fossils in the calcareous peats of fenland<sup>1</sup>. It is

therefore worth celebrating the presence of the tree in contemporary wetlands.

### **Stony Moors**

The spring-fed mires of Stony Moors are one of the more calcareous wetlands of the Forest, the calcium being flushed out of the underlying shell-rich Headon beds. The mire is structurally complex with subtle variations in its surface, including low islands and spurs of more consolidated peat. These slight knolls are usually just a few metres across and represent relatively 'dry' land, albeit only a few centimetres above the neighbouring mats of brown mosses, fen vegetation and lightly consolidated peats. Groups of Yews are abundant, sometimes dominant, on these knolls. Each knoll is different; one of the larger groves of Yew has an understorey of Purple Moor-grass with Bog Myrtle and Cross-leaved heath. Here the Yew is found with other woody species, including Alder Buckthorn and Guelder Rose. Elsewhere, on more consolidated peats, Yew grows amongst Holly, Oak and Rowan. In such groves the field layer flora can be of a distinctly woodland character with Butcher's Broom, Honeysuckle, Primrose and Bugle. Yews are relatively abundant in this habitat with over 60 trees present on nine knolls within the central sector of the mire (c.10ha).

<sup>1</sup> Thomas, P.A. & Polwart, A. (2003). Taxus baccata, Journal of Ecology 91(3).



Top: Yew grove with Bog Myrtle understorey at Stony Moors; bottom: Yew on Stony Moors (*Clive Chatters*)

The growth form of most of the Yews is of single trunk 'maiden' trees. There are a few (5) multi-stemmed trees and another cohort (5) of fallen, but alive, specimens. As the trees achieve a girth in excess of 100 cm mbh<sup>2</sup> they have a tendency to lean out over, and into, the semi-liquid peat of the adjacent mire and eventually collapse into it. In some cases the root-plate remains sufficiently intact for the tree to survive, in others the fall is fatal. Dead trees of a range of size classes are present suggesting Yews tend to be short-lived in such habitats. Whilst size need not necessarily reflect age it is a useful proxy. Using this proxy there are trees in all size cohorts from 0-10cm girth mbh to 170-180cm girth mbh, with the sole exception of the size class 100-120 cm.

### **Wootton Bridge**

The riparian woods of Wootton Bridge lie some four kilometres downstream of Stony Moors. These woodlands grow on the narrow floodplain of the anastomosing Avon Water. To the north the floodplain grades into extensive valley mires and to the south the rising ground is occupied by plantation forestry dating from the late nineteenth century. The field layer of the wood is herb-rich with an abundance of Ramsons with Yellow Archangel and Wood Spurge. The canopy and shrub layer includes elements of Ash/Alder riparian woodland as well as Oak, Hazel and Field Maple. The wood-pasture character of the site is reflected in the local abundance of Holly and Butcher's Broom and through the low biomass, but high biodiversity, of herbage within reach of livestock. The woodland is inundated most winters with floodwaters rising over 1m; these floods tend to be short-lived 'spatey' events.

Yews are scattered throughout the woodland. The one kilometre of woodland downstream of the road bridge supports 60 trees ranging in girth from 10-20cm mbh to 240-250cm mbh. The single largest maiden grown Yew at 240cm mbh is an exceptional tree in retaining its vigour whilst the two next largest, at 130 and 195cm mbh, are both standing dead trees with the remainder of the population being within or below the size class 120-130cm mbh. Recent felling within the floodplain has provided an opportunity to estimate the age of a mid-sized Yew by counting tree rings. A 100cm mbh tree had 80 visible rings; however, this may be an underestimation of the actual age as the centre of the section was too dense to read with confidence. It is possible this tree spent many years as a suppressed sapling before it grew out of reach of browsing by large mammals, notably Roe deer. As in Stony Moors there are trees present in a wide range of size classes suggesting a continuous, if slow, recruitment to the population.

The mires and riparian woods of the New Forest are recognised as of international and national importance to nature conservation in being specifically cited as a reason for the notification of the New Forest SSSI, the classification of the New Forest Ramsar site and the designation of the New Forest Special Area of Conservation. The hydrological integrity of both Stony Moors and Wootton Bridge has been damaged by drainage schemes and the field layer of the riparian woods is being eroded through the past development of recreational facilities. Remedial measures are being implemented to restore the Avon Water to its natural course and so reverse the effects of river engineering. The future of Yews in the Forest's wetlands looks reasonably secure.



Multistem Yew by the Avon Water (Clive Chatters)

<sup>2</sup> mbh = girth of the tree measured at chest height.

# **News and Views**

# *Equisetum* x *bowmanii* at Busketts Lawn Inclosure

### A note by Neil Sanderson

One of the fun things about Atlas 2020 recording is that it gets me into areas that normally I would not bother with. In my local area one of these is very much Busketts Lawn Inclosure. This is a late Inclosure dating from 1864, enclosing what would have been an area of low lying wet lawn and wet heath with patches of pasture woodland especially along the Bartley Water; it must have been beautiful. Now it is a rather dreary Inclosure with long straight rides set in a grid. Like many late Inclosures it does have some surviving pre-enclosure trees but here these amount to a few shaded veteran trees along the Bartley Water. Not much to tempt a lichenologist like me in, not with the stunning old growth Beech woods of the Busketts Wood area nearby.

However, the Inclosure does add some species for tetrad SU31A that cannot be found in the open Forest and I had updated quite a few records of common species in here. One old localised record remained to be found; Wood Horsetail *Equisetum sylvaticum* which had been recorded from SU 314 103 in 1986 and SU 314 109 in 1956 within the Inclosure. I decided to follow up these records on the 12 July 2017 and took the dogs for a walk from Busketts Wood cricket pitch. I took a route through the Open Forest and entered the Inclosure from the west. The area around the western most grid reference was a low river terrace with a striking meandering palaeochannel in mixed woodland.

As the channel was the only obvious wet habitat in this area, I walked along it from the west. At first I found a few colonies of Great Horsetail Equisetum telmateia, but no habitat wet enough for Equisetum sylvaticum. I wandered off the line of the channel to the current river channel of the Bartley Water and then back to the palaeochannel and was immediately presented with a magnificent spread of a tall feathery Horsetail. This looked quite like Equisetum sylvaticum; however, it was much too tall and not quite feathery enough; it was quite clearly Equisetum x bowmanii (Equisetum telmateia x Equisetum sylvaticum). This is well known from the road verges of the A337 south of Cadnam but also spreading into the pasture woodlands on either side but was new to this Inclosure. The colony at Busketts Lawn Inclosure was large, stretching 60m along the old channel. En masse the plant was very beautiful with the layered effect of the branch whorls reminiscent of the aesthetics of miniature Japanese Pines. The setting, a mature mixed woodland was also much pleasanter that of the other Hampshire site; the scrubby verges of an A road.

The original find of *Equisetum* x *bowmanii* by Paul Bowman in 1986 was new to science (Page 1988). Subsequently there was a record of the hybrid from Scotland, but this is now thought to be an error and to have been confused with *E. sylvaticum* (Lubienski



*Equisetum* x *bowmanii* at Busketts Lawn Inclosure, 11 July 2018 (*Neil Sanderson*)

& Dörken 2017). The Busketts Lawn Inclosure find therefore was the second world record. A couple more visits in 2017 failed to find any more sites for the hybrid or any *Equisetum sylvaticum*. The more eastern and older grid reference for *E. sylvaticum* was in unsuitable habitat and could just be an inaccurate reference to the 1986 site.

The 1986 record of *Equisetum sylvaticum* was more interesting because the six-figure grid reference given for that encompassed all the 2017 records of the hybrid. It was found by Paul Bowman and was described by Page (1988). His account reads: 'damp sides of ditch draining into stream' and 'In Busketts Lawn Inclosure (SU 314 103), there is a local population of *E. telmateia* along ditch banks on clay only 10 m from the very small population of *E. sylvaticum* described above. ...Here *E. telmateia* grows mainly where the clay is exposed, whilst *E. sylvaticum* prefers the damp slightly flushed ground, where some *Sphagnum* is present.'

It would be surprising if Bowman would mis-record *Equisetum* x *bowmanii* as *E. sylvaticum* in the same year as finding the hybrid on the A337 but equally it is odd that the hybrid at Busketts Lawn Inclosure was missed then. It is now growing apparently close to the location given for *E. sylvaticum* in 1986. Has a 60m colony of *Equisetum* x *bowmanii* grown since 1986 or was it just missed in 1986? The A337 colony does stretch about 3km along



Equisetum x bowmanii at Busketts Lawn Inclosure, 11 July 2018 (Neil Sanderson)

the verges of the A337, which were only fenced in 1964, so the hybrid does seem to have a strong capacity for vegetative spread. It certainly could have got a lot bigger and more noticeable since 1986. What, if any, connection was there between the Busketts Lawn Inclosure colony of *Equisetum* x *bowmanii* and the A337 one is difficult to envisage. The latter is partly within the catchment of the Bartley Water and upstream but the palaeochannel is hydrologically isolated from the Bartley Water. The latter has naturally deeply incised itself into the low river terrace so that it no longer floods the terrace and is not likely to have done so for many hundreds of years.

An intriguing find that begs more questions, which may be unanswerable!

#### References

Lubienski, M. & Dörken, V.M. (2017). Two hybrids of *Equisetum sylvaticum* (Equisetacaea) on the Island of Senja, Troms, Norway. *Fern Gazette* **20**: 181-196.

Page, C.N. (1988). Two hybrids of *Equisetum sylvaticum* L. new to the British flora. *Watsonia* **17**: 273-277.

# Roger Veall A tribute by Martin Rand

On 1 June after several months of illness, Roger Veall, as his widow Psyche puts it, 'gave up his struggle on Earth to go and compile a flora list in a better place'. Newer members of the Flora Group may not have known Roger, as mobility problems had limited his activity in recent years. He was an outstandingly good and meticulous botanist who added tens of thousands of records to the county's archive over nearly thirty years. The number of entries in the 1996 *Flora of Hampshire* bearing the initials 'RMV' attest to his contribution.

I first came to know him better in 2003-4 when we were working on the BSBI's 'Local Change' project, recording everything in a selected sample of 2km squares across the county. It was very hard to match Roger's efforts to leave no square inch of a tetrad un-botanised. He had a way of talking farmers and landowners into letting him go anywhere: his normal botanising garb and general demeanour probably helped in persuading them that he was in no way connected with officialdom! In company he could seem shy and hesitant and he botanised much of the time alone, but he had one of the most mischievous grins I have ever seen.

He was an active supporter of the Wildlife Trust for many years, and until quite late in life turned out in all weathers to working parties on his beloved Emer Bog. Co-workers would be impressed by his slight form dragging around the large Birch trees he had just cut down. Members may recall that one of his last acts was to donate the proceeds of sale of his book collection to wildlife charities, of which the Trust was one. For many years he had the added distinction of being the BSBI's county recorder for its smallest territory, Sark in the Channel Islands, and made regular visits to survey the island's flora.

Hampshire-born, he lived with his wife Psyche for nearly 40 years in the same house in Wellow, on the border with Wiltshire and on the fringes of the New Forest. In 2002 he published a parish Flora of Wellow that can stand as a model for others in its thoroughness and straightforward approach. By 2010 he was less able to get out and about, but continued to supply records from his immediate neighbourhood until they moved to Wiltshire to be closer to family. Consequently, Wellow has one of the best tallies of bird-seed aliens in the county. He was one of a generation of older botanists – curious, careful, persistent, thorough, and just a little off-beat, which we are sadly losing.

# Recording

# Hampshire Lichen Report 2017–18 By Neil Sanderson

### Noteworthy lichen records

The most interesting lichen records from Hampshire made in the last year or so are described below. *All photos taken by Neil Sanderson.* 

**Coenogonium tavaresianum** (Dimerella tavaresiana) Nb (NR): this is the most exciting record of the last year, which was mentioned as a stop press in the last report. During a survey of Roydon Woods May 2017 for HIWWT, I collected some small amber-beige apothecia, looking like a Gyalecta, from an old Oak by a ride in a wood in parkland, at Highwood Copse (SU 315 010). It was growing in base rich flushed bark. When examined it appeared to be a Dimerella not a Gyalecta but did not match any British species. It was put aside with a label 'Stunted Dimerella lutea?' There it stayed until in a remarkable co-incidence Mark Powell put up pictures of similar material collected by Brian Coppins and him a month later from the same habitat at High Park, Blenheim Park SSSI, Oxfordshire on the Yahoo UK Lichen Forum. The identity was eventually resolved by Brian Coppins and confirmed by E. Sérusiaux. Since the stop press it has also been found at Gregynog, Montgomeryshire and Moccas Park, Herefordshire, also on veteran Oaks in parkland.



*Coenogonium tavaresianum* apothecia and thallus, Gregynog.

From the habitat of veteran Oaks in sites with a long continuity of old trees, it is unlikely this species is a recent colonist. More likely it was overlooked in the past as the common *Gyalecta truncigena*. *C. tavaresianum* is internationally rare and had previously been known only from undisturbed humid Mediterranean woodland habitats in southern Europe (Southern France, Portugal, Spain and Italy) and the Canary Islands. It is regarded as threatened or red listed in all these counties (Critically Endangered in France, Vulnerable in Italy and Data Deficient in Iberia). The occurrence of this otherwise largely Mediterranean species in Britain was a bit of a surprise. In reality is seems to be a southern Atlantic– Mediterranean species, as are many of the characteristic rare species of the New Forest

Chaenothecopsis retinens Nb (NR): an internationally rare fungus with very few records, new to Hampshire and the New Forest. This is a species I have been looking for in the New Forest since I found it in Norfolk in 2002. which was then the first record since Nylander described it from Jersey in 1868. It was originally described as a lichen but is actually a fungal parasite of Sporodophoron cretaceum (Schismatomma cretaceum) in Britain and Jersey and the closely related Inoderma byssaceum (Arthonia byssacea) in Switzerland. Both lichens are confined to dry bark on ancient trees. C. retinens is a small pinhead fungus, but with a very short stem that is usually buried in the host's thallus, with only the shiny black head showing. Since it was re-found in Norfolk, it has only been recorded at two other sites in England (Devon & Dorset) and one in Switzerland. In December 2017, I finally found it on Sporodophoron cretaceum on dry bark on an old Oak at Eaves Hill, Busketts Wood, New Forest (SU 309 112), the fourth British record. I have since added another site at Gregynog, Montgomeryshire, new to Wales but the result of looking at hundreds of Sporodophoron cretaceum thalli is three records. The rarity of some obligate parasitic fungi is mind boggling!



Chaenothecopsis retinens showing the pinhead apothecia poking out of a Sporodophoron cretaceum thallus.

*Micarea herbarum*: this new species to Britain was actually collected by me from a fallen Beech trunk in 2007, in Gritnam Wood, New Forest. After some confusion it was provisionally identified as a C– form of the common lignum lichen *Micarea denigrata*. This lichen; however, should have a red reaction to bleach (C+ red) in its apothecia. Later *M. herbarum* was published from the Netherlands and this proved to be what this taxon was. It is a member of the *Micarea prasina* group but lacks the typically well developed thallus of this group

and resembles a small or depauperate *M. denigrata* but is distinguished by the C- reaction and details of the conidia. In the Netherlands *M. herbarum* is recorded widely on soft and decaying wood, on standing dead trunks, on dead and wet stems of herbaceous plants, or directly on soil, so is likely to be widespread in Britain and not confined to ancient habitats.



Dense apothecia of *Micarea herbarum* on a fallen Beech trunk in Gritnam Wood, New Forest.

**Sphaerellothecium cinerascens** (NR): another new species to Britain. This fungus, a parasite of *Cladonia parasitica*, was first found during a contract survey in Devon in November 2017, but was shortly found in the New Forest in December 2017. It forms tiny subglobose black perithecia 40-70 um diameter on *Cladonia* squamules; however, the most noticeable feature is that the host's squamules are given a distinctive greyblue tinge over large areas. On finding this in Devon, I was sure I had seen the same grey-blue staining on *Cladonia parasitica* in the New Forest and sure enough Andy Cross and I were able to find it shortly afterwards In Burley Old Inclosure (SU 247 041). Here it parasitised *Cladonia incrassata* and *Cladonia parasitica* on old Oak stumps.



Sphaerellothecium cinerascens: an infected thallus of Cladonia incrassata, mainly stained grey-blue, but with some yellow-white uninfected squamules; a close up of a perithecia on an infected squamule of Cladonia incrassata.

Previously this lichenicolous fungus was only known from oceanic woods in the western Pyrenees in Spain and France parasitising *Cladonia parasitica*. *Cladonia incrassata* appears to be a new host. Since the first find, intensive searching in the New Forest, where the main host is common, has failed to produce further sites. This suggests that *S. cinerascens* is rather rare, even in sites with large populations of its main host, *Cladonia parasitica*, which is itself an ancient woodland species.

#### Other interesting records

Arthonia parietinaria (NS): Hythe Marina, Hythe, South Hampshire, SU 420 086, December 2016, N. Bacciu, Det. N.A. Sanderson. Parasitising Xanthoria parietina on a Hawthorn, coastal scrub. New to Hampshire. This Arthonia parasitic on Xanthoria parietina was formerly recorded as Arthonia molendoi, but the latter is now known to be a separate taxon parasitic on the Xanthoria elegans and Caloplaca saxicola groups.

**Arthonia thelotrematis** Nb (NR/IR): by the Bartley Water north of Gutter Heath, Busketts Wood area, New Forest, SU 305 104, November 2017, N.A. Sanderson. Parasitising *Thelotrema lepadinum* over a large area of thallus on old Holly, in Oak–Beech–Holly pasture woodland. The second record for the New Forest and lowland England.

*Arthopyrenia nitescens* Nb (NS/IR): Sloden Inclosure, New Forest, SU 212 124, December 2017, N.A. Sanderson & the Wessex Lichen Group. On branch of ancient Holly, in grove of ancient Hollies in pasture woodland. First record from the north of the New Forest, of a species confined to the New Forest in the lowlands.

**Calicium diploellum** CR (NR/IR/BAP): Hincheslea Wood, New Forest, SU 271 008, September 2017, N.A. Sanderson & A.M. Cross. In a lenticel in an old Holly in Oak–Beech–Holly pasture woodland. New 10km record for what is proving to be a rare but widely scattered species in the New Forest, confined to woods with ancient Hollies. Otherwise only known from western Ireland and a single site in western Scotland.

**Corticifraga fuckelii** (NS): Ferny Crofts, New Forest, VC11, SU 368 052, January 2018, N.A. Sanderson. Parasitic on *Peltigera didactyla* growing in a bonfire site in heathland. New to Hampshire. Also closely accompanied by mounded galls formed by the pycnidial fungus *Hawksworthiana peltigericola* (NS), also new to Hampshire. On the largest galls the *Hawksworthiana peltigericola* was replaced by *Corticifraga fuckelii* apothecia, suggesting the possibility that *Hawksworthiana peltigericola* is a conidia stage of *Corticifraga fuckelii*.

*Cryptolechia carneolutea* VU (NS/IR/S41): Wooson's Hill, Mark Ash Wood, SU 260 077, April 2018, N.A. Sanderson, a large colony in wound tracks on a senescent ancient Beech. A new location for a lichen which is very rare since the loss of old Elms and further threatened by the loss of Ash trees.

**Dibaeis baeomyces**: Janesmoor Plain, New Forest, VC11, South Hampshire, SU 243 130, December 2017, N.A. Sanderson. Abundant and frequently fertile in short grazed humid heath, in a less disturbed area of heathland used as an airfield in WWII. First recent record of fertile material in Hampshire.



Dibaeis baeomyces with its gorgeous pinked stalked apothecia, these are common in the north but very rare down south.

**Enterographa elaborata** CR (NR/IR/S41): by the Bartley Water north of Gutter Heath, Busketts Wood area, SU 305 103, November 2017, on flushed bark on an old Beech in Oak–Beech–Holly pasture woodland. Wooson's Hill, Mark Ash Wood, SU 261 077, December 2017, on flushed bark on a small suppressed Beech in a grove of ancient Beeches, in pasture woodland. Bignell Wood, SU 278 127, December 2017, on flushed bark on old Beech in Oak–Beech–Holly pasture woodland, All N.A. Sanderson. Significant new trees in the New Forest for this internationally rare lichen.

*Fellhanera subtilis* (NR): Tylney Park, VC12, North Hampshire, SU 710 551, September 2017, N.A. Sanderson. On the leaves of an evergreen shrub in a garden. New to North Hampshire.

*Gyalecta derivata* Nb (NS): Warwick Slade, Hollidays Hill, SU 2684.0684, December 2017, N.A. Sanderson, in a wound track on ancient Beech, in Beech–Holly pasture woodland. Sloden Inclosure, SU 2125.1250, December 2017, N.A. Sanderson & the Wessex Lichen Group, in wound track on old *llex*, both New Forest. New records of a species with rather few recent records from England.



*Lecanora sinuosa* thallus on Beech; a distinctive thallus dominated by apothecia initials.

*Lecanora sinuosa* Nb (NR): Long Beech Hill, New Forest, VC11, South Hampshire, SU 2503 1288, December 2017, N.A. Sanderson, single thallus on well lit mature Beech in acid grassland on edge of pasture woodland. First record for the New Forest and the second location in Hampshire.

**Lobaria pulmonaria** Nb (IR): although clearly declining in the New Forest two large new colonies were found recently for this charismatic old growth dependent lichen. Sloden Inclosure, SU 210 124, January 2018, N.A. Sanderson & A.M. Cross, an old Ash with a strong *Lobaria pulmonaria* colony high up. Wooson's Hill, Mark Ash Wood, SU 259 077. April 2018, N.A. Sanderson, on two Beech trees in grove of old Beech, with one colony very large and extending a long way up the tree.

**Lobaria virens** Nb (IR): another declining charismatic old growth dependant lichen for which a large new colony was found. Wooson's Hill, Mark Ash Wood, SU 261 077, December 2017, N.A. Sanderson, frequent thalli extending high up the tree, some fertile, on an old Beech tree in old Beech grove.



Lobaria pulmonaria (top) and Lobaria virens (bottom); new colonies found at Wooson's Hill, Mark Ash Wood.

*Micarea adnata* Nb (NS): Burley Old Inclosure, New Forest, SU 249 043, November 2018, N. A. Sanderson & the Wessex Lichen Group, on lignum on a Sweet Chestnut stump in old growth woodland. Second record for Hampshire and third lowland record for a mainly upland species.

**Phylloblastia** cf. **bielczykiae** (NR): French's Bushes, New Forest, SU 298 118, September 2017, N.A. Sanderson. On Holly leaves on the edge of a glade in pasture woodland. If correctly identified, a tropical species otherwise unknown from Europe. Third British record; previously recorded at Ebernoe Common and Epping Forest. Part of an increasing assemblage of lichens and associated fungi found growing on evergreen leaves (foliicolous lichens). This increasing diversity is likely to be associated with warmer summers.

*Phylloblastia fortuita* (NR) & *Phylloblastia inexpectata* (NS): Ferny Crofts, New Forest, SU 368 053, August 2017, N.A. Sanderson. On Holly leaves on the edge of a glade in pasture woodland. New to Hampshire; more new foliicolous lichens.

**Ramonia nigra** CR (NR/IR/S41): Sloden Inclosure, SU 2181 1286 January 2018, N.A. Sanderson & A.M. Cross. Mallard Wood, SU 316 088, March 2018, N.A. Sanderson. Both on lignum inside hollow Hollies in pasture woodland in the New Forest. New sites for an endemic fungus with its headquarters in the New Forest.



Grove of exceptionally lichen rich ancient Hollies in Sloden Inclosure. The tree is the centre supported *Ramonia nigra* inside a hollow stem.

#### Publications

As this account was being written the lichen chapter of the Guidelines for the Selection of Biological SSSIs for was published by JNCC (Sanderson *et al.*, 2018) http:// jncc.defra.gov.uk/page-2303. This is the culmination of a great deal of work from the lower plant specialists of the country agencies and members of the British Lichen Society. It should put the conservation of lichens nationally on a firmer footing. If the country conservation agencies can do their jobs in these difficult times, it should result in some new SSSIs for lichens! New guidelines for bryophytes and non-lichenised fungi can also be downloaded from the same link.

Sanderson, N. A., Wilkins, T.C., Bosanquet, S.D.S and Genney, D.R. (2018) *Guidelines for the Selection of Biological SSSIs. Part 2: Detailed Guidelines for Habitats and Species Groups. Chapter 13 Lichens and associated microfungi*. Joint Nature Conservation Committee, Peterborough.

### Key

- CR = Critically Endangered Red Data Book species
- EN = Endangered Red Data Book species
- VU = Vulnerable Red Data Book species
- NT = Near Threatened Red Data Book species
- DD = Data Deficient Red Data Book species
- NR = Nationally Rare
- NS = Nationally Scarce
- IR = International Responsibility species

Nb = Notable species (NR, NS, IR or S42 species not RDB NT or higher, which are not under-recorded ruderal species)

S41 = Section 41 species

BAP = BAP species discovered in England after the list of Section 41 species was made

# Alien Bryophytes in Hampshire and Bryophyte Recording on the Isle of Wight

### A report by John Norton

### Alien bryophytes on the increase

In my previous article on bryophytes (Flora News 51, Autumn 2016) I wrote a short summary of the past and present state of bryophyte recording in Hampshire and mentioned a few of the recent additions to the Hampshire list. Hennediella macrophylla, which I mentioned at the end of the article, is now confirmed for VC11. On about the fourth time of trying I eventually managed to find a good enough specimen to be accepted by the national moss recorder as this taxon, rather than the very similar H. stanfordensis. Both are likely to have been introduced into Britain (probably from New Zealand and California respectively), and are spreading in disturbed shady places, almost certainly on the feet of people and animals. I have since found another small patch of H. macrophylla at Burley car park (outside the public toilets!). This species is likely to turn up in other similar places in the county, though is easily overlooked as it resembles a number of other common species that grow on bare soil.

Disturbed or trampled soil where there is frequent human activity also supports some other interesting bryophytes, including the balloonworts *Sphaerocarpos* spp. There are two of these ephemeral liverworts in Britain, *S. michellii* and *S. texanus*, which are only identifiable by

microscopical examination of their spores. Both are well known from arable farmland on the Isles of Scilly and in parts of East Anglia, but records are more scattered through central southern England and both are nationally scarce. They are Mediterranean species that may originally be introductions to Britain (though S. texanus is currently designated as a S.41 species of principal importance in England). I had only previously recorded S. michellii from a municipal garden at Gosport Ferry, only the third VC11 record, so I was pleased to be given a specimen of a balloonwort by Neil Sanderson, which he had collected in November 2017 from Hollands Wood campsite, north of Brockenhurst. This was only a small piece with immature capsules, but I was able to grow the specimen on and mature the spores to confirm as S. texanus, which was new for VC11.

In order to collect a good voucher specimen I visited Hollands Wood several weeks later on 4 February, and was amazed to find abundant Sphaerocarpos along the edges of the campsite access road. Growing with it was another interesting liverwort, which I initially thought was *Riccia glauca*, a common species of arable habitats. Only later when checking photos and a specimen (which luckily I had collected), did I realise that it was actually Riccia crystallina, which was also new for Hampshire. This is another Mediterranean alien, which like Sphaerocarpos texanus is well established and locally abundant on the Isles of Scilly. However, apart from a 1967 Scottish record, it has otherwise only been recorded from a few sites in south-west Cornwall. It seems quite plausible that both species could have been spread here by campers using the site, perhaps even some that had recently been to Scilly, or that had arrived from somewhere in southern Europe. Also, it was clear that both species were well established here, and could have colonised over a period of several years.

I alerted Neil to the discovery, and he also managed to find a few plants of *Riccia crystallina* at Denny Wood campsite. I looked at a few other campsites in the New Forest without any further success, but did find good colonies of *Sphaerocarpos michellii* at Lodge Heath



Sphaerocarpos texanus (showing the inflated balloonshaped structures which enclose the capsules in the female plants) with *Riccia crystallina*.

campsite, 3km east of Brockenhurst. I hope to do a more extensive survey of campsites and tourist spots in the New Forest and other south coast holiday destinations next winter! It will be interesting to see if these species are spreading generally on tented campsites, like some alien vascular plants have been doing recently.

#### Bryophyte recording on the Isle of Wight

The post of VC10 Isle of Wight bryophyte recorder had been 'vacant' for several years, so I decided to take it on in 2017 and undertake some exploratory visits there to familiarise myself with the Island. I only heard early in 2018 that the previous recorder, Lorna Snow, had passed away on 22 February 2017, aged 92. The island has been reasonably well recorded over the last three to four decades, by Lorna herself, resident naturalist Colin Pope and occasional visiting bryologists, including Rod Stern and Francis Rose. British Bryological Society national meetings were held there in 1964 and relatively recently in 2002. The bryophyte flora, written by Lorna Snow, was published in the 2003 *Isle of Wight Flora*.

Bryologically, the Island is moderately rich for its size, with 375 species and distinct taxa recorded (including the recent additions detailed below), compared to 492 for Hampshire (VC11/12 combined). Important bryophyte habitats include chalk grassland and bare chalk on the downs and in old quarries, and the semi-natural and wet woodlands on both acid and calcareous soils. There is some dry heath at Headon Warren and a few scattered small bogs and fens, though the bryological interest may have declined at some of these due to lack of management. There are of course plentiful and varied coastal habitats, which include dry calcareous cliffs and chines with wet seepages, and the landslips which provide areas of wet, calcareous mud, when fresh. These types of coastal habitats are of course very rare in Hampshire.

The Isle of Wight supports important populations of four national rarities, the liverworts Southbya nigrella and Cephaloziella baumgartneri, and the mosses Acaulon trigetrum and Philonotis marchica. The first three are all found at St Catherine's Point; the last at Shanklin Chine and another nearby site. In Britain, Southbya nigrella only occurs elsewhere on the Isle of Portland, where it is widespread; Cephaloziella baumgartneri also from Portland and very scattered sites along the south coast eastwards, including one locality in Hampshire (Netley Abbey). Acaulon trigetrum is a species of coastal cliffs with very few sites between Dorset and Sussex, where it has seriously declined. Philonotis marchica has only been recorded from one other British site in Yorkshire, in 1903. Another two nationally rare liverworts have been recorded from the Island historically: Cephaloziella turneri and Solenostoma caespiticium, the latter from the Wilderness in 1908, the first British record.

The Isle of Wight is also famous for *Leptophascum leptophyllum*, discovered in a stubble field on the 1964 BBS meeting and named after the Island as a species 'new to science', *Tortula vectensis*. It has since been



Dark green patches of the liverwort *Southbya nigrella* on a rock at St Catherine's Point, Isle of Wight, 31 March 2017 (*John Norton*).

found sporadically at sites on the Isles of Scilly, Lizard Point and Herefordshire, also typically in stubble fields or on footpaths. It is now realised to be widespread globally in warm temperate and subtropical regions, but had been described under several different names. In Europe it is present throughout parts of the Mediterranean, extending north-east to Germany. Another one to look out for in campsites perhaps?

Another new species to the British bryophyte flora was discovered relatively recently on the Island. This was the European species *Crossidium sqaumiferum*, found by Welsh bryologist Sam Bosanquet during a family holiday on cliffs near St Catherine's Point in June 2013.

With the *Isle of Wight Flora* in hand I spent two five-day trips there at the end of March and early December 2017, accompanied by George Greiff, a young botanist who had recently moved to the Island. We also met up with Colin Pope for a few days out. On the first trip we managed to add three new species to the VC10 list: *Fossombronia incurva, Fissidens crispus* and *Plagiomnium cuspidatum,* and found another 'debracketer' (a species not recorded since 1960). Unfortunately for George two of the new finds were found by me on the one morning that he could not accompany me (just a few hundred yards from my B&B in Shanklin). Details of these records are given in

the list of new records below. We also met up with staff of the National Trust and Natural England at St Catherine's Point to survey the population of *Southbya nigrella*, finding two small patches on two adjacent rocks. Whilst there we visited the site of the *Crossidium sqaumiferum*, but realised that it was inaccessible without mountain climbing gear! George later refound both colonies of *Philonotis marchica* at Shanklin and *Acaulon triquetrum* at St Catherine's Point in spring 2018.

On our second trip in December 2017 we added two more VCRs and a debracketer: *Cephalozia lunulifolia*, *Tortella tortuosa* and *Fossombronia wondraczeckii*, but by this time George was getting his eye in and spotted the first two of these himself. He has also since added an impressive three further species to the Island list in 2018: *Sphaerocarpos michellii* (on a campsite), *Nowellia curvifolia* (an increasing liverwort of dead logs) and the moss *Hygroamblystegium humile* (at two sites); plus another debracketer, *Hygroamblystegium varium* (also at two sites). We are looking forward to our next visit in early winter 2018.

### New Vice-County Bryophyte Records for Hampshire and the Isle of Wight

### Compiled by John Norton (July 2018)

Recent additions and debracketers (new post-1960 records) to the VC10/11/12 lists are listed below.

### Liverworts

**Cephalozia Iunulifolia**, VC10, Parkhurst Forest, SZ 4789 9024, 13 December 2017. New VCR. Wet humic litter on tree roots at edge of shaded acid pond. G.R.L. Greiff & J.A. Norton.

*Fossombronia incurva*, VC10, Luccombe Chine, SZ 5832 7939, 29 March 2017. Damp, bare, base rich mud on recent coastal slippage. G.R.L. Greiff & J.A. Norton. New VCR.

*Fossombronia wondraczeckii*, VC10, Parkhurst Forest, SZ 472 903, 13 December 2017. Wet clay ruts on ride. G.R.L. Greiff & J.A. Norton. Debracketer; previously recorded here and at Sandown in 1908.

*Leiocolea badensis*, VC11, Yew Hill Quarry, King's Somborne, SU 3504 3195, 17 August 2017. Bare chalk on quarry floor. J.A. Norton. New VCR.

*Lophozia excisa*, VC10, Headon Warren, SU 3138 8585, 30 March 2017. In bryophyte-rich mat on sandy/ gravelly soil on covered reservoir. G.R.L. Greiff & J.A. Norton. VC10 debracketer; previous record from this site in 1926.

*Nowellia curvifolia*, VC10, Sainham Wood, Godshill, SZ 531 811, 22 April 2018. On fallen rotting wood. G.R.L. Greiff. New VCR.

*Riccia crystallina*, VC11, Hollands Wood, Brockenhurst, SU 3003/3004, 4 & 9 February 2018. At least 2500-3000 thalli, occasional to locally abundant in consolidated fine soil/sand at edges of asphalt road to Hollands Wood



*Gymnostomum viridulum*, Micheldever Spoilheaps, 18 February 2018 (*John Norton*). One of the smallest British mosses; leaves are 0.6 x 0.3 mm. Bright green gemmae on the leaves are also visible in this photo.

campsite, within open Pedunculate Oak woodland. Colony extends 1km from SU303035 to SU305044 and to W side of campsite at SU303043. Main associate *Sphaerocarpos texanus*. D.R. Allan & J.A. Norton. New VCR.

**Sphaerocarpos michellii**, VC10 St Helens, SZ 6345 8963, 17 April 2018. Disturbed soil in holiday park. G.R.L. Greiff. New VCR.

**Sphaerocarpos texanus**, VC11, Hollands Wood, Brockenhurst, SU 303 034 to 304 042, 4 & 9 February 2018. Abundant in consolidated fine soil/sand at edges of asphalt road to Hollands Wood campsite and amongst gravel/stones around campsite washrooms. Associated with *Riccia crystallina*. D.R. Allan & J.A. Norton (first recorded by N.A. Sanderson, November 2017). New VCR.

#### Mosses

*Dialytrichia saxicola*, VC11, Stubbington, SU 5514 0413, 18 January 2018. Asphalt driveway, near to church; with *D. mucronata*. J.A. Norton. New VCR. A rare species likely to be spreading on tarmac.

*Fissidens crispus*, VC10, Alexandra Road, Shanklin, SZ 583 811, 1 April 2017. On steep bank with dry mesic soil, growing with *Bryum donianum* and other *Fissidens* spp. J.A. Norton. New VCR.

*Gymnostomum viridulum*, VC12, Micheldever Spoilheaps, SU 5192 4448, 3 December 2017 (voucher obtained 18 February 2018). Partly shaded chalk spoil. J.A. Norton. New VCR. A rather scattered species, mainly recorded from south-western Britain and South Wales. A tiny species found within a specimen of liverworts collected from the site. Also refound at a second Isle of Wight site in December 2017.

*Hygroamblystegium humile*, VC10, Sandown Levels, SZ 607 852, 12 May 2018. Locally common on bases of grasses and reeds in ditches. G.R.L. Greiff. New VCR.

*Hygroamblystegium varium*, VC10, Sandown Community Orchard, SZ 5879 8505; 11 May 2017. Locally frequent on rotting wood and damp soil. G.R.L. Greiff. Debracketer.

**Plagiomnium cuspidatum**, VC10, Tower Cottage Gardens, Shanklin, SZ 5838 8111, 1 April 2017. Tower Cottage Gardens on N side of Shanklin Chine. In semishade under Magnolia tree in wet amenity grassland/ bare mesic soil. J.A. Norton. New VCR. This species is rather rare and possibly declining across south-eastern Britain (commoner elsewhere in mainly lowland sites). Not yet recorded for VC11.

**Pottiopsis caespitosa**, VC11, Portsdown Hill (SW of Fort Widley), VC11, SU 6521 0646, 26 November 2017 and SU 6075 0701, 17 February 2018. Bare chalk in chalk grassland. J.A. Norton. Debracketer; first records since 1959. The second collection was made because I was looking for *Microbryum davallianum*, var. *commutatum*, a taxon characteristic of chalk grassland not previously recorded for VC11; embarrassingly, however, the recorder told me I'd collected more *Pottiopsis caespitosa*. The second sample had fully developed capsules, so both were retained for depositing in the BBS herbarium. Also recorded recently from the Isle of Wight by George Greiff.

**Rhynchostegiella teneriffae**, VC12, Deptford Bridge, Greywell, SU 7214 5129, 29 January 2017. Debracketer. Found by Sharon Pilkington at the end of a BBS Southern Group meeting to Greywell Moors. First record for VC12 since an unlocalised record dated '1900'.

**Rhytidiadelphus loreus**, VC10, Brighstone Down, SZ 432 847, 16 April 2018. G.R.L. Greiff. New VCR. Although previously recorded from the Isle of Wight by Francis Rose, there is no record on the BBS database and no previous voucher specimen.

**Sematophyllum substrumulosum**, VC11, Creech Woods, Denmead, SU 633 112, 5 November 2016. Small fruiting patch near base of young birch under unthinned young spruce plantation (humid and densely shaded). J.A. Norton. New VCR. A species which has spread throughout southern Britain and other parts of Europe in recent years, and was predicted to do so as a consequence of global warming. Better knowledge of ID features has meant that it has now been recorded across most vice-counties in the south in the last few years, though not yet in VC12, where no-one has looked for it. Long-known from Scilly and Sussex.

*Syntrichia virescens*, VC11, Stubbington, SU 5550 0331, 23 December 2017. J.A. Norton. On asphalt pavement. New VCR. A species likely to be spreading on tarmac.

*Tortella tortuosa*, VC10, West High Down, SZ 307 852, 12 December 2017. North-facing chalk grassland/bare chalk exposures above road to Needles Battery. G.R.L. Greiff & J.A. Norton. New VCR (surprisingly).

**Ulota species**. Ulota crispa, historically split from *U*. *bruchii*, was itself recently divided into three taxa, two of which appear to be widespread in the three vice-

counties. These are *U. crispa* sensu strictissimo (in the strictest sense) and *U. crispula*, both now confirmed by new vouchers submitted for the Isle of Wight, but not yet for VC11 or 12. The other taxon *U. intermedia*, appears to be mainly a northern and western species.

### VC11 Records

The VC11 plant records will be published in the Spring 2019 edition of *Flora News*.

### VC12 Records

### Compiled by Tony Mundell (8 July 2018)

Here again is a set of my personal selections from the records received recently. As usual I have tended to select the scarcer native species with a sprinkling of interesting aliens. I would far prefer to include YOUR records rather than my own but sadly I was forced to include even more of my own this time.

Isn't it tragic that so many superb botanical sites get destroyed by housing developments? Looking at my old County Floras I see that botanists have complained about this for over a hundred years but with the unstoppable growth of the human population such losses can only continue to accelerate. I was recently amazed by the sight of vast uncountable numbers of Wild Pansy Viola tricolor and an outstanding population of many hundreds of plants of Bur Chervil Anthriscus caucalis in what used to be an arable field that is now abandoned and scheduled for housing - see the records below. The site also has lots of Bugloss Anchusa arvensis and is the only place where I have seen Pink Shepherd's-purse Capsella rubella. It is rather typical of the arable flora that none of these plants were obvious prior to the last time it was ploughed, though when I visited the same field on 22 Aug 2014 there were sheets of yellow from thousands of plants of Corn Marigold Glebionis segetum amongst the crop of Broad Beans. Even if the field could be saved from housing the sad truth is that these plants could not survive unless the soil was regularly ploughed.

Another danger for our flora is the 'tidying up' of formerly wildlife-rich habitats when they are designated as SANGs (Sites of Alternative Natural Greenspace). The government now requires a nearby SANG before large housing developments can proceed, and provides funding to 'improve' the area with drainage, hard surfaced paths, etc. mainly for dog walkers. We have a new SANG near me now called Bramshot Country Park and half of what was very wet marshy meadows is now closely mown grass. Two more SANGs are planned nearby; one is the best VC12 site for Pepper Saxifrage Silaum silaus. I hope that is not also mown to death. The other proposed SANG is at Southwood Meadows and again is in an area subject to flooding with a rich flora including Brown Sedge Carex disticha, much Cyperus Sedge C. pseudocyperus, Ragged Robin Silene flos-cuculi and Greater Spearwort Ranunculus lingua - see the records below.

Having griped about that, of course some plants are increasing, particularly those found near housing. Most are aliens but provided they don't get invasive it all adds interest to the flora. Examples are Great Lettuce *Lactuca virosa*, Round-leaved Crane's-bill *Geranium rotundifolium* and Water Bent *Polypogon viridis*. The latter has a curious English name as I never see it by water. In fact it is typically in the driest situation possible, growing from pavement cracks. Another example is Keeled-fruited Cornsalad *Valerianella carinata* that is now commoner in Hampshire than the so-called Common Cornsalad *Valerianella locusta*.

It is a sign of the times that many plants with the word 'Common' in their name are no longer common. Consider these, where I will abbreviate Common to 'C.' to save repetition:

C. Bistort *Polygonum bistorta*, C. Broomrape *Orobanche minor*, C. Butterwort *Pinguicula vulgaris*, C. Calamint *Clinopodium ascendens*, C. Club-rush *Schoenoplectus lacustris*, C. Cotton-grass *Eriophorum angustifolium*, C. Cudweed *Filago vulgaris*, C. Meadow-rue *Thalictrum flavum*, C. Milkwort *Polygala vulgaris*, C. Spotted-orchid *Dactylorhiza fuchsii*, C. Purslane *Portulaca oleracea*, C. Restharrow *Ononis repens*, C. Scurvygrass *Cochlearia officinalis*, C. Sedge *Carex nigra*, C. Water-crowfoot *Ranunculus aquatilis* and C. Wintergreen *Pyrola minor*. I would not call any of those common!

Of course some others like Common Nettle *Urtica dioica* really are common and clearly a few of them are given the 'Common' merely in a comparative sense because there is another species in the same genus that is much scarcer. The sad thing is that most of those listed above are native plants.

Nevertheless the following records show that many scarce plants continue to be found, or are still hanging on at their old haunts. The number of plants of Smooth Cat's-ear *Hypochaeris glabra* found recently at The Slab and at Woolmer Forest is wonderful and a new site for Heath Pearlwort *Sagina subulata* was also found at The Slab.

The very rare Green Hound's-tongue *Cynoglossum germanicum* first found in Hampshire in 2012 seems to be spreading which is splendid – I suspect its hooked seeds are getting carried along the Basingstoke Canal towpath and adjacent footpaths by dogs out with their owners. Another excellent VC12 find has been Clustered Clover *Trifolium glomeratum* in several sandy places in Bordon. This is more typically found in coastal sandy areas.

It is encouraging that winter scrub-cutting works by Hampshire County Council have re-vitalised the one surviving site for Tower Mustard *Turritis glabra* and their rotavation of the site of the extremely rare Red-tipped Cudweed *Filago lutescens* led to at least one plant of it germinating. I was pleased to have a record for River Water-dropwort *Oenanthe fluviatilis* as this is sharply declining in VC12, and I was also delighted to have an update on the Greater Broomrape *Orobanche rapum*- *genistae* which is slowly spreading on its Broom *Cytisus scoparius* host at Ashford Hill Meadows.

As is often the case it is an alien plant that provided the biggest surprise in VC12 this year. A very strange sedge was found when I was surveying with others at Yateley Common. It turned out to be New Zealand Hair-sedge *Carex comans*. It could easily be mistaken for a grass as the inflorescences are hidden deep down inside a dense tuft of fine leaves. Almost as surprising is the record of Tree Mallow *Malva* (formerly *Lavatera*) *arborea* in VC12 as it is confined to close to the coast as a native. Perhaps this is an example of another halophyte spreading inland on winter-salted roads via seed on car tyres.

HFG = Hampshire Flora Group

**Acaena novae-zelandiae (Pirri-pirri-bur)** One patch about 2 square feet on track at Longmoor SU8001 3146 just inside the red-flagged area, Victor Freestone 6 Jun 2018.



Pirri-pirri-bur Acaena novae-zelandiae, Longmoor 6 June 2018 (Victor Freestone)

*Acer saccharum* (Sugar Maple) West Tisted, one tree, planted, Andrew Powling & Eric Clement 16 Nov 2017.

Achillea ptarmica (Sneezewort) Southwood Meadows, one patch at SU8545 5534 beside footpath, Tony Mundell 2 Jun 2018.

*Ajuga chamaepitys* (Ground-pine) SE of Freefolk Wood, only found a single plant at SU5036 4391, with a single flowering stem. The strip at the edge of the field is more vegetated than last year, to the detriment of lower growing things. There is a huge amount of *Geranium columbinum*, Fred Rumsey 23 Jun 2018. SE of Freefolk Wood, one very small non-flowering plant at SU50369 43943 and a much larger plant with four flowering stems at SU50361 43919. There is very little suitable habitat left for this as most of this arable edge is densely covered in *Geranium columbinum* and *Carduus nutans* etc., Tony Mundell 25 Jun 2018.

**Allium schoenoprasum (Chives)** Faulkners Down Farm SU4110 4729 escaped over a stone wall from a garden at the farm, Tony Mundell, Simon Melville & Lisa Malter 4 Jun 2018.

Anacamptis pyramidalis (Pyramidal Orchid) Upper Wootton SU588544, scattered on S-facing bank, Sarah Ball and Sarah White 6 Jun 2018. Winchester, Winnall roundabout SU496305, Pyramidal Orchids are doing very well this year with more locations on roundabout, Anna Stewart 12 Jun 2018. Greywell Pumping Station, two plants, close together at SU7232 5146 and SU7233 5146, Peter Vaughan 29 Jun 2018.

**Anchusa arvensis (Bugloss)** Former arable field N of Crookham Village, abundant at SU7969 5328, SU7967 5324, SU7975 5335, SU7974 5338 and many other places in this sandy field, Tony Mundell 12 May 2018. Site destined for housing.

Anthriscus caucalis (Bur Chervil) S of Oakhanger, about 12 small plants beneath an Oak on a bare, shady roadside bank, 100m N of Springfield Nursery at SU7708 3486, Steve Povey 29 Apr 2018. Former arable field N of Crookham Village, abundant with many hundreds of plants from SU7943 5346 to SU7946 5320, and many scattered plants around SU7964 5337, SU7964 5335, SU7965 5334 and elsewhere in this sandy field, Tony Mundell 12 May 2018 – certainly the best site in VC12 for this rare plant but scheduled for housing!



Bur Chervil Anthriscus caucalis en masse, Crookham, 12 May 2018 (Tony Mundell)

*Arum italicum* subsp. *italicum* (Italian Lords-and-Ladies) A large, strikingly marked plant, E of Steep, by lane near Harrow Inn SU751251, Steve Povey 25 Feb 2018.

**Asplenium ceterach (Rustyback)** Around 50 plants scattered over both sides of Bishop's Sutton churchyard wall at SU6063 3201, Steve Povey & Laura Gravestock 7 May 2018.

**Azolla filiculoides (Water Fern)** Greywell Moors HWT reserve SU720511, in the River Whitewater, Tony Mundell & Dawn Nelson 11 Mar 2018.

**Barbarea intermedia (Medium-flowered Winter-cress)** Bishop's Sutton, two plants by car-park of The Ship Inn at SU6063 3193, Steve Povey & Laura Gravestock 7 May 2018. N of Medstead SU652382, plentiful in an arable field, Andrew Powling & Eric Clement 17 May 2018.

**Brachypodium rupestre (Tor-grass)** Harewood Peak, patch beside footpath at SU4035 4681. Leaves rolled, erect inflorescence, awns only half as long as lemma body so not *B. sylvaticum*, Tony Mundell, Simon Melville & Lisa Malter 4 Jun 2018.

*Bromus hordeaceus* subsp. *longipedicellatus* (Soft-brome) S of North Oakley SU5319 5396 on track verge, several patches, Sarah Ball & Sarah White 22 May 2018.

*Brunnera macrophylla* (Great Forget-me-not) Alton SU7094 3914 public footpath in alleyway, Tony Mundell & Steve Povey 5 Jul 2018. *Campanula trachelium* (Nettle-leaved Bellflower) Ackender Wood, several plants not yet flowering at SU7028 3872, HFG 22 Apr 2018.

**Capsella rubella (Pink Shepherd's-purse)** Former arable field N of Crookham Village, several plants in sandy field at SU7957 5328 (destined for housing). New to North Hampshire. Close-up photos taken of the pinkish petals, pink sepals and reddish fruits. Voucher specimen taken, Tony Mundell 12 May 2018.

*Carex arenaria* (Sand Sedge) Bordon SU7858 3534, Tony Mundell 25 May 2018.

*Carex canescens* (White Sedge) The Slab, Bordon, on pond edge at SU7804 3580, Tony Mundell, Steve Povey & Stephen Miles 15 May 2018. Yateley Common SU8225 5963 on edge of Wyndhams Pool. This scarce sedge is threatened by the nearby invasive *Hydrocotyle ranunculoides*, Tony Mundell, Sarah White & Anna Stewart, 27 Jun 2018.

*Carex comans* (New Zealand Hair-sedge) Yateley Common, about a dozen plants at SU8250 5972 in dry acid grassland within the cemetery grounds but away from the graves. Several more decapitated plants in a closely mown area at SU8250 5975. Specimen determined by Mike Porter, BSBI Carex Referee. Presumably it was once planted on a grave but has escaped via seed spread by the mowers/strimmers, Tony Mundell, Sarah White & Anna Stewart, 27 Jun 2018.



New Zealand Hair-sedge *Carex comans*, Yateley 27 June 2018 (*Tony Mundell*). Top: mown-off plant; bottom: specimen showing inflorescence.

*Carex disticha* (Brown Sedge) Southwood Meadows (proposed SANG), a large patch at SU8549 5545, Tony Mundell 2 Jun 2018. *Carex lepidocarpa* (Long-stalked Yellow-sedge) Andover SU363450, one plant re-found from an introduction programme about 6 years ago in the wetland beside ASDA about the time the store was being built. Plants were taken then from the disused watercress beds at Anton Lakes, Graeme Davies 20 Feb 2018.

*Carex otrubae* (False Fox-sedge) E of Wyck, frequent in meadow in and around SU763392, Steve Povey & Cathy Wilson 10 Jun 2018.

*Carex pseudocyperus* (Cyperus Sedge) Southwood Meadows (proposed SANG), a splendid display of dozens of plants at SU8547 5513 on floodplain meadow, with more at SU8546 5495, Tony Mundell 2 Jun 2018. Yateley Common SU8225 5961 on the edge of Wyndhams Pool, close to, and threatened by, the *Hydrocharis ranunculoides*, Tony Mundell, Sarah White & Anna Stewart, 27 Jun 2018.

*Carex rostrata* (Bottle Sedge) The Slab, Bordon, plentiful on pond margins at SU7802 3580 and more around pond at SU7850 3594, Tony Mundell, Steve Povey & Stephen Miles 15 May 2018.

*Catabrosa aquatica* (Whorl-grass) Alton SU7130 3947 and SU7158 3945 in the River Wey, Tony Mundell & Steve Povey 5 Jul 2018.

**Catapodium marinum (Sea Fern-grass)** Abundant at Alton SU7281 3856 along northbound edge of central reservation of A31 dual carriageway where a footpath crosses it, Tony Mundell, Isobel Girvan & Steve Povey 30 May 2018. In thin turf at the edge of the A323, Wellington Avenue, Aldershot SU8543 5084, near the roundabout, Fred Rumsey 5 June 2018.

*Catapodium rigidum* (Fern-grass) Alton SU7267 3926 as a roadside pavement weed, Tony Mundell, Isobel Girvan & Steve Povey 30 May 2018. Winchester SU4958 3026, Tesco car park, Anna Stewart 24 May 2018.

**Centaurium pulchellum (Lesser Centaury)** Probably about 30 plants at Alice Holt SU8149 4045 along the edge of a forest ride, Dave Pearson 5 Jul 2018 (first record for SU84).

**Cephalanthera damasonium (White Helleborine)** Winnall, Tesco car park SU495302, under the row of big beech trees, and also on the junction of Park Road and Andover Road, as you drive into Winchester on the left hand side of the road, and on the town side of the junction, three individual plants, Diane Prater May 2018. Matterley Bowl SU5228, 11 plants under beech near A272, heads chewed off, Ginnie Copsey 9 May 2018. 35 flower spikes at Alton SU7291 3877 on shady, steep roadside bank of A31, visible from track below, Tony Mundell, Isobel Girvan & Steve Povey 30 May 2018. W of Bishop's Sutton SU6039 3151, six flowering plants in scrub at base of bridge, SE side, Andrew Powling & Eric Clement 31 May 2018. Upper Wootton SU5840 5494 on shaded bank beside A339, at least 7 spikes, Sarah Ball & Sarah White 6 Jun 2018. Winchester SU495303, Tesco car park, White Helleborine orchids strimmed off, Anna Stewart 12 Jun 2018.

**Cephalanthera longifolia (Narrow-leaved Helleborine)** Ashford Hangers, well over 100 flowering plants scattered in and around SU7404 2683 in an area known as 'The Little Shoulder of Mutton.', B. Long 25 May 2018.

*Ceratochloa carinata* (California Brome) Numerous plants over 15 yards on east road verge at North Oakley SU5214 5331, Victor Freestone 11 Oct 2017. Several plants on verge by the bend in Bacon Lane, Wishanger at SU8400 3968, Steve Povey 3 Jul 2018.

*Chrysosplenium alternifolium* (Alternate-leaved Goldensaxifrage) S of Flexcombe, several flowering plants on bank near lane at SU7690 2600. Also N of Steep, single non-flowering plant on one small island in stream which feeds Lutcombe Pond at SU7349 2643. Not looking good for this site. Both Steve Povey 10 Apr 2018.

*Cirsium eriophorum* (Woolly Thistle) W of Over Wallop on disturbed ground at SU2783 3876 adjacent to new housing estate. One small, young plant, Tony Mundell, Anna Stewart, Mary Parker &

Ginnie Copsey 29 Mar 2018. Beacon Hill Iron Age Hill Fort SU4575 5734, on ramparts, Nicki Paton 13 Jun 2018.

*Claytonia perfoliata* (Springbeauty) Bordon, occasional around SU798 359, Steve Povey & Laura Gravestock 8 Jun 2018.

**Convallaria majalis (Lily-of-the-valley)** Large flowering patch 8m across at Bordon SU7875 3616 in woods just south of military cemetery, Tony Mundell & Steve Povey 15 May 2018. [On 25 May 2018 half of this patch was bulldozed away to lay a new pipe across this wood – Tony Mundell].

*Crassula tillaea* (Mossy Stonecrop) Hogmoor Inclosure, Bordon SU7880 3485 and The Slab on pure sand at SU7812 3589 and SU7821 3585, Tony Mundell & Steve Povey 15 May 2018. Bordon SU796356, occasional on bare sand, Steve Povey & Laura Gravestock 8 Jun 2018.

*Crocus tommasinianus* (Early Crocus) E of Steep SU751251, many plants on bank just east of the Harrow Inn, Steve Povey 25 Feb 2018.

*Cyclamen coum* (Eastern Sowbread) E of Steep, single plant on roadside verge near Harrow Inn, SU750251, Steve Povey 25 Feb 2018.

*Cyclamen hederifolium* (Sowbread) Clump on verge at corner of minor crossroads 0.5km west of Salisbury Lodge, Cholderton Home Farm SU2342, John Moon 23 Jan 2018. Large patch on road verge in centre of village, Fyfield SU2946, John Moon 30 Jan 2018.

*Cynoglossum germanicum* (Green Hound's-tongue) In woodland beside Basingstoke Canal, 5 patches between SU8633 5230 and 8640 5232, c.60 flowering spikes. Also by west wall of WW2 pillbox SU8606 5227, adjacent to Basingstoke Canal, three flowering plants. Both Steve Bailey 16 May 2018.

*Dactylorhiza x grandis (D. fuchsii x praetermissa)* E of Wyck, two plants in damp meadow at SU7638 3928, Steve Povey & Cathy Wilson 10 Jun 2018.

**Datura stramonium (Thorn-apple)** Hogmoor Inclosure, Bordon, a single dead plant from last year but carrying much seed at SU7868 3522 in the newly landscaped children's play area – this SINC, Site of Importance for Nature Conservation, still has some surviving native plants but has been bulldozed and planted with alien plants, presumably this was inadvertently introduced by the machinery, Tony Mundell & Steve Povey 15 May 2018.

*Dryopteris carthusiana* (Narrow Buckler-Fern) Southwood Meadows, a remarkable sight of hundreds of plants from SU8442 5501 to SU8446 5505 in a marshy meadow. The best site I know for this fern, Tony Mundell 2 Jun 2018.

*Echinochloa frumentacea* (White Millet) One plant at Hogmoor Inclosure SU7898 3465, Victor Freestone 18 Oct 2017. Photo confirmed by Tony Mundell.

*Epilobium palustre* (Marsh Willowherb) Yateley Common SU8225 5963 on edge of Wyndhams Pool. This scarce plant is threatened by the nearby invasive *Hydrocotyle ranunculoides*, Tony Mundell, Sarah White & Anna Stewart 27 Jun 2018.

*Epilobium roseum* (Pale Willowherb) A weed in a garden at Church Crookham SU8103 5207, voucher specimen collected, with one plant spread into the adjacent public alleyway, Tony Mundell 23 Jun 2018.

*Epipactis purpurata* (Violet Helleborine) Noar Hill, twelve plants at the usual spot (i.e. SU7452 3186), Graham Long 23 Jun 2018. At least three plants at Basingstoke SU6534 5412 beneath trees on the verge of Wade Road, just north of 40 Bee Orchids, Chris Slack 25 Jun 2018. Photos confirmed by Tony Mundell. This is the first record for SU65.

*Equisetum palustre* (Marsh Horsetail) Hogmoor Inclosure, Bordon, very atypical plants on pure dry sand at SU78820 35136, in a patch 3m x 2m of hundreds of small, pink coloured, un-branched stems only 15-25cm tall and only 1.2mm in diameter with seven rounded ridges and a very tiny central cavity c.1/4 of stem diameter. Photos and a specimen taken. As typical *E. palustre* is growing and fruiting nearby at SU78850 3512 in a much wetter area and this also



White Millet Echinochloa frumentacea Hogmoor Inclosure 18 October 2017 (Victor Freestone)

has a few very small slender (mostly green but some pinkish) 1mm diameter stems I think they must all be *E. palustre*, Tony Mundell 15 May 2018.

*Eranthis hyemalis* (Winter Aconite) Small clump growing under field hedge, top half of Red Post Lane, Penton Grafton SU3245, John Moon 30 Jan 2018. En-masse naturalised on road verge at Humbly Grove SU7088 4535, just outside a house, Tony Mundell & Dawn Nelson 9 Apr 2018.

*Erigeron acris* (Blue Fleabane) Woolmer Forest, many plants scattered on sandy ground around SU788313, Steve Povey & Laura Gravestock 3 Jun 2018.

**Erodium cicutarium (Common Stork's-bill)** Abundant at Crookham Village SU7975 5335 and other places in the sandy field, colouring it pink over large areas and often mixed with *Viola tricolor*, but threatened by a housing development.

*Euphorbia lathyris* (Caper Spurge) W of Over Wallop, close to Wallop Brook SU278385, visible from Station Road, numerous plants, Tony Mundell, Anna Stewart, Mary Parker & Ginnie Copsey 29 Mar 2018.

*Euphorbia stricta* (Upright Spurge) Old Basing, on mound of earth outside old scout hut SU6680 5305, Adam Lucas 6 Feb 2018. Harewood Peak, many flowering plants at SU4033 4657 close to a single flowering *Symphytum caucasicum*, beside footpath, presumably from dumped garden rubbish, Tony Mundell & Simon Melville 4 Jun 2018.

*Filago lutescens* (Red-tipped Cudweed) Fleet SU812563, one plant in flower on the road verge c.8m from the Broomhurst Cattery sign and c.1.5–2m in from the road. Photos taken, Gareth Knass 3 Jul 2018.

*Filago minima* (Small Cudweed) Many plants scattered on bare sand in small field at Woolmer Forest SU7893 3127, Steve Povey & Laura Gravestock 3 June 2018.

*Filago vulgaris* (Common Cudweed) A few plants in small field at Woolmer Forest SU7893 3127, Steve Povey & Laura Gravestock 3 June 2018.

*Filipendula vulgaris* (Dropwort) St Giles Hill Cemetery SU490293, front of graveyard near gravestone, one clump only, Anna Stewart 21 Jun 2018. Headley Down SU8405 3649, a single plant in grassy area beside public footpath, Tony Mundell 30 Jun 2018.

*Fritillaria meleagris* (Fritillary) Chilbolton Common, approx 600 blooms & seed-heads in area 70m x 20m, from SU3891 3997 to SU3885 3996, Glynne Evan 25 Apr 2018..

*Fumaria densiflora* (Dense-flowered Fumitory) S of North Oakley SU5360 5203 on disturbed bank between track and arable field, Sarah Ball & Sarah White 22 May 2018.

*Galanthus elwesii* (Greater Snowdrop) Steep SU7353 2588 on road verge, Tony Mundell, Steve Povey & Dawn Nelson 31 Mar 2018. *Genista anglica* (Petty whin) One plant in flower at Silchester

Common SU6191 6224. Searched hard but failed to find any more plants nearby, Victor Freestone 11 May 2018.

**Geranium columbinum (Long-stalked Crane's-bill)** Several plants in flower bed between car-park and platform of Alresford Station SU588324, Steve Povey & Laura Gravestock 7 May 2018. Magdalen Hill Down, two flowering plants by footpath at SU50812 29033 and one at SU50769 29050, Dawn Nelson 11 Jun 2018.

*Geranium lucidum* (Shining Crane's-bill) Sherborne St John SU6241 5538, all along bottom of wall beside house, Adam Lucas 13 Nov 2017. Alton SU7273 3934 on roadside, Tony Mundell, Isobel Girvan Cathy Wilson & Steve Povey 30 May 2018.

*Geranium phaeum* (Dusky Crane's-bill) Beside footpath at Fleet SU7993 5327, Toy Mundell 12 May 2018.

*Geranium pratense* (Meadow Crane's-bill) At Alton SU7279 3856 along field edge, Tony Mundell, Isobel Girvan & Steve Povey 30 May 2018.

*Geum rivale* (Water Avens) SW of New Alresford SU576317, in plenty on marsh, Steve Povey 18 May 2018.

*Gymnadenia conopsea* (Chalk Fragrant-orchid) Winchester, Winnall roundabout SU496305, more plants this year and more accessible next to path, Anna Stewart 12 Jun 2018

*Helleborus foetidus* (Stinking Hellebore) Andover, Tegoulds Copse SU344454, Six plants, Graeme Davis

13 Feb 2018. Andover SU363441, 15 plants, Graeme Davis 19 Feb 2018. Andover SU362450, one plant established in disturbed soil, Graeme Davis 14 Mar 2018. Andover SU358466, two plants, Anton Lakes – Coleman's Meadow, Graeme Davis 1 Apr 2018.

*Helleborus orientalis* (Lenten-rose) Andover SU363441, four plants, Graeme Davis 19 Feb 2018. Single flowering clump in arable hedgerow at Humbly Grove SU7093 4563, c. 30yds from nearest garden that is on the other side of the road. Presumably spread via seed, Tony Mundell & Dawn Nelson 9 Apr 2018.

*Helleborus viridis* (Green Hellebore) Squiresfield Hanger, nr Bradshott Hall SU7093 4563, 14 clumps in flower or bud on south road verge between SU7619 3213 and SU7615 3217, Bill & Chris Wain 18 Feb 2018. Single flowering plant with several seedlings nearby, beside stream near Lutcombe Pond, Ashford Hanger, N of Steep SU735264, Steve Povey 25 Feb 2018.

*Herminium monorchis* (Musk Orchid) A few in flower at Noar Hill SU74100 31918, Nigel Johnson & Rosemary Webb 2 Jun 2018.

*Hordeum secalinum* (Meadow Barley) E of Wyck, very plentiful throughout meadow from SU763394 to SU763392Steve Povey & Cathy Wilson 10 Jun 2018.

*Hydrocotyle ranunculoides* (Floating Pennywort) This highly invasive alien plant is a serious threat to the native flora. A huge colony at Yateley Common centered on SU8226 5961 beside Wyndhams Pool that I am sure HCC are aware of but have failed to eradicate. I informed the Environment Agency a while ago but I still see no action taken, Tony Mundell 27 Jun 2018.

*Hyoscyamus niger* (Henbane) Last years spike with seed capsules on arable field edge at Hatherden SU3500 5098 plus several of last years spikes with seed capsules at SU358509 amongst 'conservation' area sown with Sunflowers and *Sorghum bicolor*, Tony Mundell 5 Apr 2018.

*Hypericum humifusum* (Trailing St John's-wort) On pure sand at The Slab, Bordon SU7808 3565, Tony Mundell & Steve Povey 15 May 2018.

*Hypericum pulchrum* (Slender St John's-wort) E of Tangley at SU3597 5281 on wood edge and at SU3583 5253, Tony Mundell & Peter Billinghurst 28 May 2018.

*Hypochaeris glabra* (Smooth Cat's-ear) Over a hundred plants, some starting to flower, on sandy area at The Slab SU78183 35864, dozens more at SU78175 35868 and SU78175 35872, 6 at SU7819 3586, some at SU7819 3587, also dozens on pure sand at SU7805 3590, Tony Mundell & Steve Povey 15 May 2018. Well over 500 plants on roadside sandy bank at and around Woolmer Forest SU7889 3134, and scattered in plenty on bare ground between A325 and MoD track from SU7888 3138 to SU7899 3130. Also scattered in plenty on very short turf beside roadway near MoD units at SU7845 3125 and a few plants in small field at SU7893 3127, all Steve Povey & Laura Gravestock 3 Jun 2018.

*Illecebrum verticillatum* (Coral-necklace) Hogmoor Inclosure, Bordon, at SU7880 3486, SU7883 3485, SU7896 3497 and SU7898 3498 beside puddles, Tony Mundell & Steve Povey 15 May 2018.

*Impatiens capensis* (Orange Balsam) Southwood Meadows, several patches on floodplain meadow at SU8551 5545, SU8552 5493, SU8546 5518 & SU8551 5530, Tony Mundell 2 Jun 2018.

*Isolepis setacea* (Bristle Club-rush) On damp sand at The Slab, Bordon SU78174 35872 and several patches at Hogmoor Inclosure, Bordon SU78174 35872, Tony Mundell & Steve Povey 15 May 2018.

*Juncus subnodulosus* (Blunt-flowered Rush) In margin of Basingstoke Canal, Odiham at SU7360 5215, pith checked with vertical and horizontal divisions., Tony Mundell 22 Dec 2017.

*Lactuca virosa* (Great Lettuce) Seems to be increasing in Hampshire, e.g. N of Crookham Village, one young plant at SU7951 5328 and a single plant at SU7954 5331, Tony Mundell 12 May 2018. Blackbushe SU8027 5966, Tony Mundell 1 Jun 2018.

*Lathraea squamaria* (Toothwort) N of Hatherden, ten spikes just pushing up beside Hazel at SU3475 5163, confined to a small area on the wood edge, Tony Mundell & Peter Billinghurst 4 April 2018. Wick Hill Hanger, only one spike at present at c.SU7512 3599 on northern roadside, Bill & Chris Wain 8 Apr 2018. Ackender Wood, 15 spikes on Hazel at SU7037 3873, another 75 spikes at SU7035 3871 either on Ash or Beech, 40 spikes on Ash at SU7030 3870 with some more at SU7030 3871, HFG 22 Apr 2018.

*Lemna gibba* (Fat Duckweed) SW of New Alresford SU577316, in small pond on allotments with *L. minuta*, Steve Povey 18 May 2018.

*Limnanthes douglasii* (Meadow-foam) SW of New Alresford SU578316, several plants beneath hedgerow by allotments, Steve Povey 18 May 2018.

*Lonicera pileata* (Box-leaved Honeysuckle) On stream bank at Alton SU7281 3943, apparently self sown as clearly planted on a road verge nearby, Tony Mundell, Isobel Girvan & Steve Povey 30 May 2018.

*Malva arborea* (Tree Mallow) Near Andover at SU3550 4429 in central reservation of A303 just south of Watermills Park. Has been at this spot for five years now, so for several generations, Fred Rumsey 26 Jun 2018.

*Malva setigera* (Rough Marsh-mallow) S of Freefolk Wood, dozens of plants from SU49567 43762 to SU49539 43732 in grassy area beside arable field near the SW tip of Cranbourne Wood. The flowers are a very pale pink (not white as first reported here in 2016), Tony Mundell 25 Jun 2018.

*Menyanthes trifoliata* (Bogbean) At edge of pond at Yateley Common SU8380 5947 but also visible with binoculars in great



Rough Marsh-mallow *Malva setigera*, near Freefolk Wood, 25 June 2018 (*Tony Mundell*)

quantity on southern edge of this pond, Tony Mundell, Sarah White & Anna Stewart 27 Jun 2018.

*Mercurialis annua* (Annual Mercury) W of Over Wallop, on disturbed ground at SU2783 3876 adjacent to new housing estate, Tony Mundell, Anna Stewart, Mary Parker & Ginnie Copsey 29 Mar 2018. SE of Chilbolton, garden weed at SU4016 3886, Tony Mundell & Dave Pearson 11 Apr 2018. Avington Manor Farm SU5350 3039 on roadside gravel area beside farm buildings, Tony Mundell, Steve Povey & Mary Parker 18 Apr 2018. Faulkners Down Farm SU4110 4729, Tony Mundell & Simon Melville 4 Jun 2018.

*Myosotis discolor* (Changing Forget-me-not) The Slab, Bordon, on pure sand at SU7812 3589.and SU7831 3579, Tony Mundell & Steve Povey 15 May 2018.

*Myosotis ramosissima* (Early Forget-me-not) The Slab, Bordon, on pure sand at SU7812 3589.with *M. discolor*, Tony Mundell & Steve Povey 15 May 2018.

*Narcissus pseudonarcissus* subsp. *pseudonarcissus* (Daffodil) West Worldham, Little Wood Copse SU737368, good numbers now in flower, Bill & Chris Wain 8 Apr 2018.

**Nothofagus obliqua (Roble)** Thousands of seedlings c.1-2m high arising from an earlier forestry plantation in Closedown Wood, Humbly Grove. A few trees noted e.g. at SU7042 4458, but seedlings abundant along sides of rides in SU701445, SU703445 and SU704445. It looks very invasive! Tony Mundell & Dawn Nelson 9 Apr 2018.

**Oenanthe fluviatilis (River Water-dropwort)** Three plants in stream nr Abbey Mill, Winchester, SU4845 2925, Martin Rand 27 May 2018.

**Oenothera stricta (Fragrant Evening-primrose)** Steep SU7374 2546 on housing estate pavement verge, escaped from adjacent garden, Tony Mundell, Steve Povey & Dawn Nelson 31 Mar 2018.

Ophrys apifera (Bee Orchid) Winchester SU49513036, leaf rosettes in grass near Tesco sign, Easton Lane roundabout, Anna Stewart 2 Dec 2017. Winchester SU48702943, vegetative rosettes. No flowers seen here previously as cutting of grass a bit random, Anna Stewart 4 Jan 2018. 16 rosettes counted, Andover Hospital grass verge, SU353464, Graeme Davis 19 Feb 2018. E of Wyck SU7635 3933, two spikes (three until grass path mown 2 days ago), Cathy Wilson 10 Jun 2018. Winchester SU4951 3036, near Tesco sign, Easton Lane roundabout. Recent strimming of area, distinctive arch formed by machine on turf. No orchids present, Anna Stewart 12 Jun 2018. Basingstoke SU65395411, main populations located in two clumps on verge, Harvey Dawson 15 Jun 2018. Whitchurch, Skylark Rise SU4574 4867 behind houses on grassland to the east of the playground, Harvey Dawson 15 Jun 2018. Basingstoke SU653541, 40 plants on the verge of Wade Road, Chris Slack 25 Jun 2018.

**Ophrys insectifera (Fly Orchid)** Noar Hill, several in the usual area. One with a double lip at SU74269 31859. A small plant of var. ochroleuca west of path at SU74259 31841 – a new spot? – but those of var. ochroleuca on the bank appear to have gone, Nigel Johnson & Rosemary Webb2 Jun 2018.

**Orobanche hederae (Ivy Broomrape)** 17 flower spikes this year of the normal purple form at Church Crookham SU8105 5205 at foot of a wooden fence pushing through the edge of the tarmac surface of an alleyway. The host is a cultivated Ivy in the garden of 40 Conifer Close on the other side of the fence, Tony Mundell 23 Jun 2018. [Most spikes looking very droughted on 8 July 2018 due to a heat wave].

**Orobanche hederae f. monochroma (Ivy Broomrape, yellow form)** At entrance to Park Road Allotments, Winchester. Lots of them – first time seen there, Christopher Sealey Jun 2018.

**Orobanche minor (Common Broomrape)** Upper Wootton SU5877 5448 on grassy bank, Sarah Ball & Sarah White 6 Jun 2018. About 20 flower spikes in a small island of shrubs in Wickes car park, Basingstoke at SU6245 5218, Peter Vaughan 8 Jun 2018.

**Orobanche rapum-genistae (Greater Broomrape)** Ashford Hill Meadows, now on a total of four Broom bushes, one of them at SU56287 62097, the original site, now with 25+ flower spikes, one at SU56311 62090, with 5 flower spikes, one at SU56291 62117 with 25 spikes and one at SU56277 62102 with 7 flower spikes, Bob Winfield 28 May 2018.

*Paris quadrifolia* (Herb-paris) Ackender Wood, patch at SU7021 3866, a few spikes at SU7027 3872, 19 at SU7028 3871, and a patch at SU7026 3871 including one with five leaves and another with six leaves, HFG 22 Apr 2018. Around a dozen dense colonies of varying size, from 1sq.m to 150 sq.m beneath Beech, scattered over an area of around 150m x 150m containing an estimate of 30,000 plants on Selborne Hill centered at SU7307 3351, Steve Povey 1 May 2018.

**Persicaria bistorta (Common Bistort)** Single plant by stream at Bishop's Sutton SU6072 3208, Steve Povey & Laura Gravestock 7 May 2018. Two fine, large colonies on Passfield Green at SU8207 3379. Long known at this site, Steve Povey 22 May 2018.

*Petasites japonicus* (Giant Butterbur) SW of New Alresford SU576317, in plenty alongside lane, Steve Povey 18 May 2018.

*Petroselinum crispum* (Garden Parsley) Four plants growing in roadside gutter at Bordon SU7965 3586, Steve Povey & Laura Gravestock 8 Jun 2018.

*Platanus* x *hispanica* (London Plane (*P. occidentalis* x *orientalis*)) Alton SU7065 3922 in Brick Kiln Lane. A magnificent really huge tree, Tony Mundell & Steve Povey 5 Jul 2018.

**Polygonum sp.** Specimens and photos from Hogmoor Inclosure, Bordon SU7863 3472 sent to Dr J Akeroyd who replied 'This is what I now regard as *Polygonum neglectum* Besser, described from Ukraine and well known to Fennoscandian botanists. I gave it a brief description in the Handbook under *P. arenastrum.*', Victor Freestone 8 Nov 2017.

*Polypogon viridis* (Water Bent) In alleyway at Odiham SU7407 5100, Tony Mundell 6 Nov 2017. Many plants as roadside pavement weed, Blackwater SU851598, Tony Mundell 2 Dec 2017. Pavement weed in Park Road, Aldershot at SU8708 4950, SU8711 4951, SU8712 4950 and SU8719 4950, Tony Mundell 4 Dec 2017. Winchester SU4958 3026, Tesco car park, seen next to Fern Grass (*Catapodium rigidum*), Anna Stewart 12 Jun 2018. Liphook SU8418 3160 along roadside pavement and SU8414 3130 on roundabout, Tony Mundell, Isobel Girvan & Anna Stewart 2 Jul 2018.

**Polystichum aculeatum (Hard Shield-fern)** One plant in hedge, West Tisted SU6590 2907, Andrew Powling & Eric Clement 16 Nov 2017. Three plants NE of Tangley at SU3401 5348 beside track in wood, Tony Mundell & Peter Billinghurst 28 May 2018.

*Polystichum setiferum* (Soft Shield-fern) In copse at Abbotts Ann SU318414, John Moon 25 Nov 2017. At Steep SU7375 2564 beside footpath, Tony Mundell, Steve Povey & Dawn Nelson 31 Mar 2018.

E of Lasham, at SU6883 4356 beside footpath in wood edge, Tony Mundell, Steve Povey & Lisa Malter 20 Apr 2018. NE of Tangley, several plants beside Holt Lane at SU3378 5284, Tony Mundell & Peter Billinghurst 28 May 2018.

*Polystichum x bicknellii (P. aculeatum x setiferum)* Beside main track at Ackender Wood SU7016 3823. Single frond collected as a voucher, HFG 22 Apr 2018.

**Potamogeton nodosus (Loddon Pondweed)** River Blackwater SU7417 6361, in the river very close to the VC12/22 border, Victor Freestone 11 Aug 2017, specimen det. Chris Preston 24 Jan 2018 who commented that with a microscope it showed the characteristic teeth on the leaf margins.

**Potentilla anglica (Trailing Tormentil)** Plentiful on track E of Tangley at SU3585 5249 to SU3587 5243, growing *with P. erecta*, Tony Mundell & Peter Billinghurst 28 May 2018.

*Primula x polyantha* (False Oxlip (*P. veris x vulgaris*)) lbthorpe, Dolomans Lane, verge of lane beside a garden. In presence of both parents, Peter Billinghurst 13 Apr 2018.

*Prunus padus* (Bird Cherry) NW of Bighton SU6035, Andrew Powling & Eric Clement 10 May 2018. Hogmoor Inclosure, SW part, several small trees at SU7859 3496 and further north by same path, Tony Mundell & Steve Povey 15 May 2018.

*Prunus serotina* (Rum Cherry) Two small trees about three yards apart at The Slab, Bordon SU7820 3504, Victor Freestone 18 Oct 2017.

**Ranunculus auricomus (Goldilocks Buttercup)** Large patches on roadside at Humbly Grove SU7092 4572 and SU7091 4578, not yet in flower, Tony Mundell & Dawn Nelson 9 Apr 2018. Ackender Wood SU6996 3804 and SU7009 3810, HFG 22 Apr 2018. In road verge, Privett SU677269, Andrew Powling & Eric Clement 26 Apr 2018. Several plants beside bridleway, W of Gundleton SU608339, Steve Povey & Laura Gravestock 7 May 2018.

*Ranunculus lingua* (Greater Spearwort) Southwood Meadows, in Cove Brook at SU8551 5501 beside bridge and at SU8551 5527, Tony Mundell 2 Jun 2018.

*Ranunculus omiophyllus* (Round-leaved Crowfoot) The Slab, Bordon, in puddle at SU7807 3568, Tony Mundell & Steve Povey 15 May 2018.

**Rosa** 'Hollandica' (Dutch Rose) Several plants re-sprouting on road verge at Bordon SU78579 35711, after recently being shaved off at ground level (where originally recorded by Lady Anne Brewis), Tony Mundell & Steve Povey 15 May 2018.

*Rumex hydrolapathum* (Water Dock) Southwood Meadows, many plants at SU8546 5505, Tony Mundell 2 Jun 2018.

*Ruscus aculeatus* (Butcher's-broom) Three plants uncovered by hedge reduction, Longstock Road, Goodworth Clatford SU357429, Graeme Davis 8 Apr 2018.

Sagina subulata (Heath Pearlwort) Many hundreds of flowering plants scattered over an area of Slab Common of approx. 30 sq. m. at SU7819 3562, Steve Povey & Laura Gravestock 19 May 2018. At The Slab SU7819 3562 where recently found by Steve Povey, but all plants now in fruit. Glandular sepals and very long glandular pedicels, point on leaf tips over 0.5mm. Voucher retained, Tony Mundell 25 May 2018.

*Sagittaria latifolia* (Duck Potato) Liphook SU8407 3128 in a small pond, surely originally planted, Tony Mundell, Isobel Girvan & Anna Stewart 2 Jul 2018.

*Salvia verbenaca* (Wild Clary) One plant in flower at Alton SU7276 3850 in field edge, Tony Mundell, Isobel Girvan & Steve Povey 30 May 2018.

**Santolina chamaecyparissus (Lavender-cotton)** At Hogmoor Inclosure, Bordon, SU7865 3519, in the new children's play area, planted in landscaping on the SINC, Site of Importance for Nature Conservation! together with other aliens like *Ophiopogon planiscapus* 'Nigrescens' that I cannot record as not on the MapMate taxa list, Tony Mundell & Steve Povey 15 May 2018. Saxifraga granulata (Meadow Saxifrage) Chilbolton Churchyard at c.SU3943 4021, Tony Mundell & Dave Pearson11 Apr 2018. Chilbolton, West Down SU3836 3898, two small clumps flowering, Glynne Evans 24 Apr 2018.

*Silene flos-cuculi* (Ragged-Robin) SW of New Alresford SU576317, occasional in marsh, Steve Povey 18 May 2018. Southwood Meadows, several patches on floodplain meadow at SU8551 5545, two large patches at SU8548 5527 and SU8548 5529 plus a few outliers nearby, Tony Mundell 2 Jun 2018.

*Silene gallica* (Small-flowered Catchfly) 90 very small plants at Conde Way, Bordon SU7965 3470, some of them flowering, Bill Wain 1 Nov 2017.

*Silene noctiflora* (Night-flowering Catchfly) Stubbington Down, three plants scattered in fodder/cover crop. One with two flowering stems at SU5169 5635, one with four flowering stems at SU5159 5641 and one with six flowering stems at SU5159 5643, Victor Freestone 8 Jun 2018.

**Sorbus torminalis (Wild Service-tree)** Winchester, St Giles Hill SU4915 2943, a planted tree, ID confirmed by John Poland, Anna Stewart 24 Feb 2018.

**Sorghum bicolor (Great Millet)** Hatherden SU348509, many of last years fruiting spikes in 'conservation' area sown mainly with Sunflowers, Tony Mundell & Peter Billinghurst 5 Apr 2018.

**Spergularia marina (Lesser Sea-spurrey)** Abundant at Alton SU7281 3856 along northbound edge of A31 dual carriageway where a footpath crosses it, Tony Mundell, Isobel Girvan & Steve Povey 30 May 2018. Hartley Wintney SU7689 5705 on pavement at base of shop frontage, close to the Chinese take-away, Fred Rumsey 23 Jun 2018.

*Stachys palustris* (Marsh Woundwort) Southwood Meadows, large patch at SU8549 5499 on floodplain meadow, Tony Mundell 2 Jun 2018.

**Stellaria pallida** (Lesser Chickweed) Hogmoor Inclosure, Bordon, one plant on a heap of disturbed soil at SU7874 3526 in the newly landscaped children's play area – this area is a SINC, Site of Importance for Nature Conservation, and it has been bulldozed to make the play area, Tony Mundell & Steve Povey 15 May 2018.

**Symphytum caucasicum (Caucasian Comfrey)** Single flowering plant at Harewood Peak SU4033 4657 close to many *Euphorbia stricta* beside footpath, presumably from dumped garden rubbish, Tony Mundell & Simon Melville 4 Jun 2018.

*Teesdalia nudicaulis* (Shepherd's Cress) The Slab, Bordon, scattered plants on pure sand at SU7819 3586. SU7819 3587, SU78183 35864, SU7805 3590 etc., Tony Mundell & Steve Povey 15 May 2018. Many plants scattered in short turf in small field at Woolmer Forest SU7893 3127, Steve Povey & Laura Gravestock 3 Jun 2018.

*Tephroseris integrifolia* (Field Fleawort) Cholderton Estate, Reservoir field SU245437, five flower spikes at the waterworks, Henry Edmunds Jun 2018.

*Thlaspi arvense* (Field Penny-cress) E of Wyck SU767390, several plants on farm track, with flowers and fruits, clearly matching Rose 'Wild Flower Key' description/drawing in all respects, Cathy Wilson 8 Jul 2018.

*Tilia platyphyllos* (Large-leaved Lime) Bishop's Sutton, large specimen tree near churchyard of subspecies *platyphyllos* at SU6058 3205, Steve Povey & Laura Gravestock 7 May 2018. Single small tree next to Shortheath Pond car-park at SU7748 3691. Plant keys out to subsp. *platyphyllos*, Steve Povey & Laura Gravestock 19 May 2018.

*Torilis nodosa* (Knotted Hedge-parsley) Many plants growing as a pavement weed on roadside, Alton SU7268 3928 to SU7267 3924, Tony Mundell, Isobel Girvan & Steve Povey 30 May 2018.

*Trifolium glomeratum* (Clustered Clover) Scattered in short, sandy turf around Bordon SU7967 3561, SU7965 3586 and frequent in short, sandy turf at SU7983 3594. Voucher specimen collected, Steve Povey & Laura Gravestock 8 Jun 2018.

*Trifolium striatum* (Knotted Clover) The Slab, Bordon, on pure sand at SU7814 3588, Tony Mundell & Steve Povey 15 May 2018. Plentiful and widespread in short, sandy turf to the NE of Budds Lane, Bordon at and around SU7983 3594, SU7965 3586 & SU7967 3561, Steve Povey & Laura Gravestock 8 Jun 2018.

*Trifolium subterraneum* (Subterranean Clover) Bordon Military Cemetery SU7875 3623, SU7876 3622, SU7878 3622 and SU7879 3625, Tony Mundell & Steve Povey 15 May 2018. In several places in short, sandy turf at Bordon around SU7983 3594, SU7965 3586 and by Budds Lane at SU7967 3561, Steve Povey & Laura Gravestock 8 Jun 2018.

*Turritis glabra* (Tower Mustard) Kingsley, Baker's Corner, at least 65 plants scattered over the bank at Bakers Corner SU7787 3775. One plant found growing outside the fenced area, on the roadside verge, Steve Povey 30 Apr 2018.

*Valeriana dioica* (Marsh Valerian) SW of New Alresford SU576317, in plenty on marsh, Steve Povey 18 May 2018.

*Valerianella carinata* (Keeled-fruited Cornsalad) Garden weed on pavement verge at Kings Road, Alton SU7077 3889, HFG 22 Apr 2018.

*Valerianella locusta* (Common Cornsalad) Bordon SU7833 3506 on road verge, seeds checked, Tony Mundell & Steve Povey 15 May 2018.

*Vinca major* var. *oxyloba* (Greater Periwinkle) lbthorpe, Dolomans Lane SU380534, verge of lane beside a garden, Peter Billinghurst 13 Apr 2018.

*Viola lactea* (Pale Dog-violet) Only half a dozen small, nonflowering plants clinging on at Upper Bourley SU8280 4987 beneath dense Bracken brash and Honeysuckle, Mike Waite 25 May 2018.

*Viola odorata* var. *dumetorum* (Scented Violet) On road verge at Humbly Grove SU7092 4559 and SU7092 4568, Tony Mundell & Dawn Nelson 9 Apr 2018.

*Viola odorata* var. *imberbis* (Scented Violet) St Giles Hill Graveyard, Winchester SU490293, old part of graveyard, Anna Stewart 5 Apr 2018. On verge of Windmill Lane, Ibthorpe SU374536, white with pale pinkish spur, no tufts on lateral petals, Peter Billinghurst 11 Apr 2018.

*Viola odorata var. odorata* (Scented Violet) St Giles Hill Graveyard, Winchester SU4909 2940, new part of graveyard, Anna Stewart 4 Apr 2018.

*Viola odorata var. praecox* (Scented Violet) Wildhern SU3528 5101 at start of footpath, Tony Mundell & Peter Billinghurst 4 Apr 2018. Verge of Windmill Lane., Ibthorpe. No tuft of hairs on lateral petals, leaves nearly orbicular and flowers not fully opened, Peter Billinghurst 11 Apr 2018.

*Viola odorata var. subcarnea* (Scented Violet) St Giles Hill Graveyard, Winchester SU4909 2940, new part of graveyard, Anna Stewart 5 Apr 2018. SE of Chilbolton beside footpath at SU4000 3896, a rather muddy-coloured dark-pink, with 'beards' on inner two petals. Possibly var. *subcarnea*, but also possibly the un-named reddish form noted in the BSBI Viola Handbook, Tony Mundell & Dave Pearson 11 Apr 2018. Houghton Down, beside lane to Chattis Farm at SU3272 3539 on verge under a hedge. Possibly var, *subcarnea* but flowers a deeper reddish colour than usual so probably the un-named red form as shown in the BSBI Violet Handbook, Tony Mundell, Dawn Nelson & Mary Parker 13 Apr 2018.

Viola odorata var. sulfurea (Scented Violet) W of Over Wallop on grassy road verge at SU2796 3864 near start of Evans Close, Tony Mundell, Anna Stewart, Mary Parker & Ginnie Copsey 29 Mar 2018. Winchester, St Giles Hill in garden lawn at SU4902 2937, neither encouraged nor discouraged by the land owner, and also in a grassy area on side of road SU4900 2937, Anna Stewart 5 Apr 2018.

*Viola tricolor* (Wild Pansy) N of Crookham Village, SU796532, SU797533, SU794532, SU794534, SU795533, SU795534, abundant with many thousands of plants e.g. hundreds at SU7969 5328, SU7967 5324, SU7975 5335 and SU7974 5332, in a large disused arable, sandy field, scheduled for housing. An amazing

sight covering and colouring a large area. Many of the plants are the even rarer hybrid V. x *comtempta*, Tony Mundell 12 May 2018. *Viola x bavarica (V. reichenbachiana x riviniana)* Looks a convincing hybrid on road verge at Shalden SU6965 4214. Spur dark purple but notched, shape of upper pair of petals and markings on lower petal intermediate. Both parents seen nearby, Tony Mundell, Steve Povey & Lisa Malter 20 Apr 2018.

*Viola x contempta (V. arvensis x tricolor)* N of Crookham Village, SU796532, SU797533, SU794532, SU794534, SU795533, SU795534, abundant with many thousands of plants e.g. hundreds at SU7969 5328, SU7967 5324, SU7975 5335 and SU7974 5332, in a large disused arable, sandy field, scheduled for housing, Tony Mundell 12 May 2018.



Scented Violet Viola odorata var. sulfurea, Winchester, 19 March 2017 (Anna Stewart)



Wild Pansy Viola tricolor, Crookham, 12 May 2018 (Tony Mundell)

### The Hampshire and Isle of Wight Wildlife Trust Flora Group aims to monitor the 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. Many thanks to everyone who contributed. If you have any comments or would like to submit articles or photographs for inclusion in a future issue please contact:

### **Catherine Chatters, Flora Group Secretary**

Ivy Cottage, Ashurst Bridge Road, Totton, Southampton SO40 7EA

Tel: 023 8086 3920, e-mail: Catherine.Chatters@hiwwt.org.uk

When submitting digital photographs, please reduce the size of each image to no larger than 2MB and please include your own name in the filename, along with description of subject and date taken for inclusion in the caption. Please include English and scientific names of any plants.

### If you would like to send in your plant records, please see the Hants Plants website: http://www.hantsplants.org.uk for information, including downloadable forms, or contact your relevant vice-county Recorder:

### VC11: Martin Rand

3 Kings Close, Chandler's Ford, Eastleigh, SO53 2FF Tel: 07531 461442, e-mail: VC11recorder@hantsplants.net

### VC12: Tony Mundell

38 Conifer Close, Church Crookham, Fleet GU52 6LS Tel: 01252 614516, e-mail: argmundell@gmail.com



Flora Group at Ackender Wood, 22 April 2018 (Tony Mundell). See p. 6.

If you would like to join Hampshire & Isle of Wight Wildlife Trust and become a member of the Flora Group please contact our Membership Team on 01489 774400 or visit our website for further details: www.hiwwt.org.uk. Visit us on Facebook under Hampshire Flora Group.

Company Limited by guarantee and Registered in England and Wales No 676313 Registered Charity No 201081 Beechcroft House, Vicarage Lane, Curdridge, SO32 2DP





# Protecting wildlife, inspiring people