# **Flora News**

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

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In this issue we have details of events to be held during winter 2015/16. We are delighted that Stewart McPherson, an expert on carnivorous plants, has agreed to give us a talk on Saturday 9 January 2016, setting British carnivorous plants in a wider European context. Stewart is co-author of a handbook on British carnivorous plants which is due to be published in October this year. We are very grateful to Martin Rand for organising this event, full details of which can be found in the 'forthcoming events' section of this newsletter. Stewart currently lives in Australia so this is a rare opportunity for us to hear him speak. We aim to advertise the event widely to members of conservation organisations so please encourage your botanically-minded friends to come and hear his fascinating talk.

The penultimate field meeting of the year will be at Eastney and Milton Common, Portsmouth on 4 October to look for alien plants, led by John Norton and Hampshire's 'alien' expert Eric Clement. Tony Mundell has kindly organised a workshop at the end of October to help us identify conifers. This will be led by conifer expert Matt Parratt who works at Alice Holt. On 5 December 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. Thanks to Tony and Martin for organising this event.

As usual we are always keen to receive your suggestions for Flora Group events or activities. Please raise your ideas with any of the Committee members - Sarah Ball (Chairman), Catherine Chatters, Clive Chatters, Ginnie Copsey, Gareth Knass, Tony Mundell, John Norton, Martin Rand or Neil Sanderson.

We are always keen for more people to submit contributions to *Flora News* on any relevant botanical topics. If you have enjoyed any of the Flora Group events and would like to write a report, we would be very pleased to receive it. Please send your articles, notes or reports to Catherine Chatters at Catherine. Chatters@hiwwt.org.uk or to her home address which is given at the end of this newsletter.

Catherine ChattersJoFlora Group SecretaryEd

*John Norton* Editor

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# **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)!

#### Sunday 4 October 2015, 10.30am-3.30pm Coastal aliens, Portsmouth Leaders: John Norton & Eric Clement

An excursion to Eastney and Milton Common on Portsea Island to look for later-flowering aliens in particular, but there will also be a chance to look at typical coastal plants and do some general recording in a very poorly recorded part of Hampshire.

During a recent recce to Eastney (early August) I couldn't refind the alien Yellow-rattle *Rhinathus rumelicus*, but there was some freshly disturbed ground east of the fort which may provide something interesting during the meeting. At Milton Common we will admire a huge Fig tree and see if we can refind the colony of *Cynodon dactylon* (Bermuda-grass), a possibly native species in one of its few Hants localities. If we can gain access to one of the lagoons we should be able to find *Zannichellia palustris* (Horned Pondweed).

Meet at the free public car park on the north-east side of Fort Cumberland (SZ 684 995), which is reached via Fort Cumberland Road and Ferry Road. In the afternoon we will move the cars to Great Salterns Quay off Eastern Road (SU 676 017) and walk south to Milton Common.

Contact: John Norton, telephone: 02392 520828, e-mail: john@jnecology.com.

#### Saturday 31 October 2015 Conifer Workshop at Alice Holt Leader: Matt Parratt

Matt Parratt works at Alice Holt and is an expert on conifer identification. The workshop will be a general introduction, including the few native species but mainly covering the wide range of species that can be found planted in the countryside. Emphasis will be placed on the commoner ones. The morning will be an indoor session and Matt will give participants samples of the foliage and cones as he explains their distinguishing characters. If the weather is acceptable, the plan is then to see growing trees at Alice Holt in the afternoon session. Most conifer species are woefully under-recorded in Hampshire, so I am keen to encourage you to get to know at least the commoner ones, and record their presence.

This event is by booking only. Please send booking to Tony Mundell by Sunday 11 October accompanied by a cheque for £8 made out to 'Hampshire & Isle of Wight Wildlife Trust'. Further details will be sent to participants just prior to the event.

Contact: Tony Mundell (see back page for details).

#### Saturday 5 December 2015, 11am–4pm Flora Group/BSBI Exhibition Meeting Testwood Lakes Centre, Brunel Road, Totton

We will continue this traditional autumn 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.** 

Testwood Lakes Centre (SU 345 155) 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, until the Centre comes into view above the lake. There is plenty of parking there. No need to book a place.

Contact: Tony Mundell (see back page for details).

#### Saturday 9 January 2016, 7.15pm–9.45pm John Stripe Theatre, University of Winchester Talk by Stewart McPherson: Carnivorous plants in Britain and beyond

Stewart is a field biologist, naturalist, explorer and carnivorous plants expert worldwide. He is the founder of Redfern Natural History Productions, which publishes an impressive range of superbly illustrated books on carnivorous plants and other wildlife topics. He has also made broadcasts and conservation films. He will be talking particularly about carnivorous plants in Britain and their relations. We anticipate having a range of books on display and for sale during the talk interval, including (we hope) the newly published handbook on carnivorous plants in Britain that he is co-authoring with Tim Bailey. For more details about Stewart and the books see http:// www.redfernnaturalhistory.com/. Light refreshments will be available during the talk interval.

Ticket prices: Standard – pre-booked, £7 per person; unbooked at door, £8 per person. Student – pre-booked, £5 per person; unbooked at door, £6 per person. For prebooked tickets, please add £1 per booking (irrespective of ticket numbers) if you wish tickets to be posted on; or collect at the door.

Bookings can be made in one of three ways: **cheques** – made payable to 'Hampshire & Isle of Wight Wildlife Trust' and sent to Hampshire & Isle of Wight Wildlife Trust, Beechcroft House, Vicarage Lane, Curdridge, Hampshire SO32 2DP, attention: Sarah Jackson, marked 'Flora Group talk'; **card payment** – over the phone by calling the Wildlife Trust reception on 01489 774400, and requesting to make a payment for the Flora Group talk; **online payment** – will be available during the course of September.

# **Reports of Recent Events**

# Winter Twig Identification Training at Testwood Lakes Centre, 8 March 2015

#### A report by Catherine Chatters

John Poland very kindly agreed to lead two training sessions to fulfil requests made at the Flora Group AGM in 2014 for guidance on identification of winter trees and shrubs and identification of plants using vegetative characteristics. The first of these was held at Testwood Lakes Centre on 8 March 2015 where fifteen people spent a very informative day focusing on the identification of winter twigs.

John had brought along samples of a wide range of different species of trees and shrubs, so even after only a few minutes I found myself looking much more closely at twigs that I had done in the past, quickly becoming acquainted with such previously unfamiliar features as 'stipule scars', 'bundle scars' and 'interpetiolar ridges', and terms such as 'sympodial branching' and 'monopodial branching'.

John encouraged us to consider the general shape of twigs, for example the zig-zag shape of hazel, lime and London plane; the colour and arrangement of the buds; whether the twigs have thorns, spines or prickles; whether the buds are naked with hairs to protect them against frost; whether the stem is round or angled and whether the twigs contain latex as in the case of field maple and Norway maple Acer platanoides. I was fascinated to be shown the five-sided cross-sectional shape of the pith in a cut poplar twig and to discover that alder buckthorn Rhamnus cathartica stems are green inside. As well as using our eyes, John encouraged us to use our senses of taste and smell (for example, the broken stems of Acer saccharinum emit a 'bad' smell and the stems of Liquidambar contain an aromatic sap) but warned us not to do so when identifying Daphne mezereon!

In the afternoon we went outside and studied the overall shape of trees, including oak, ash and alder, reinforcing our understanding that the silhouette of a tree is determined by the characteristics of the buds.

To assist in the identification of winter twigs John strongly recommended a magnifying glass with an integral light and he showed us a selection of books, many of which have been written by Americans and which focus on the species found in a particular state such as Maine and Arkansas. A key, prepared by John with illustrations by Robin Walls, should be available during 2015 and John is happy for people to send him photographs or specimens if they are having difficulty identifying a particular twig.

Our grateful thanks to John for his excellent teaching skills, patience and good humour. I particularly liked his anecdote about Sir John Lubbock (1834–1913). When John enigmatically mentioned that we have to thank buds and stipules for Bank holidays, he explained that Sir John Lubbock, a banker and keen naturalist, was instrumental in introducing the Bank Holidays Act of 1871 and had published '*On Buds and Stipules*' in 1899. John informed us that this had been referred to in *Punch* magazine during 1882 as follows:-

'How doth the Banking Busy Bee Improve his Shining Hours? By studying on Bank Holidays Strange Insects and Wild Flowers!'

John gave us all a very inspiring day and I know that I will pay a lot more attention to winter trees and shrubs in the future, thanks to his excellent guidance.



John Poland demonstrating winter twigs at Testwood Lakes, 8 March 2015 (Catherine Chatters)

#### Joint Flora Group/BSBI *Taraxacum* (Dandelion) Recording and Training Workshop, 17–20 April 2015

#### A Report by Martin Rand

Twenty BSBI and Hampshire Flora Group members from far and wide in Britain gathered in Ringwood on Friday afternoon for a long weekend studying the dandelion flora of south-west Hampshire, led by the country's expert on the genus, Dr John Richards (see back page for the group photo). *Taraxacum* is one of the notorious genera of mostly apomictic plants that strike fear into the hearts of most plant-lovers. Since they can produce offspring without the need for fertilisation, they give rise to many 'microspecies' whose differences can be subtle, to say the least. As a result, they have been poorly recorded over the past two decades, and this meeting presented an opportunity not only to get to know them better but also to add to existing records from the county, most of which had a strong eastern bias.

After a cup of tea and sign-in, we lost no time in getting out into the field – in this case, the back garden and car park of the Greyfriars Community Centre which was our base for the next three days. Progress was even more glacial than usual, as John introduced us to no less than seven species growing in the first 80 yards or so. Finally we made it out to the edge of Bickerley Common, now very much an urban recreation ground, but no less attractive to the dandelions, and we 'clocked up' a few more before returning to a buffet supper. After supper John gave us a talk that introduced us to *Taraxacum* biology and the main sections into which they are divided for the purposes of classification and identification.

Saturday was planned as a day on the New Forest, visiting several sites that had interesting records in the past or were felt to be promising. Unfortunately the dry cool spring, coupled with heavy grazing in many spots, conspired to make life difficult for us. At Mill Lawn near Burley, we struggled to find poor specimens of just a few species, mostly clinging to the sides of the stream. Our next stop, Ossemsley Ford, is a well-known site for Taraxacum palustre, one of a small, quite distinctive and rather distinguished group normally found in damp base-rich grassland. We had no trouble finding this, and rapidly also found a near relative, Taraxacum anglicum - previously only recorded in Hampshire in one fen near Basingstoke. This was soon capped by finding a third species that even our leader was uncertain about. A specimen went to Jan Kirschner, a European expert in Czechoslovakia, who provisionally identified it as Taraxacum ciliare - a species never formally recorded in mainland Britain, although Jan said he had collected specimens of it in the Forest about 20 years ago. Its previous known distribution was north-west France and (under the name Taraxacum sarniense) the Channel Islands.

This excitement made up for the dismal showing we had at our next stop at Stony Moors, near Holmsley, where drought, heavy grazing, and the ubiquity of dog excrement made for a dispiriting stop. At this point we decided to retreat to Ringwood and continue to explore the vicinity of Bickerley Common, getting on to more rural flood plain meadows. The suburban part of the common yielded up a few more species, while the first of the water meadows (which appears to be getting managed as a late-cut 'litter meadow' at the moment), while not species-rich, had a couple of characteristic meadow species. Then it was off to the nearby Italian restaurant for dinner.

Sunday was taken up with a visit to the Bisterne Manor estate, starting with the sandy fields of Pheasant Pen Rough. We were hopeful of finding a good clutch of members of the Erythrosperma section here, as they are characteristic of dry short grassland on chalk, limestone and sand. In this we were not disappointed; as we started, John suggested that 5 species would be a good tally for 'quality' grassland, and we managed 7. Although the season was running quite late for them, a number of the small clovers and other annuals were also in evidence to distract us.

From here we made our way down the lane to a damp pasture that runs down to the River Avon. Here we had lunch in Arcadian surroundings, serenaded by Cetti's Warblers, before we tackled the dandelions yet again. We had a reasonably good haul which included some 'old meadow' species; and a few more (and some repeats) were yielded by the water-meadows to the north. We finished the day with yet another visit to the southern outskirts of Ringwood, which were proving so rich in ruderals. In the evening, after a pub dinner, John gave us another short talk on dandelion identification, and collection and documentation protocols.

Monday was 'going home' day, and so a morning field trip to the seaside (Hengistbury Head) was on the schedule. There was not enough time to explore the more distant and wilder parts of the Head, but the sandy grassland and vestigial dunes near the main car park provided plenty to keep us occupied, and gave us several new species.



John Richards explains the finer points of *Taraxcum 'non-severum'* (Martin Rand)

I believe that even the more knowledgeable of our group had their horizons expanded, and for a dandelion tyro like me the weekend was revelatory. We are extremely grateful to John Richards for his expertise, informative presentation, generosity and patience in leading this workshop. Thanks are also due to the staff at the Greyfriars Community Centre who went out of their way to make us welcome and accommodate our needs; and to the owner and estate staff at Bisterne Manor estate for their help and interest. There is still some final analysis to be done, but it appears that we recorded over 70 *Taraxacum* taxa, of which as many as 37 may be new vice-county records! A full listing will appear in the next *Flora News*.

#### Workshop on Identification using Vegetative Characteristics, Testwood Lakes Centre, 26 April 2015

#### A report by Jill Oakley and Janet Blizard

The group of twenty people, comprising of a mixture of enthusiastic amateur botanists and professional ecologists, met in the education room at Testwood Lakes for John Poland's workshop. John wrote the *Vegetative Key to the British Flora* with Eric Clement in 2009. It is a new approach to naming British vascular plants on vegetative characters alone, unlike other Florae that depend on fruit and flowers.

John began by highlighting some of the useful identification characteristics to look for when identifying plants solely on their vegetative features. He then took us out onto the Reserve to show us useful diagnostic features, including touch and smell. Strong stomach and vivid imagination needed here. We examined different leaf shapes, the arrangements of their lobes and teeth, different types of venation and the importance of looking at the positions of stomata.

John showed us examples of many different types of hairs and where they are placed on leaves and stems; and explained the difference between prickles, thorns and spines. We were introduced to the extra floral nectaries on Guelder-rose and plants with hydrathodes on their leaves. These are glands which exude excess water and sometimes lime or salt.

After lunch, we visited the pond, wood and wetland area and collected more specimens for closer examination in the centre. Finally, John showed us how to use his book to identify specimens with confidence in a few steps, using only their vegetative characteristics. We practised using Alder and Cleavers.

At the end of the workshop everyone thanked John for an extremely interesting, well-structured and productive day and for giving us the confidence to use the Key. Thanks also to Catherine Chatters, who kept us supplied with plenty of tea, coffee and biscuits throughout the day.



Vegetative identification in action (Catherine Chatters)

# Visit to East Hampshire Hangers and Flora Group AGM, Saturday 23 May 2015

#### A report by Tony Mundell

There was an excellent turnout for this meeting and we started from the end of Honeycritch Lane where Mrs Shirley Reed had kindly arranged for some of us to park at Hill Farm. As I was pointing out a really huge tree of Wych Elm *Ulmus glabra*, Clive Chatters noticed that there was a colony of Herb-paris *Paris quadrifolia* at its base.



Herb-paris *Paris quadrifolia*, Oakshott Hanger, 23 May 2015 (Gareth Knass)

Continuing on, after noting numerous plants of Soft Shield-fern *Polystichum setiferum* we visited Roundhills Hanger Meadow, hoping to see a display of Greater Butterfly-orchid *Platanthera chlorantha*, but unlike the previous year they were still in green bud. We eventually refound the small colony of Adder's-tongue *Ophioglossum vulgatum* and nearby Martin pointed out the variety of Field Forget-me-not *Myosotis arvensis* var. *sylvestris* that has flowers mid-way in size between the common var. *arvensis* and another species, Wood Forget-me-not *M. sylvatica*.

The meadow was dotted with Common Twayblade Neottia ovata and in one area there were several Earlypurple Orchids Orchis mascula but sadly no sign of the pure white-flowered one that was there the previous year. The opportunity was taken to complete a list of everything seen in the tetrad and then, after squeezing into the minimum number of cars, we set out for the car park at Ashford Farm at the base of the hangers. In Jack's Meadow which had an abundance of Meadow Crane's-bill Geranium pratense Steve Povey showed us a site for more Adder's Tongue. A horsetail abundant here was collected by Eric Clement who later provisionally identified it as Equisetum x rothmaleri, the hybrid between Field Horsetail E. arvense and Marsh Horsetail E. palustre. Although the parents are common, the hybrid seems to be very rare or under-recorded and not previously recorded for VC12. (Further specimens collected later by Steve Povey turned out to be E. arvense, but the presence of the hybrid at the site has not yet been ruled out.)

We climbed steeply up to our picnic site past a few spikes of White Helleborine *Cephalanthera damasonium* and plants of Nettle-leaved Bellflower *Campanula trachelium*. In the open area where we stopped for lunch a few Juniper *Juniperus communis* seedlings were found close to a parent female bush and not far from that one or two plants of Dwarf Thistle *Cirsium acaule*. There were a few Greater Butterfly-orchids here but they were not as plentiful as in previous years due to scrub encroachment. After our picnic a brief AGM was held before Steve led us onwards and upwards past some fine flowering Bird'snest Orchids *Neottia nidus-avis* and a few Narrow-leaved Helleborines *Cephalanthera longifolia* – many more were to follow later!



Enjoying lunch in the warm sun (Anna Stewart)



Narrow-leaved Helleborine Cephalanthera longifolia, East Hampshire Hangers, 23 May 2015 (Gareth Knass)

At Wheatham Hill we noted Small-flowered Sweet-briar *Rosa micrantha*, Common Gromwell *Lithospermum officinale* and Heath-grass *Danthonia decumbens* (which in spite of its vernacular name is just as happy in chalk grassland). Passing many bushes of Spurge-laurel *Daphne laureola*, Steve showed us Deadly Nightshade *Atropa belladonna* in flower and a superb colony of at least 160 flower spikes of Narrow-leaved Helleborine, but in smaller numbers than previous years due to scrub growth.

We passed a couple of colonies of the alien Fringecups Tellima grandiflora en-route back to the cars, and after some discussion about a dozen people decided to continue plant-hunting by driving to Lutcombe Bottom. Here Steve showed us the leaves of the alien subspecies of Italian Lords-and-Ladies Arum italicum subsp. italicum and compared this with the rare native version subsp. neglectum that in Britain is virtually confined to the Hampshire hangers (Steve is convinced that many records elsewhere are errors). We also saw the Green Hellebore Helleborus viridis and lots of Thin-spiked Wood-sedge Carex strigosa. In Lutcombe Pond there was a good quantity of the now rare Opposite-leaved Pondweed Groenlandia densa. All in all, we were shown a remarkable number of uncommon plants during the day.

#### Fern Workshop, Chandler's Ford, 4 July 2015 A Report by Martin Rand

This was an outstandingly relaxed day, with just six Flora Group members attending and the 'safari' part of the workshop involving little more than a 40-metre walk around the leader's garden. And the weather was kind!

We started by looking at the peculiar terminology that is used by pteridologists to describe parts of a fern, and moved on to consider fern biology and natural history, with a look at some of the microscopic features of ferns (spores and sporangia) that are often useful in dealing with the more critical fern genera. From here we took a look at some of the more important British fern genera using specimens from the garden, concentrating initially on Wood-ferns Dryopteris, Shield-ferns Polystichum and Lady-ferns Athyrium. Participants were then given the exercise of going out into the garden to find other representatives of these genera lurking in the lush herbaceous borders. Also in this session we were able to pay our respects to a live specimen of what is possibly the world's second oldest living fern species, Osmundastrum cinnamomeum - its history certainly goes back 75 million years, and a recent fossil discovery in Scandinavia suggests this can be pushed back to 180 million years.

After lunch we returned to considering *Dryopteris*; this time its genetics and reproductive behaviours, which help to make identification so challenging in some parts of the genus. We looked at a 'reticulogram' of all the British species and hybrids and their immediate ancestors, which served both to illustrate and (hopefully)

to clarify the complexity of their relations and the reason for a lot of variability. We then viewed a number of the British species shown in the diagram, including *D. submontana, D. filix-mas, D. affinis, D. expansa, D. dilatata* and some of their non-British putative ancestors such as *D. wallichiana* and *D. crassirhizoma*. There was also opportunity to examine other North American and Far East species, illustrating the great diversity in form and size in this one genus.

From here we went on to look at other British genera, particularly Polystichum and the subtleties of distinguishing P. setiferum and P. aculeatum on young fronds; another often problematic pair, Polypodium vulgare and P. interjectum; the Royal Fern Osmunda regalis whose green spores we had examined in the morning and Asplenium species. As an extra challenge, Hard-ferns *Blechnum* were represented by the non-native B. penna-marina and the Beech-fern genus Phegopteris by the non-native Phegopteris decursive-pinnata. Finally, there was a chance to see a number of non-native ferns that are becoming established in the wild in Britain nowadays, including the Holly-fern Cyrtomium fortunei, Sensitive Fern Onoclea sensibilis (another contender in the 'venerable species' competition) and Ostrich-fern Matteucia struthiopteris.

### Visit to Hartfordbridge Flats, Saturday 11 July 2015

A report by Tony Mundell



View across the western part of the site (Gareth Knass)

Hampshire & Isle of Wight Wildlife Trust have recently taken on the management of Hartfordbridge Flats for the private owner. The site is part of Castle Bottom to Yateley Common Site of Special Scientific Interest (SSSI). It is a strip of heathland immediately south of Blackbushe Airport and the A30 about 1.6km long and 180m wide. The Hampshire Flora Group had been requested to make a baseline botanical survey before grazing begins on the site, so the plan was to record all the plants we could find.

Only six people attended this event but with the range of expertise available (including John Norton, Neil Sanderson

and Gareth Knass) we managed to not only make a comprehensive list of the vascular plants present but we also listed 10 butterfly species (including several Dark Green Fritillaries), 13 birds, four grasshopper species, numerous mosses and some lichens. Apart from the mosses John also recorded 13 *Rubus* microspecies, one of which, *R. marshallii*, has a stronghold in Surrey/West Sussex, but is rare in VC12.



Dark-green Fritillary (on Spear Thistle *Cirsium vulgare*, Hartfordbridge Flats, 11 July 2015 (*Gareth Knass*)

Large areas have already been cleared of invasive conifers and the barer areas proved quite rich. I was delighted that Heath Violet *Viola canina* was in numerous places across the site, mostly in small numbers but at one spot there were in excess of a hundred plants.



Heath Dog-violet *Viola canina*, Hartfordbridge Flats, 11 July 2015 (Gareth Knass)

The Trust have already managed to kill off most of a large patch of invasive Japanese Knotweed *Fallopia japonica*, but elsewhere we found a large patch of the hybrid Bohemian Knotweed *Fallopia x bohemica* which is just as invasive and will eventually need herbicide

treatment. Much of the site is dry heathland and Brown Bent *Agrostis vinealis* was surprisingly plentiful. After much searching we also finally found a few plants of Bristle Bent *Agrostis curtisii*.

The white-flowered variety of Common Centaury *Centaurium erythraea* was noted amongst the normal pink variety in many places. We found one patch of what on detailed later examination proved to be Hybrid Cinquefoil *Potentilla x mixta*, with a mixture of 4 and 5-petaled flowers and leaves that had a mixture of 2, 3, 4 and 5 leaflets. A patch of Wall Bedstraw *Galium parisiense* was also found. This scarce plant seems to be increasing in Hampshire but in disturbed soil habitats rather than its former preference for growing on walls.

Towards the eastern end of the site there are still many Scots Pine *Pinus sylvestris*, with a sprinkling of Corsican Pine *P. nigra* subsp. *laricio* and a couple of Maritime Pines *P. pinaster* with huge cones. As we walked through the Scots Pines where the ground was dominated by mosses I said it looked like typical habitat for Common Wintergreen *Pyrola minor* – and within a minute we had found it!



Common Wintergreen *Pyrola minor*, Hartfordbridge Flats, 11 July 2015 (*Gareth Knass*)

Back in World War 2 Blackbushe Airfield extended into this area with runways or at least concrete taxiways or hard-standings. Although the concrete has been removed it has left its mark as several plants normally associated with more calcareous soils. This explained the presence of Viper's-bugloss *Echium vulgare*, Carline Thistle *Carlina vulgaris*, Yellow-wort *Blackstonia perfoliata* and Ploughman's-spikenard *Inula conyzae*.

# **Features**

#### A Field Guide to the NVC – Part 1: General Introduction and Concepts

#### An article by John Norton

This is the first in a series of articles which I hope will be of general interest to botanists wishing to know a little more about the National Vegetation Classification (NVC) and of practical use to vegetation surveyors. These articles will only cover NVC types present in the lowlands, with the main focus being on those occurring in Hampshire. This first instalment includes a general introduction to the NVC and a smattering of advice on its application in field surveys and mapping. In next January's *Flora News* I will cover the classification and identification of the drier types of neutral ('mesotrophic') grassland. Further useful information on the NVC is given in the 'general introduction' at the start of each of the published volumes and in the downloadable NVC User's Handbook (Rodwell 2006).

#### Historical background, approach and publishing

The term 'NVC' is widely used to refer to both the published books and the classification itself. The NVC was commissioned in 1975 by the former Nature Conservancy Council (NCC) to provide a 'comprehensive and systematic catalogue and description of the plant communities of Great Britain' (excluding Northern Ireland). It was published in five volumes as British Plant Communities between 1991 and 2000 (Rodwell 1991a, 1991b, 1992, 1995, 2000) (Table 1). These were authoritatively edited by (and largely written by) John Rodwell, who during the latter stages of the project coordinated a team based at the University of Lancaster. It was initially produced in draft form and used internally by the NCC in the 1980s. It has since become the standard system of vegetation classification in the UK and has been widely adopted by the country conservation agencies, local authorities and various other organisations.

It should be borne in mind that the NVC is a floristic or 'phytosociological' classification, not a habitat classification (ecologists tend to use terms such as 'grassland', 'woodland' and 'saltmarsh' interchangeably for both vegetation types and habitats). The main units of division were drawn up purely on the basis of the plant species present in the vegetation and not on the environmental characteristics of the habitat.

Rodwell simply termed the units of classification 'communities' and states that they are equivalent to the Braun-Blanquet 'association', as used widely elsewhere in Europe. Communities were named according to the dominant or characteristic species present. Thankfully, Rodwell avoided adopting the full continental hierarchical system of classification, which also uses 'classes', 'orders' and 'alliances,' along with their confusing Latinised names, but in the published volumes he liberally refers to the Braun-Blanquet names instead of the NVC names, making the text difficult to follow in places. Also, due to an editing oversight some of the running heads in the books use the Braun-Blanquet association names instead of the NVC names.

In total 286 communities were defined (brief details of how this was done are given below). In the published volumes these were grouped into twelve chapters according to main vegetation types (or habitats) as shown in **Table 1**. The sequence of publishing was not in any particular order.

Most of the communities were further subdivided into two or more sub-communities (I think totalling more than 600). Within a few sub-communities, particularly for grasslands, 'variants' were also recognised. The books also include summaries of other types of vegetation that occur very rarely, were poorly sampled or poorly defined floristically, so were not given full community status. The subsequent review of the NVC by Rodwell *et al.* (2000) also lists a number of known or likely gaps in coverage, i.e. 'missing' communities and sub-communities.

#### Collection and sampling of data used in the NVC

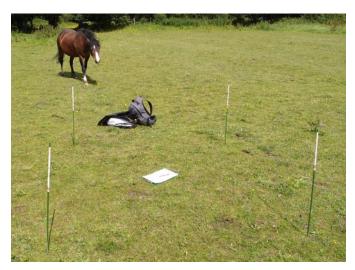
The data used to define the various communities were obtained through fieldwork carried out by a small team of surveyors during a four-year period from 1976 to 1979, supplemented by data obtained from other pre-existing studies. Vegetation was sampled from almost all types of habitats around the UK using small plots marked out on the ground in which the cover of all vascular plants, bryophytes and 'macrolichens' was recorded and their projected cover estimated using the Domin scale (**Table 2**). These plots are universally known as 'relevés', but in the UK we refer to them as 'quadrats', or more accurately 'quadrat samples' ('quadrat' also referring to the frame placed on the ground to record the sample).

#### Using quadrat sampling for vegetation surveys

Quadrat samples provide useful quantitative data for analysis of vegetation, including diagnosis of NVC types and monitoring of successional trends or responses to management if the vegetation is repeatedly sampled over time. Rodwell (2006) provides useful advice on quadrat sampling, but it is worth mentioning a few of the most important points here. Quadrats are not sampled

# Table 2: the Domin scale of cover/abundance used to record quadrat samples for the NVC

Cover	Domin
<4% (few individuals)	1
<4% (several individuals)	2
<4% (many individuals)	3
4-10%	4
11-25%	5
26-33%	6
34-50%	7
51-75%	8
76-90%	9
91-100%	10



Who ate all the grass?

randomly, but in selected positions within stands of homogeneous vegetation so as to be representative of the whole stand. They do not necessarily need to be square and may cover small stands of vegetation in their entirety. For grassland or other finely-patterned vegetation the standard quadrat size used is  $2 \times 2$ metres, with  $4 \times 4m$  for clumpier or coarser vegetation such as tall herb fen,  $5 \times 5m$  or  $10 \times 10m$  for the field layer vegetation of woodlands and  $50 \times 50m$  for the woodland canopy and understorey. Quadrats may be marked out in various ways but the easiest method is to mark the four corners using aluminium garden stakes as the photo above shows. The dimensions do not need to be exact so can be measured by pacing. It sometimes

Table 1:	Arrangement	of the	published	NVC	volumes	and	chapters	

Vol.	Date	Volume title	Vegetation chapters and codes	No. of communities
1	1991	Woodlands and scrub	Woodlands and scrub (W)	25
2 1991	Mires and heaths	Mires (M)	38	
		Heaths (H)	22	
			Mesotrophic grasslands (MG)	13
3 1992	Grasslands and montane communities	Calcicolous grasslands (C)	14	
		Calcifugous grasslands and montane communities (U)	21	
4	4 1995	Aquatic communities,	Aquatic communities (A)	24
4 1995 s	swamps and tall-herb fens	Swamps and tall-herb fens (S)	28	
5 2000	Maritime communities and vegetation of open habitats	Salt-marsh communities (SM)	28	
		Shingle, strandline and sand-dune communities (SD)	19	
		Maritime cliff communities (MC)	12	
			Vegetation of open habitats (OV)	42
			Total communities:	286

helps to mark the quadrat boundaries with string or tape but it is easy enough to simply visualise where the edges will lie. In long vegetation the margin outside the quadrat will normally become trampled down while the quadrat is being recorded, creating an edge which helps this process. Alternatively, frames may be constructed using square cross-section cable ducting cut to length and threaded with string (my own invention).

Ideally, in order to provide better data for analysis, several quadrats should be sampled at different positions within the same stand or in different stands of similar vegetation within a survey area. Such data can then be analysed in terms of both cover and frequency (frequency being the proportion of quadrats in which a species occurs).

If around five or more quadrat samples are available, frequency tables can be constructed and compared with the NVC floristic tables (discussed below) and the community and sub-community descriptions in the published chapters. Samples can be analysed using MATCH (see below) or MAVIS (http://www.ceh.ac.uk/ products/software/cehsoftware-mavis.htm) computer programs, but these are clunky to use and the results need to be interpreted carefully for small samples. Recording quadrats is time consuming, however, so often only one or two quadrats can feasibly be sampled from a selected stand of vegetation during a survey. Nevertheless, taking the trouble to record quadrats can often be fruitful in detecting low-growing or young stages of species that would otherwise be missed during a walkover survey. They also help give a better idea of the true frequency and abundance of species, which can be inaccurate if judged visually from a distance.

#### Data analysis and presentation

Analysis of the 35,000 samples obtained during the NVC fieldwork was coordinated by the late Andrew Malloch, involving teams from Lancaster and three other UK universities. After initially dividing the samples into rough groups based on main habitat types, multivariate statistical analysis techniques were employed to assist in the process of drawing up and refining the vegetation communities. In fact, different computer programs were developed by each university team in order to carry out the analyses, several of which are still commonly used today, such as Twinspan. Malloch also produced and marketed the DOS-based MATCH program as a tool to aid the diagnosis of vegetation types from quadrat samples.

The published chapters include summary tables of the NVC data for each community, known as 'floristic tables', which give the average frequency and range of recorded Domin scores for each species. Frequency class is denoted on a scale of I to V, with V denoting a frequency of more than 80%. The species in classes IV and V are termed 'constant' species and are arranged at the top of the floristic table. I would recommend reading the full explanatory text on floristic tables in the chapters, as a full understanding of these is of key importance in understanding and using the NVC.

#### NVC names, codes and conventions

NVC communities are identified by a one or two-letter code (as shown in Table 1) and each one is numbered consecutively (e.g. 'MG1'). Sub-communities are denoted by lowercase letter suffixes ('MG1a'), but some communities are not further subdivided. Communities and sub-communities also have a technical name which incorporates one or more scientific names of the component species. The community name may have up to three of the constant species, whilst the sub-community names usually comprise one or two constant or 'preferential' species (see Floristic analysis, below). Examples are MG1a Arrhenatherum elatius grassland, Festuca rubra sub-community and U1d Festuca ovina-Agrostis capillaris-Rumex acetosella grassland, Anthoxanthum odoratum-Lotus corniculatus sub-community. The community names usually include the broad vegetation type at the end, such as 'grassland', 'woodland', etc., but many types are simply referred to as 'communities', e.g. U20 Pteridium aquilinum-Galium saxatile community (i.e. Bracken stands).

The use of bold to indicate the NVC code and underlining for the name is my own convention which I would recommend for use in written reports. Repeated use of the full names can, however, become tedious and unnecessary, so I would suggest using the full name on the first mention in a report and only the code thereafter, without the emboldening. However, in order to make reports more readable and understandable to the nonspecialist it is often preferable to use a shortened name for NVC types, which can then be repeated after the first mention of the full name. These 'nicknames' can incorporate scientific or English names of plants or any term that adequately describes the vegetation type. For example, MG1 could be referred to as 'Arrhenatherum' grassland', 'False Oat-grass grassland' or 'rough neutral grassland'. I prefer the second of these even though it does not easily roll off the tongue! Neil Sanderson has coined the term 'parched acid grassland' for U1 Festuca ovina-Agrostis capillaris-Rumex acetosella grassland (the commonest type of acid grassland in southern Britain) amongst others. Nicknames are useful for map legends where the full NVC name may be too long.

Since the NVC was published the names of many plants included in the names have of course changed, but I would advocate strict adherence to the Rodwell names, where necessary showing the current scientific name in square brackets. For example: OV1 Viola arvensis-Aphanes microcarpa [=A. australis] community and **SM14** *Halimione portulacoides* [=*Atriplex portulacoides*] salt-marsh community. The equals sign could be omitted. I also prefer to follow Rodwell's hyphenation conventions for the vegetation types included as part of the names, such as 'salt-marsh', 'rush-pasture' and 'tall-herb fen', which these days tend to be written as 'saltmarsh' 'rush pasture' and 'tall herb fen'. Since these are well-known terms in general use this is probably down to personal choice but I would argue that using 'subcommunity' instead of 'sub-community' is scientifically incorrect as the latter term is the one coined by Rodwell.

#### Transitions, mosaics and 'non-standard' types

NVC types are best regarded as 'nodes in a continuum of variation', and as such it is often the case that an area of vegetation being studied will not exactly match the defined communities or sub-communities but lie somewhere between two or more types. Examples of such vegetation are usually referred to as 'transitions', though when describing these in non-technical reports it may be preferable to refer to them as being 'intermediate' In my opinion a 'transition' implies that the vegetation is changing from one type to another; however, this may not necessarily be the case and in any case it will usually be difficult to deduce the direction of a trend during a one-off survey (except perhaps where vegetation is changing through natural succession).

Another feature of vegetation is the 'mosaic' effect where two types occur together over an area in an intimate pattern. This is usually caused by fine-scale variations in soil type or other environmental factors. In my experience mosaics are rather rare in lowland habitats. Examples include stands of rush pasture occurring in grazed meadows, and saltmarsh on finely dissected intertidal mud, where species such as *Atriplex portulacoides* (Sea-purslane) and *Puccinellia maritima* (Common Saltmarsh-grass) grow at slightly different elevations. In the published accounts Rodwell gives useful information on transitions, mosaics and other types of variation for each community under the sections on 'Zonation and succession'.

Where it is clear that a sampled area of vegetation does not clearly fit to a defined NVC type or transition, or is perhaps an impoverished (atypically species poor) version, it is quite acceptable to give it a new name simply for the purposes of mapping it or referring to it in a survey report. Alternatively, surveyors will refer to an area of vegetation having an 'affinity' to a particular NVC type, implying that there is not an exact fit (however, this term is over-used). Such 'non-standard' types of vegetation can be referred to by nicknames as described above, but it is probably not good practice to invent NVC-style community and sub-community names for them, as this could cause confusion.

In some situations, invented names are needed to refer to vegetation types in reports because the NVC name or definition is too broad or misleading. A good example of this relates to **W21a** <u>Crataegus monogyna-Hedera</u> <u>helix scrub, Hedera helix-Urtica dioica sub-community</u>. This type actually encompasses a broad range of scrub, hedgerow and secondary woodland types in lowland Britain, so in a vegetation survey report one might refer to 'Hawthorn-dominated hedgerow' or 'Hawthorn/ Blackthorn scrub' for example.

#### Environmental attributes and indicator species

Although the NVC is primarily a floristic classification, the understanding of habitat associations and the influence of environmental factors on vegetation is fundamental to the undertaking of any vegetation survey work or analysis. Rodwell provides detailed accounts of these aspects in the published chapters. A knowledge of habitat associations can assist with the identification of NVC types, particularly where data on some species is lacking; for example when a grassland being surveyed has just been mown or is looked at out of season. If an impoverished stand of vegetation is encountered, an assessment of the habitat and management of the site might enable one to deduce which NVC type it might be related to. Generally, however, one should not jump to conclusions as to the type of vegetation occurring at a site based predominantly on habitat and environmental characteristics.

Quite often, of course, there are strong, direct links between the floristics of a stand of vegetation and its environmental influences. For example *Urtica dioica* (Common Nettle) nearly always signifies high levels of nitrates in the soil, usually caused by deposition of natural manure or chemical fertilisers. We say that nettle is an 'indicator' of nutrient enrichment. Other species may indicate the degree of waterlogging or dryness of the soil, its base status or salinity, the intensity of grazing or even the presence of rabbits.

Theoretically, all plant species will have a certain range of environmental conditions in which they can germinate, grow and reproduce. Some species will have a narrow range of tolerance to an environmental variable and so may be suitable as indicators with respect to that variable, whilst others may have a wider range of tolerance and so not suitable as an indicator. Under certain circumstances such species may be referred to as 'specialists' and 'generalists'. In plant ecology the relationships to edaphic, climatic, biotic and anthropogenic influences are often inter-related and therefore not always straightforward to understand, but getting to know the ecological requirements of plant species is fundamental to the study of vegetation. In this regard Hill et al. (2004) and Grime et al. (2007) are useful reference sources.

#### Floristic analysis

In the NVC accounts Rodwell gives great weight to 'preferential' and 'differential' species which are used to differentiate between vegetation types, particularly at the sub-community level. Preferential species are those which tend to have a higher than average frequency within a certain sub-community and differential species a lower than average frequency (i.e. with respect to the community as a whole). Some of the preferential species are well known indicator species, e.g. *Avenula pratensis* (Meadow Oat-grass), which is a 'strict calcicole' of chalk and limestone grassland. However, many such species do not necessarily relate to a single, discernible, environmental variable and for the purposes of defining and distinguishing sub-communities it is the species associations that are important.

The published volumes each contain a useful index at the back which lists all plant species mentioned in the accounts, giving the NVC community in which the species occurs. Species that are constant in the community are shown in bold and those constant in one or more sub-communities are shown in italic. When finding an uncommon or unusual species in an area of vegetation, reference to these indexes can be helpful in suggesting a possible diagnosis.

When trying to match site survey data to the NVC floristic tables it may be necessary to interpret differences in species composition or frequency quite carefully. There are many factors to consider as to why differences may exist. Most importantly the NVC datasets for each community cover all (or most) of the range of that community in the UK and are usually made up of between 100 and 500 samples (though some, such as CG2, exceed 800 samples and some weed communities have fewer than 50). The floristic tables distil all that information into summary form and species recorded at lower than 5% frequency are omitted. Therefore, purely for statistical reasons survey data from a limited, often uniform survey area can differ from the national dataset summarised in the floristic tables. Normally, however, most of the NVC constant species should be present at the local level. These sorts of sampling differences also have implications for analysis using computer software, as anomalous results can be easily be produced, especially with small samples. Needless to say, the NVC written descriptions should always be read in conjunction with the floristic tables when attempting to match a set of sample data to the NVC.

A second reason for disparities between a set of sample data and the published NVC data relates to apparent under-sampling over parts of the country during the NVC fieldwork and data compilation in the late 1970s. An additional problem is that in a few cases vegetation has changed since that time (particularly aquatic vegetation). In particular, grassland and coastal vegetation appears to have been under-sampled from Hampshire and southeast England, with the result that several grassland species which we would regard as widespread here are under-represented or missing from the published floristic tables. Furthermore, some types of coastal vegetation found here do not fit into the defined NVC communities. Examples of species missing from the floristic tables include Anacamptis morio (Green-winged Orchid), Chamaemelum nobile (Chamomile), Hordeum secalinum (Meadow Barley), Ranunculus sardous (Hairy Buttercup), Senecio erucifolius (Hoary Ragwort) and Trifolium fragiferum (Strawberry Clover). Anacamptis morio is, however, mentioned in the text account for MG5 (for which it is a well-known indicator). Hordeum secalinum is included only in the floristic table for MG9 Holcus lanatus-Deschampsia cespitosa grassland, though in fact it is much more distinctive of flood pasture falling under MG7c and MG7d. Admittedly, some of these species are uncommon in our county.

After the last volume of the NVC was finally published in 2000, Rodwell *et al.* (2000) also produced what in present-day terminology might be described as a 'washup' report which includes definitions of a number of 'missing' communities and sub-communities (amongst others). No fewer than 50 new communities are suggested, though these are mainly likely to occur in transitional, marginal, temporary or fragmented habitats. They were not given NVC-style names or codes (the authors advocated that most need to be properly sampled in order to characterise them). One example is a new sub-community which Rodwell states would probably fall under **MG6** *Lolium perenne-Cynosurus cristatus* grassland, distributed in 'inland clay pasture and coastal reclaimed coastal marshes around the Thames and perhaps also the Severn'... (quoting a pers. comm. source), '...with *Ranunculus sardous, Hordeum secalinum* and *Trifolium fragiferum*'. As noted above, such vegetation also occurs in Hampshire!

With a few important exceptions very little work has been done since the above review, but in general the published volumes have stood the test of time and remain a testament to what was a brilliant scientific piece of work by Rodwell and his collaborators. The NVC is a mine of information for anyone embarking on the study of vegetation in the British Isles.

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# **News and Views**

# Purple Toothwort *Lathraea clandestina* growing five feet above ground in VC12

#### A note by Steve Povey

In April this year (2015), while surveying a piece of private woodland alongside the River Rother between Liss and Petersfield at SU7625 in VC12, I noticed some distance away in the fork of a Poplar (*Populus* sp.) what looked like a piece of purple-coloured plastic netting. With curiosity getting the better of me, I decided to take a closer look. What I discovered left me somewhat aghast! In the fork of this tree at a height of approximately 1.5m was a large plant of Purple Toothwort - *Lathraea clandestina*. I have seen many colonies of this strange toothwort over the years but never growing in such a position.



Steve Povey examining Purple Toothwort *Lathraea clandestina* in the fork of a Poplar near Liss, 12 April 2015

The question I asked on finding this arboreal plant was 'how could it have got there?' I have several possible answers but favour, first, that the seed, which floats (Atkinson 1996) found its way into this fork when the river was in flood and when the fork was perhaps lower than today (the Rother is known to frequently flood to a height of 1m or more in this particular area) and second, that plants of *L. clandestina* growing around the base this tree, of which there were many, may have found their way into this fork via the method by which seeds of this species are known to be dispersed. '*The seeds are explosively ejected, and they may be thrown for a considerable distance.*' (Atkinson 1996, from Druce 1925 & Ridley 1930).

According to Atkinson *L. clandestina 'is occasionally* found up to several metres above the ground in old willow trees, presumably having grown up through cracks from the ground.' I could find no evidence that this had happened in this instance and suspect that either seeds had germinated in the fork, or possibly that a piece of plant had somehow found its way there. We will never know, but I would suggest from my knowledge of this species, that this particular plant could be aged to at least 20-25 years.

Purple Toothwort is native from Italy in the East, through Belgium and France down as far as the Pyrenees. It was apparently first introduced to Britain in the 1880s. It has been successfully introduced to many gardens from where in a few places it has escaped and become well naturalised; as here in this part of East Hampshire in VC12. Several colonies of *L. clandestina* are established along the course of the Rother through this part of Hampshire, no doubt originally having come from plants successfully introduced from seed to the garden of Greatham Mill, SU7630 (3 miles to the north), sometime in the late 1960s.

#### Reference

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### Photographs of Brambles A note by John Norton



Rubus moylei flower (with 7 petals) (an abundant Hampshire species), Gosport, 20 June 2015 (John Norton)

During the months of June and July over the last 10 years I have been slowly learning the brambles (Rubus spp.) of Hampshire and West Sussex under the tutelage of our resident expert David Allen. One thing he suggested I do from the start was to take photographs of them in the field to capture their distinctive characters, especially of the flowers, which are largely lost when specimens are pressed. However, I have only been able to take what I regard as 'decent' pictures over the last two seasons following the purchase of a higher megapixel DSLR camera. I have now started building a web-based gallery of bramble photos (mostly taken in these two counties), with some easy-to-understand information on identification features and taxonomy. So far 21 species representing all of the typical sections and series have been included as a introductory 'taster' (there are probably 80-100 fairly common and widespread species in Hampshire!). The pages can be viewed at http://www. jnecology.com/brambles.htm.

#### Free to a good home

Dr Steve Jackson has been trying to collect back copies of *Watsonia* and *BSBI News*, but in doing so he has accumulated lots of duplicates so would like to pass them on to any interested botanists. He has the following to give away free to a good home:

*Watsonia* (the journal of the Botanical Society of the British Isles): vol. 5 (1963) to vol. 28 (2010) with some missing issues, but not many. Plus the subsequent *New Journal of Botany* vol. 1. Must go as one lot!

**BSBI** News (the bulletin of the BSBI but also includes lots of shorter articles on plants): no. 9 (1975) to no. 119 (2012). Must go as one lot!

If you would like to have these publications, please get in touch with Steve at drsteven.jackson@btinternet.com.

# Recording

#### VC11 Notes and Records

#### Compiled by Martin Rand (July 2015)

Again the Atlas 2020 recording has thrown up plenty of records among both our notable natives and the everincreasing number of spreading non-natives. Space here doesn't permit publishing all the records for the notable plants, so I restrict entries to those where there's been a significant gap in time since the last record at the location. Otherwise the policy is to publish new 2km (or sometimes site) records for notables and new 10km and vice-county records for the rest. Plantings in churchyards, parks / gardens and urban / suburban settings without mention of regeneration or spread are not listed, but I retain them on the database. Plantings in the broader countryside are usually included. Even if you didn't get your name in lights, your record is still valued and adds to the knowledge of our flora.

The BSBI / Hampshire Flora Group *Taraxacum* (Dandelion) workshop threw up an enormous number of new vicecounty records, as reported elsewhere in this issue. The most gratifying feature was a number of species indicative of 'good' habitat. Species such as these certainly deserve wider study in the county. A full list will appear in the next issue.

We are currently half way through a recording programme for wetland plants in and around Hatchet Pond, Beaulieu. The full results of this will also appear in the next *Flora News*, but it has been very informative already. Some species have proved reassuringly widespread, others (particularly aquatics and marginal plants) less so, but seasonal effects may be playing a part here.

Among the pleasures of being a recorder are the invitations to visit 'unknown territory' - usually private land owned or managed by people who want to commit to doing the best thing for nature on their patch. First this season I had the opportunity to visit the peripheral



Peloric Lesser Butterfly-orchid *Platanthera bifolia*, nr. Wilverley, 23 June 2015 (*Roger Powley*)

grounds of the Caravan Club site at Rookesbury Park, which has some excellent flushed grassland on a springline, with both Early and Southern Marsh-orchids among other things; and some good dry turf with some of the less usual Clovers and other species of sandy soils. Then came a piece of ancient semi-natural woodland near Fordingbridge which has passed out of the ownership of the MOD into private hands, and like many of the interesting woodlands in the area lies on the boundary of the Chalk and Reading Beds, with an intriguing mixture of plants of both calcareous and acid soils. A sizeable part of the area was clear-felled and ground made up by the MOD for vehicle testing in the past. While this is hardly pristine habitat, it is now supporting an excellent range of plants of dry and wet ground in slightly weird associations. Finally, I spent a happy half day on pastures in and around Ampfield. None of these were exactly the stuff that SSSIs are made of, but all were interesting. The drier parts had a huge profusion of common grassland plants, Common Centaury (Centaurium erythraea) turning large tracts pink in places; but the best areas were small flushes and marshes fed by the spring line at the junction of Bagshot Sands and London Clay. One marsh with a large number of Southern Marsh-orchid (Dactylorhiza praetermissa) and Common Spotted-orchid (D. fuchsii) had exceptional quantities of their hybrid, D. x grandis, another had a few spikes of the much less common D. x hallii which involves the Heath Spotted-orchid (D. maculata) instead. There were no rarities here but it was good to find that communities supporting a good range of Sedge species along with plants like Marsh Speedwell *Veronica scutellata* and Tufted Forget-me-not *Myosotis laxa* aren't entirely eradicated from ordinary countryside away from the New Forest.

I have been sent a number of interesting photos of Orchids this spring and summer. One was of plants that looked very convincing as Marsh Fragrant-orchids *Gymnadenia densiflora* from a second spot on Martin Down, and a much drier one than the first location. This is not unknown behaviour for this species. Then there was a series of pictures of Heath Spotted-orchids showing a remarkable range of variation in markings, in a population on Southampton Common. Some had almost solid carmine labella like the form *rhodochila* of *D. fuchsii*. Apparently the variability at this site is wellknown to orchid aficionados, but the range this year was exceptional.

Finally, Roger Powley sent me photos of peloric Lesser Butterfly-orchids *Platanthera bifolia* near Wilverley in the New Forest. Normally these kinds of floral distortion don't appeal to me much, but these are stunningly attractive. Roger has kindly allowed us to use one of his photos for *Flora News*.

#### The codings at the front of each plant are:

\* = Hampshire notable (\*\* = British or English Red List). I list these whenever I have a record for a tetrad that is either new, or the first for a long time (usually taken as about 25 years, but for species 'on the brink' it can be shorter). However the account would be long and tedious in the case of some plants now on the English Red List that are widespread in Hampshire, so I have summarised tetrads for these unless the record is a significant extension to the known range. A year in brackets indicates when last recorded in the tetrad; no brackets means a new tetrad record.

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

**NN** = other Neophyte Non-native. Defining Neophyte (arrived after 1500) or Archaeophyte (arrived by 1500) in a local context is beset with difficulty, but I use this category if the plant in the given location is outside its generally agreed native range and can reasonably be inferred to have got there recently by human agency whether intentional or not. That includes plants that are native elsewhere in Britain, or even nearby in other habitats. Generally I list these if they are new vice-county records, new to a hectad or the first for a long time. I mostly exclude patently planted trees and shrubs occurring in gardens, municipal parks and cemeteries unless they are also self-establishing or very likely to do so. However I keep records for them on the database so records are welcome, provided you state that they are 'Planted' if the only individuals clearly are planted, or 'Introduced' if they are spreading naturally from original plantings.

**NA** = **Native or Archaeophyte**. Again, I list these if they are new vice-county records, new to a hectad or the first for a long time.

#### Abbreviations for recorders and determiners are:

AHP = Andrew Powling; ALe = Andrew Leonard; AMC = Andy Cross; ARGM = Tony Mundell; ATh = Alan Thurbon; BGo = Barry Goater; BF = Brian Fellows; BMd = Ben Mead; BSBI = BSBI field meeting (leader's initials in brackets); CC = Clive Chatters; CWW = Charles Whitworth; DHu = David Hughes; DL = David Leadbetter; DN = Dawn Nelson; EAP = Ted Pratt; EJC = Eric Clement; FAW = Felicity Woodhead; GCo = Ginnie Copsey; GFa = Geoff Farwell; GHo = George Hounsome; GK = Geoffrey Kitchener; HFG = Hampshire Flora Group meeting (leader's initials in brackets); JAN = John Norton; JMill = Joel Miller; JOa = Jill Oakley; JPa = Jo Parmenter; MPa = Mary Parker, MR = Martin Rand; MWR = Mike Rowe; MWS = Malcolm Storey; NAS = Neil Sanderson; NW = Nick Woods; PAM = Pat Mundell; PET = Paul Toynton; PM = Peter Marston; RCR = Clare Rand; RPH = Robin Harley; SP = Steve Povey; WR = Wolfgang Ritter.

NN *Abies alba* (European Silver-fir): Sopley East, Clockhouse Copse, SZ1697; 20 Jun 2014; FAW. Mature, very tall. First for SZ19.

**IN** *Acaena novae-zelandiae* (Pirri-pirri-bur): Bournemouth Central, Meyrick Park, S to golf club, Wessex Way, SZ0891; 06 May 2014; FAW. At SZ 08210 91791. First for SZ09.

**NN** *Acer platanoides* (Norway Maple): Eyeworth Pond, SU227145; 25 Sep 2014; PM. Young tree west of pond. First for SU21.

NN Acer saccharinum (Silver Maple): North of Ocknell Inclosure, SU247121; 04 Nov 2014; PM. Young tree 5 metres tall at SU2477 1219. First for SU21. Crabdens (Horndean) area, SU6713; 02 Jul 2015; AHP & EJC. Escape. First for SU61. Queens Park East, Queens Park from QP S Drive car park to pond, SZ1193; 21 May 2014; FAW. First for SZ19.

**NA** *Aethusa cynapium subsp. agrestis* (Fool's Parsley): Bournemouth Hospital, Hospital grounds, car park C, SZ1294; 28 Aug 2014; FAW. First for SZ19.

\*\* **NA** *Agrostemma githago* (Corncockle): East Meon and N and W of East Meon, SU6822; 28 Aug 2014; AHP & EJC. From wild flower mix? First for SU62.

**NN** *Alcea rosea* (Hollyhock): Shawford, SU471240; 12 Jul 2014; PM. Plant with pink flowers at SU4716 2406. First for SU42.

**NN** *Allium roseum* (Rosy Garlic): Milford on Sea (NW), SZ2892; 19 May 2014. Several plants (var. bulbiferum) in 'natural' vegetation on roadside opposite houses, Manor Road, SZ 2866 9253. First for SZ29.

NN *Allium sativum* (Garlic): Park Lane, SU581174; 22 Apr 2015; GCo. Large grass triangle at junction with Vicarage Lane. First for SU51.

**NN** *Allium triquetrum* (Three-cornered Garlic): Breamore Churchyard, SU153188; 24 Apr 2015; BSBI [MR] det. MR; Introduced. First for SU11.

NN *Alnus cordata* (Italian Alder): Kings Somborne, SU360311; 30 Apr 2015; MR & GCo; Planted. First for SU33.

**NN** *Ammi majus* (Bullwort): Nutburn, SU397202; 28 Sep 2014; PM. Flowering/fruiting beside pavement near allotments on east side of Nutburn Road. First for SU32.

\*\* **NA** *Anacamptis morio* (Green-winged Orchid): Avon Heath CP Visitor Centre, South Park, tumuli 9a, tractorshed, SU1202; 16 May 2014; FAW. Three flowers at 12500 02239 comp 9a. **First for tetrad since 1985**. Godshill, SU17791495; 08 May 2014; PET. **First for tetrad since ?1960s**. Testwood Lakes lower carpark, SU347152; 16 May 2015; CC. In atypical habitat of tallish mesotrophic grassland of Holcus lanatus, Achill' mill, Geranium dissectum, Plantago lanc', Galium aparine and a very stocky Leuc' chrysanthemeum. **New tetrad**.

NA Anagallis arvensis subsp. arvensis f. lilacina (Scarlet Pimpernel): Bournemouth Airport NW, East Parley, Chapel Lane, Track, SZ1098; 23 Sep 2014; FAW. New vice-county record.

**NN** *Anchusa officinalis* (Alkanet): Durley Copse, SU5017; 15 Mar 2014; GCo. First for SU52.

\* **NA** *Anisantha madritensis* (Compact Brome): E of Grans Barrow, Rockbourne, SU093199; 19 Jun 2015; MR & RCR det. MR; Introduced. Group of 5 plants in arable margin, ?seed contaminant. **First for SU01**. NA Arctium lappa (Greater Burdock): Bratley Plain, SU2108; 25 Sep 2014; MWR. Layby, A31, SU 2169 0835. First for SU20. Brockenhurst (Ivy Wood area), SU3102; 29 Aug 2014; MWR. 1 plant, roadside, Mill Lane, SU 3130 0249. First for SU30.

NA Asplenium ceterach (Rustyback): Bath Road Emsworth, SU747058; 02 Aug 2014; ALe. Rare, house wall. New tetrad.

**NN** *Aster laevis* (Glaucous Michaelmas-daisy): Kings Park, Rec area, N of Athl. Stadium, to E, cemetery, verges, SZ1192; 09 Sep 2014; FAW. Var laevis. First for SZ19.

NA *Athyrium filix-femina* (Lady-fern): Southsea, Clarence Parade, SZ64259855; 26 Aug 2014; ALe. First for SZ69.

**NN** *Aubrieta deltoidea* (Aubretia): Kings Somborne churchyard, SU360310; 30 Apr 2015; MR & GCo; Introduced. Churchyard wall. **First for SU33**.

\*\* NA Baldellia ranunculoides (Lesser Water-plantain): Furzey Lodge Area, SU3602; 16 Jun 2014; MWR. Ssp. ranunculoides, frequent in slow stream, SU 3627 0261. First localised tetrad record. Pottern Ford area, SU3607; 30 Jun 2014; MWR. Ssp. ranunculoides, c 14 plants, SU 3686 0712. First localised tetrad record.

**NN** *Berberis julianae* (Chinese Barberry): Somerford, Normandy Drive meadow to east, comp 5., SZ1793; 18 Jun 2014; FAW; Planted. First for SZ19.

**NN** *Berberis wilsoniae* (Mrs Wilson's Barberry): Somerford, Normandy Drive meadow to east, comp 5., SZ1793; 18 Jun 2014; FAW; Planted. First for SZ19.

**NN** *Bergenia crassifolia* (Elephant-ears): Highcliffe Castle, St Marks Churchyards, SZ2093; 12 Mar 2014; FAW; Planted. Probably established. First for SZ29.

\*\* **NA** *Botrychium lunaria* (Moonwort): Linwood, SU180093; 28 Apr 2015; MWR. 1 plant, N side of road, SU 1809 0931. More found by Jo and Ashley Basil 08 and 09/06/2015. Appleslade Bottom, SU18090932; 09 Jun 2015; ALe. Locations of c. 25 plants confirmed by A Leonard and A Basil on 9/6/2015 as SU18095 09323, SU18097 09320, SU18093 09326, SU18091 09321, SU18092 09321, SU18082 09324, SU18126 09325, SU18125 09320. **New tetrad**.

\* **NA** *Bromus commutatus* (Meadow Brome): Hursley, SU428244; 22 Jun 2014; MR & RCR det. MR. Single tuft on margin of winter wheat below Ladwell. **New tetrad**. Hambledon, 1 mile to east, SU6614; 18 Jun 2015; AHP & EJC. **New tetrad**. Sowley Brooms area, SZ3696; 22 Jun 2014; MWR. A few plants at edge of wheat field, SZ 3604 9690. **New tetrad**.

\* NA Bromus racemosus (Smooth Brome): North of Lovedean, SU6813; 21 Aug 2014; AHP. New tetrad. Crabdens (Horndean) area, SU6713; 02 Jul 2015; AHP & EJC. SU67791326. New tetrad. S of Kingsland Copse, SU665250; 29 Jul 2014; MR, MPa & GCo; locally frequent. New tetrad. S of Old Down Farm, SU673245; 29 Jul 2014; MR, MPa & GCo; locally frequent. New tetrad. North of West Meon, SU6425; 07 Aug 2014; AHP & EJC. New tetrad.

\*\* NA *Bromus secalinus* (Rye Brome): Purbrook, SU6508; 19 Jul 2014; GFa. Abundant in wheat crop at SU652087. New tetrad. Crabdens (Horndean) area, SU6713; 02 Jul 2015; AHP & EJC. SU67791326. First for SU61. S of Kingsland Copse, SU665250; 29 Jul 2014; MR, MPa & GCo; occasional. New tetrad. W of Tigwell, SU677247; 29 Jul 2014; MR, MPa & GCo; occasional. New tetrad. Hordle (E side), SZ2795; 08 Aug 2014; MWR. Several plants, rough field edge (flax field), SZ 2777 9536. First for SZ29.

**NA** *Calystegia silvatica subsp. disjuncta* (Large Bindweed): Winkton, SZ159953; 12 Sep 2014; EAP. var. zonata. W of road, SZ15979535. **First for SZ19**.

**NN** *Capsella rubella* (Pink Shepherd's-purse): Nr Cobden Bridge, Southampton, SU436143; 05 May 2015; JAN; 1 plant. Immediately north of the small jetty. Grid ref c. SU4369 1439. First for SU41.



Moonwort *Botrychium lunaria*, Linwood, 9 June 2015 (Ashley Basil)

\* NA Carex montana (Soft-leaved Sedge): Avon Heath CP North, path N from Visitor Centre, SU1203; 01 Aug 2014; FAW. New tetrad. Ditchend Bottom, SU189147; 13 May 2015; MR & GCo; locally frequent. On drier tops of hummocks in hummocky wet heath. New tetrad.

IN *Carpobrotus edulis* (Hottentot-fig): Hayling Island, The Kench, SU690000; 19 May 2015; DN. Just a small patch. First for SU60.

NA *Catapodium marinum* (Sea Fern-grass): Emsworth, SU746060; 25 Jun 2015; BF det. conf. MR; rare. St James Road. New tetrad.

*Catapodium marinum* (Sea Fern-grass): Bournemouth Pier, West Cliff, SZ0890; 08 Jun 2014; FAW. First for SZ09.

**NA** *Catapodium rigidum* (Fern-grass): Bournemouth Pier, West Cliff, SZ0890; 08 Jun 2014; FAW. Moordown St Johns, East, Highfield Rd, Ensbury underpass, SZ0894; 19 Sep 2014; FAW. Wimborne Rd Cemetery East, Wimborne Rd Cemetery east part, SZ0992; 30 Jun 2014; FAW. First for SZ09.

NN Cedrus atlantica (Atlas Cedar): Hatch Grange area, SU4614; 16 Sep 2014; MWR. Planted in grass field, Hatch Grange, SU 4669 1467. Probably cv 'Glauca'. First for SU41. Bournemouth Central, Horseshoe Common, E side, roadsides, SZ0991; 08 Sep 2014; FAW. Bournemouth Central, Horseshoe Common, W side, pond, SZ0891; 08 Sep 2014; FAW. *f. glaucissima*: Moordown St Johns, East, St Johns churchyard, Victoria Park, SZ0894; 25 Sep 2014; FAW. First for SZ09.

**NN** *Cedrus deodara* (Deodar): North Waterlooville inc. Queen's Inclosure and Park Wood., SU6810; 30 Aug 2014; AHP. First for SU60. Meyrick Park East, Wimborne Rd Cemetery west part, SZ0892; 30 Jun 2014; FAW. Wimborne Rd Cemetery East, Wimborne Rd Cemetery east part, SZ0992; 30 Jun 2014; FAW. Bournemouth Central, Horseshoe Common, E side, roadsides, SZ0991; 08 Sep 2014; FAW. First for SZ09. Thorney Hill, All Saints Church, playing field, C road by Shirley Common, SZ1999; 25 Jun 2014; FAW. First for SZ19.

**NA** *Centaurea debeauxii* (Chalk Knapweed): Thorney Hill, All Saints Church, playing field, C road by Shirley Common, SZ1999; 25 Jun 2014; FAW. Hurn Bridge, lanes, river, fields, woodland edges, SZ1296; 02 Jul 2014; FAW. First for SZ19.

**NN** *Centaurea montana* (Perennial Cornflower): Hillstreet, SU341164; 11 May 2014; PM. Flowering on verge on west side of road at SU3419 1649. First for SU31.

\*\* **NA** *Centunculus minimus* (Chaffweed): Norleywood, SZ3597; 06 Aug 2014; MWR. Recently-cleared roadside ditch, Norleywood Road, SZ 3536 9784, with Radiola linoides and Isolepis setacea. **New tetrad**.

NN *Ceratochloa cathartica* (Rescue Brome): St Leonards, SU1103; 28 Sep 2014; MWR. Urban verge, corner of Malmesbury Road and Heather Close, SU 1113 0335. First for SU10.

NN Chamaecyparis lawsoniana (Lawson's Cypress): Mayhill, SU5917; 18 Mar 2014; GCo. First for SU51.

NN *Chamaecyparis pisifera* (Sawara Cypress): Sopley, Sopley Cemetery, pig field, road verges, SZ1597; 07 Sep 2014; FAW. First for SZ19.

\*\* NA *Chamaemelum nobile* (Chamomile): Fritham Plain West, SW corner of square, SU2113; 27 Jul 2014; FAW. 21926 13048. New tetrad.

**NN** *Chenopodium quinoa* (Quinoa): East Parley Common, East Parley track, tracks to E, Parley lakes, SZ1099; 26 Sep 2014; FAW; sown. Bournemouth Hospital, Hospital grounds, car park C, SZ1294; 28 Aug 2014; FAW. First for SZ19.

**NN** *Colchicum autumnale* (Meadow Saffron): Hurn Forest East, North, Bostwick Lane, heath to N, SZ1299; 05 Sep 2014; FAW; opposite mobile home site. **First for SZ19**.

**NN** *Cordyline australis* (Cabbage-palm): Dores Lane, Hursley, SU406263; 06 Apr 2015; MR. Obvious garden throw-out, now established with massive twin stems in hedgerow on E side of lane. First for SU42.

**NN** *Cosmos bipinnatus* (Mexican Aster): East Parley Common, East Parley track, tracks to E, Parley lakes, SZ1099; 26 Sep 2014; FAW; Established. Iford Bridge, North, river banks to bridge upstream, SZ1393; 22 Sep 2014; FAW; sown 'wild flower' area. **First for SZ19**.

NN Cotoneaster conspicuus (Tibetan Cotoneaster): Ashley, SU1304; 21 Sep 2014; MWR. Abundantly planted by A31, SU 1318 0439; also a few specimens probably bird-sown. First for SU10. Wildern (W side), SU4813; 30 Sep 2014; MWR. Roadside, Charles Watts Way (A 334), SU 4837 1339, presumed planted. First for SU41.

NN Cotoneaster dielsianus (Diels' Cotoneaster): Lodge Hill, SW Newtown, SU6012; 30 Apr 2015; AHP & EJC. First for SU61.

**NN** *Crataegus laevigata* (Midland Hawthorn): Dibden, SU4008; 20 Apr 2015; MWR. Roadside hedge, Main Road, SU 4023 0846. First for SU40. Winton Rec, Winton Recreation Ground, SZ0993; 22 May 2014; FAW. red, pink. First for SZ09.

NN Crataegus x media (C. monogyna x laevigata): Lodge Hill, SW Newtown, SU602125; 30 Apr 2015; AHP & EJC. SU60251250. First for SU61.

**NN** *Crocus chrysanthus* (Golden Crocus): Romsey East, SU366210; 15 Feb 2015; PM. Several groups of yellow Golden Crocus and several groups of white Crocus chrysanthus 'Snow Bunting' flowering on wide grass verge on south side of Botley Road at SU3663 2107. First for SU32.

NN Crocus x luteus (Yellow Crocus (C. angustifolius x flavus)): Eling, SU365123; 08 Feb 2015; PM. 5 groups together in cemetery at SU3657 1239. First for SU32. Cemetery, Pine Road, Hiltingbury, SU429220; 09 Feb 2014; MR. Established introduction. First for SU42.

NN Cupressus macrocarpa (Monterey Cypress): Boltons Bench Cemetery, SU308082; 17 Apr 2014; MR, GCo & BGo. First for SU30. NN Cyclamen coum (Eastern Sowbread): Winchester road, SU56301327; 28 Feb 2015; GCo. First for SU51.

**NN** *Cyclamen hederifolium* (Sowbread): Whitsbury, SU1218; 28 Apr 2015; DHu; rare. South to Rockbourne. Pokesdown, Kings Park, Petersfield Rd car park and Kings Park Dr, SZ1292; 16 Mar 2014; FAW. Queens Park West, Strouden Playing Field, south, SZ1093; 09 Mar 2014; FAW; escape. sp. may be C. hederifolium or graecum . **First for SZ19**.

NN Cyperus eragrostis (Pale Galingale): Exbury, SZ4199; 15 Nov 2014; GCo. First for SZ49.

\* NA Dactylorhiza incarnata subsp. incarnata (Early Marshorchid): Rookesbury Park, SU590120; 19 May 2015; MR & RCR; occasional. Scattered on damp flushed slope around SU5905 1208. New tetrad.

NA Dactylorhiza x hallii (D. maculata x praetermissa): Highwood, SU16850686; 03 Jun 2014; DHu; frequent. Watermeadows south of lane. New tetrad.

**NN** *Datura stramonium* (Thorn-apple): Longcross Plain, south of, SU245148; 13 Aug 2014; PM. Including one large fruiting plant beside entrance to farm. First for SU21 since ?1960s. Parley Court, Parley Manor, Stour Valley Way, footpaths, tracks, SZ0997; 30 Sep 2014; FAW. At 09622 97174 on edge of maize crop, several. First for SZ09.

NN Dicentra formosa (Bleeding-heart): Barton on Sea, SZ244932; 21 Apr 2015; DL; introduced. S side of passage N of wood, Barton-on-Sea (24418 93273). White form. First for SZ29.

NN *Digitalis grandiflora* (Yellow Foxglove): Upham, SU540206; 20 Jun 2015; GCo. Bank outside garden, probably escape. First for SU52.

NA Diplotaxis tenuifolia (Perennial Wall-rocket): St Leonards, SU1103; 28 Sep 2014; MWR. 1 large plant by A31, SU 1170 0344. First for SU10.

NN Dracunculus vulgaris (Dragon Arum): Fairmile, Marsh Lane, SZ1494; 19 Jun 2014; FAW. At 14697 94666, 2 fls sev pls, also 14863 94726, sev fls 2 plants, + 4 uprooted pls. First for SZ19. \* NA Dryopteris x deweveri (D. carthusiana x dilatata): Kingston North Common, SU146032; 07 May 2014; MR, FAW et al. With both parents, S edge of pond, SU1469 0321. New tetrad. NN Echinochloa colona (Shama Millet): Bournemouth Hospital, Hospital grounds, car park C, SZ1294; 28 Aug 2014; FAW. First for SZ19.

\* NA *Epilobium lanceolatum* (Spear-leaved Willowherb): Eastleigh, SU440182; 04 Sep 2014; MWR. 1 plant, SU 4408 1828. New tetrad.

*Epilobium lanceolatum* (Spear-leaved Willowherb): Tetrads: SU41E, SU41P, SZ29B, SZ29H.

\* NA *Epilobium roseum* (Pale Willowherb): Somerford, Staple Cross, Ambury Lane, SZ1793; 03 Aug 2014; FAW. First for tetrad since 1965.

**NA** *Epilobium x aggregatum (E. montanum x obscurum)*: Eastleigh (Fleming Park area), SU4418; 04 Sep 2014; MWR det. GK. Edge of grassy space by hedge, Passfield Avenue, SU 4427 1820. This hybrid 'most likely' rather than *E. montanum x E. tetragonum* (GDK). **First for SU41**.

NA *Epilobium x mentiens (E. tetragonum x ciliatum)*: Wildern (W side), SU4813; 30 Sep 2014; MWR det. GK. Roadside, Charles Watts Way (A334), SU 4838 1341. E. tetragonum 'most likely' as 1st parent (GDK). First for SU41.

\* **NA** *Equisetum x litorale* (Shore Horsetail (*E. arvense x fluviatile*)): Chewton Bunny North, Chewton Bunny Mill Lane to N, SZ2293; 19 May 2014; FAW. **First for tetrad since 1984**.

NN Erica vagans (Cornish Heath): Wimborne Rd Cemetery East, Wimborne Rd Cemetery east part, SZ0992; 30 Jun 2014; FAW. Seedling growing away from parent not planted. First for SZ09 since 1889. N of Sway, SZ280997; 24 Aug 2014; MWR conf. EJC. W of Marlpit Oak.1 small plant in flower, presumed planted, SZ 2807 9976, with Calluna vulgaris and Erica tetralix. First for SZ19 since 1899.

**NN** *Erigeron karvinskianus* (Mexican Fleabane): Hayling Island, The Kench, SU690000; 19 May 2015; DN. First for SU60.

\*\* NA *Eriophorum angustifolium* (Common Cottongrass): Steamer Point BoC, SZ197929; 27 Jun 2015; DL. Priory Pond. New tetrad.

\* NA *Erodium moschatum* (Musk Stork's-bill): Tetrads: SU41W, SZ19G, SZ29W.

\*\* **NA** *Erysimum cheiranthoides* (Treacle-mustard): Ashley, Castleman trailway to east from car park, Weston lane, SU1304; 14 Jul 2014; FAW. **New tetrad**.

**NN** *Euonymus japonicus* (Evergreen Spindle): Highcliffe to Milford Cliffs BoC, SZ2193; 27 Jun 2015; DL. First for SZ29. Galley Hill area, SZ3197; 07 May 2015; MWR. Planted by A337, SZ 3157 9762. First for SZ39.

NN Euphorbia amygdaloides subsp. robbiae (Turkish Wood Spurge): Kings Somborne, SU363311; 30 Apr 2015; MR & GCo. Introduced. First for SU33.

**NN** *Euphorbia characias subsp. characias* (Mediterranean Spurge): Woodside, SZ3294; 06 May 2014; MWR. 1 very large plant (present for years) on roadside by garden, Ridgeway Lane, SZ 3211 9402, with Brunnera macrophylla. **First for SZ39**.

NN Euphorbia characias subsp. veneta (Mediterranean Spurge): Petersfield, West, SU7523; 31 Mar 2015; DN & JOa det. DN. Established from raised bed above at SU75942391. First for SU72.

**NN** *Euphorbia cyparissias* (Cypress Spurge): Little Lions Farm, Castleman Trailway S from Burton Close, SU1004; 04 May 2014; FAW. **New tetrad**. Somerford, Staple Cross, Ambury Lane, SZ1793; 03 Aug 2014; FAW. **New tetrad**. Thorney Hill, All Saints Church, playing field, C road by Shirley Common, SZ1999; 25 Jun 2014; FAW. **New tetrad**.

NN *Euphorbia oblongata* (Balkan Spurge): Soberton Heath 1km north east, SU6114; 07 May 2015; AHP. Garden escape. First for SU61.

NN *Euphorbia stricta* (Upright Spurge): Ashley, SZ255961; 16 Jul 2014; MWR. c 10 plants, SZ 2555 9612. First for SZ29.

\*\* **NA** *Euphrasia confusa* (Confused Eyebright): Grange Estate, Hurn Forest, St Leonards Peat South, SU1101; 22 Aug 2014; FAW. **New tetrad**. Cowards Marsh, Cowards Marsh north part, SZ1595; 21 Sep 2014; FAW. **First for SZ19**.

\*\* NA *Euphrasia nemorosa* (Common Eyebright): Tetrads: SU30Q, SU40R, SU61Y, SU62L, SU62M, SU71P, SZ29Z.

**IN** *Fallopia baldschuanica* (Russian-vine): Shrover (Horndean) area, SU6712; 02 Jul 2015; AHP & EJC. Escaping from garden and overgrowing hedge. First for SU61.

**NN** *Festuca brevipila* (Hard Fescue): Breamore Churchyard, SU153188; 24 Apr 2015; BSBI [MR] det. MR; rare, introduced. On imported gravel on grave, SU1536 1885. First for SU12.

**NN** *Festuca longifolia* (Blue Fescue): St Leonards Hospital South, Hurn Forest North, rides N of St L P, SU1001; 22 Aug 2014; FAW. First for SU10.

\*\* **NA** *Filago vulgaris* (Common Cudweed): St Leonards Hospital South, Hurn Forest North, forest cycleway, SU1001; 17 May 2014; FAW. **New Tetrads: SU10A, SU51K**.

\* NN *Fritillaria meleagris* (Fritillary): Wellow. North-east of, SU310193; 13 Apr 2014; PM. 15 purple and 1 white flowering plants on green triangle at junction between Romsey Road and Whinwhistle Road at SU3104 1938 presumed planted. New tetrad.

NN *Galanthus elwesii* (Greater Snowdrop): Colebrook Street Park, SU484292; 12 Feb 2015; GCo. First for SU42.

NA Galium album (Hedge Bedstraw): Moordown, SZ0994; 12 Jun 2014; FAW. First for SZ09. **IN** *Gaultheria shallon* (Shallon): Ringwood Forest, SU114084; 03 Sep 2014; MR; locally abundant. Dominating patch in plantation edge by ride. **New tetrad**. Hurn Forest West, Hurn Forest, main track, alder carr, rides, SZ1199; 05 Sep 2014; FAW. At 11815 99685. **New tetrad**. Fillybrook, Matchams Lane, car park, woods, E side woods, verge, SZ1298; 06 Sep 2014; FAW. At 12881 98994. Hurn Forest East, Hurn Forest, main track, woods to E,, SZ1299; 06 Sep 2014; FAW. At 12884 99001. Week Common, Matchams Lane woods by A338, ski centre, lake, SZ1399; 06 Sep 2014; FAW. At 13061 99762. **New tetrad**.

\*\* NA *Genista anglica* (Petty Whin): Harvest Slade Bottom, SU210065; Jun 2015; JPa. New tetrad.

NN *Geranium endressii* (French Crane's-bill): Shrover (Horndean) area, SU6712; 02 Jul 2015; AHP & EJC. Garden throw-out, in hedge beside layby. First for SU61.

**?NN** *Geranium lucidum* (Shining Crane's-bill): Cadnam, SU291138; 14 Jun 2015; PM. Small patch on west side of Cadnam Lane at SU2912 1381. First for SU21.

*Geranium lucidum* (Shining Crane's-bill): Fishlake Meadows, SU354221; 22 Mar 2015; PM. Large areas on both sides of footpath at SU3542 2211. Halterworth, SU377217; 08 Jun 2014; PM. Large patch flowering/fruiting on south side of Highwood Lane at SU3772 2177. First for SU32.

\* NA *Geranium rotundifolium* (Round-leaved Crane's-bill): Tetrads: SU41U, SU60V, SU70D, SZ29M, SZ39E, SZ39I.

**NN** *Geranium yeoi* (Greater Herb-Robert): Druitt Gardens, SZ157927; 28 Apr 2015; RPH. First for SZ19.

\*\* **NN** *Glebionis segetum* (Corn Marigold): Burton North, B road, back road to Avon Valley Path, stream, SZ1695; 16 Sep 2014; FAW; Planted. **New tetrad**.

**NA** *Glyceria declinata* (Small Sweet-grass): Parley Common South, East, W of bridleway, round solar fence, wood, SZ0998; 26 Sep 2014; FAW. First for SZ09.

\*\* **NA** *Gnaphalium sylvaticum* (Heath Cudweed): Fillybrook, Height Restriction Zone, field, pig field, woods to, SZ1298; 17 Sep 2014; FAW. 12702 98993. First for SZ19. Beaulieu Heath, SZ368975; 14 Sep 2014; CWW. Pond next to the road. New tetrad.

\* NN Helleborus foetidus (Stinking Hellebore): Lions Hill, Back Of Beyond campsite, heath, Moors River, Sharma, SU1003; 27 Aug 2014; FAW. First for SU10. Weston, SW of, SU7221; 07 Apr 2015; DN & JOa det. DN. Garden escape. New tetrad. Angels Cottage area, SZ2593; 26 Apr 2014; MWR. 1 large plant, rough ground opposite houses, Barton Common Lane, SZ 2504 9365; presumed throwout. New tetrad.

NN *Hemerocallis lilioasphodelus* (Yellow Day-lily): Highcliffe to Milford Cliffs BoC, SZ2193; 27 Jun 2015; DL. New vice-county record.

**IN** *Heracleum mantegazzianum* (Giant Hogweed): Avon Heath (DCC), SU1203; 09 Apr 2015; MWR. 16 small plants by A31 (S side), especially by and to E of bridge, SU 1222 0377. Avon Heath CP North, path N from Visitor Centre, SU1203; 01 Aug 2014; FAW. A31 verges, behind bus stop by pedestrian bridge at SU 12200 03754. New tetrad. Fisher's Pond, SU488208; 09 May 2014; GCo. New tetrad.

**?NA** *Heracleum sphondylium subsp. flavescens* (Hogweed): Hurn, Pussex Lane, junction by Hurn Bridge to airport SW Sector, SZ1297; 02 Jul 2014; FAW. **New vice-county record**.

**?NA** *Hieracium maculatum agg.* (A hawkweed): Grans Barrow, Rockbourne, SU090197; 19 Jun 2015; MR & RCR det. MR; locally abundant. Probably H. spilophaeum. First for SU11.

NA *Hieracium sabaudum* (Autumn Hawkweed): Copythorne, SU305145; 12 Oct 2014; PM. Several flowering at SU3050 1456. First for SU31. Durley, SU5016; 21 Aug 2014; GCo. First for SU51.

NN *Hirschfeldia incana* (Hoary Mustard): Biddenfield Lane, SU5411; 30 Jun 2015; GCo. First for SU51.

**NA** *Hyacinthoides non-scripta* (Bluebell): Lions Hill Farm West, Castleman Trailway W past Lions Hill Farm, SU0903; 04 May 2014; FAW. First for SU00.

\*\* NA Hypericum elodes (Marsh St John's-wort): Wattons Ford Common, woods, lanes, river bank, SU1301; 16 Jul 2014; FAW. At 13303 01202. New tetrad.

**NN** *Hypericum x inodorum* (Tall Tutsan (*H. androsaemum* x *hircinum*)): Moordown St Johns, East, St Johns churchyard, Victoria Park, SZ0894; 25 Sep 2014; FAW. First for SZ09.

**NN** *Jasminum officinale* (Summer Jasmine): Moordown St Johns, East, St Johns churchyard, Victoria Park, SZ0894; 25 Sep 2014; FAW. First for SZ09.

**NA** *Juncus conglomeratus var. subuliflorus* (Jointed Rush): Bransgore North, Elmers Copse, spring, Prinks Wd, common, roads, SZ1898; 10 Sep 2014; FAW. 18083 98934. First for SZ19.

\*\* **NA** *Juniperus communis* (Juniper): The Mountain (South), SU649229; 01 Oct 2014; JMill; rare. HBIC Hampshire Habitat Survey Partnership Project 2014 SU65022277, SU65022274 Full GR: SU64902295. **First for tetrad since 1984**. Broughton Down, N of, SU284342; 12 Sep 2014; ARGM & PAM det. ARGM. A single male bush about 1 metre high and wide, at SU2841 3429 rather hidden in a hedgerow. **First for tetrad since 1987**.

**NN** *Kerria japonica* (Kerria): Calmore, SU348147; 05 Apr 2015; PM. Flore pleno. Large shrub flowering beside stream on south side of A36 at SU3484 1477. **First for SU31**.

\*\* **NA** *Knautia arvensis* (Field Scabious): Eastleigh (Fleming Park area), SU4418; 04 Sep 2014; MWR. 1 plant by car park, SU 4412 1882 (also on rough ground nearby). **New tetrad**.

**NA** *Lactuca virosa* (Great Lettuce): Upper Lazy Bushes, SU216083; 25 Sep 2014; MWR. 1 plant, SU 2169 0834. Also in layby: Silene x hampeana, Barbarea vulgaris, Reseda luteola, Brassica napus, Geranium pyrenaicum, Arctium lappa, Erigeron acris, Conyza floribunda, Senecio squalidus. First for SU20. B3037, SU509190; 16 Jun 2015; GCo. First confirmed for SU51.

**NN** *Laurus nobilis* (Bay): Petersfield, West, SU7523; 31 Mar 2015; DN & JOa det. DN. Status unknown at SU756232, S side of Heath Rd. First for SU72.

NA Lemna gibba (Fat Duckweed): Tetrads: SU10A, SU33Q, SU42U, SU42V, SU50L, SU60A, SU62S, SZ19D.

**NA** *Lepidium campestre* (Field Pepperwort): Roundabout of Chestnut Avenue northwest of M3, SU43211864; 26 Apr 2015; WR; rare. Road verge at south-eastern corner. New tetrad.

NN *Leucojum aestivum* (Summer Snowflake): Lower Canterton, SU271131; 09 Apr 2015; PM. Flowering at edge of Pipers Copse at SU2718 1318. First for SU21.

**NN** *Linum usitatissimum* (Flax): South Bockhampton, SZ1795; 22 Jun 2014; FAW. Crop escape. First for SZ19.

**NA** *Lithospermum officinale* (Common Gromwell): N of Wash Pit, Blashford Lakes, SU157067; 10 Sep 2014; MR & GCo; occasional. First for SU10.

**IN** *Lonicera japonica* (Japanese Honeysuckle): Rudley Mill and surroundings, SU6212; 11 Jun 2015; AHP & EJC. First for SU61. Moordown, Moordown Recreation Ground, Sylmor Gardens, SZ0994; 12 Jun 2014; FAW. First for SZ09.

NN Lotus corniculatus var. sativus (Fodder Bird's-foot-trefoil): E of Old Idsworth Church, SU743141; 24 Apr 2014; MR, EJC & GCo. Component of resown grassland in field corner. First for SU71.

\* **NA** *Ludwigia palustris* (Hampshire-purslane): New Forest: Ober Water (SSSI), SU260033; Jun 2015; JPa. 2606103307 through to 2605603317. New tetrad.

\* NA *Luzula forsteri* (Southern Wood-rush): Tetrads: SU61R, SU70P.

**NN** *Meconopsis cambrica* (Welsh Poppy): Romsey West, SU348210; 08 Jun 2014; PM. Flowering/fruiting beside road at SU3486 2106. First for SU32.

NN *Melilotus albus* (White Melilot): Chewton Bunny North, Chewton Bunny Mill Lane to N, SZ2293; 19 May 2014; FAW. First for SZ29.

**NN** *Melissa officinalis* (Balm): Winton, Ridley Rd by St Lukes school, St Lukes Church grounds, SZ0893; 26 Jun 2014; FAW. First for SZ09.

**NN** *Mentha spicata* (Spear Mint): Parley Court, Parley Manor, Stour Valley Way, footpaths, tracks, SZ0997; 30 Sep 2014; FAW. First for SZ09.

\*\* NA *Moenchia erecta* (Upright Chickweed): Hengistbury Head, Hengistbury Head far end, SZ1890; 30 Apr 2014; FAW. New tetrad.

NN *Myosotis arvensis var. sylvestris* (Large-flowered Field Forgetme-not): King's Somborne, SU3631; 30 Apr 2015; MR & GCo. First for SU33. West Wood, Farley Mount, SU418303; 09 May 2015; MR & RCR det. MR. Dumped soil by ride. First for SU43. Opp. Fox and Hounds, SU49051985; 10 Jun 2015; GCo. First for SU41 since 1930.

\* **NA** *Myosotis secunda* (Creeping Forget-me-not): Moors Valley CP, car park to Kings Farm, rides past Go Ape, SU1005; 04 Sep 2014; FAW. **New tetrad**.

\*\* **NA** *Myosurus minimus* (Mousetail): Linwood, Toms Farm, SU187096; 28 Apr 2015; MWR. Well over 1000 plants at SU 1872 0967; smaller numbers extending to SU 1876 0975. **New** tetrad. Off Trojan Way, Crookhorn, SU685071; Apr 2015; EJC & GHo. On a housing estate in rather neglected amenity beds at SU68590719, in clayey soil on either side of a footpath. A scattering of plants in the original bed and a dense patch of them in a bed on the other side of the path. First seen 1992. **New tetrad**.

\* NA *Myriophyllum alterniflorum* (Alternate Water-milfoil): Christchurch Priory, Stanpit Marsh NW, Iron Boat + Central Marsh, SZ1692; 18 Jul 2014. Main path pool near iron boat. New tetrad.

NN *Narcissus hispanicus* (Spanish Daffodil): Keyhaven, SZ303910; 16 Mar 2014; MR & RCR det. MR. Pennington Sea Wall, SZ328928; 16 Mar 2014; MR & RCR det. MR. Among low scrub on back of sea wall. First for SZ39.

NN Narcissus x cyclazetta (Head-to-head Daffodil (N. tazetta x cyclamineus)): Hedge End (Wildern), SU4913; 05 Apr 2015; MWR. Planted on roadside, Locke Road, SU 4966 1396. First for SU41.

NA *Narthecium ossifragum* (Bog Asphodel): Grange Estate, Hurn Forest, St Leonards Peat South, SU1101; 22 Aug 2014; FAW. New tetrad.

**NN** *Nicotiana alata* (Sweet Tobacco): Galley Hill area, SZ3197; 06 Jun 2014; MWR conf. EJC. 1 plant, roadside (A337), SZ 3132 9799. First for SZ39.

NN *Nigella damascena* (Love-in-a-mist): Cadnam, SU299139; 14 Jun 2015; PM. A large plant with white flowers on rough ground on east side of Old Lyndhurst Road at SU2993 1396. First for SU21. Kings Somborne, SU360309; 30 Apr 2015; MR & GCo. Garden escape onto waste ground. First for SU33.

**NN** *Nymphaea marliacea* (Coloured Water-Iily): Lions Hill, Back Of Beyond campsite, heath, Moors River, Sharma, SU1003; 27 Aug 2014; FAW. Pink. First for SU10. East Parley Common, East Parley track, tracks to E, Parley lakes, SZ1099; 26 Sep 2014; FAW; Established. Red water Iily. First for SZ19.

\* NA *Oenanthe pimpinelloides* (Corky-fruited Water-dropwort): SU20R, SU61C, SU61D.

**NN** *Oenothera x fallax* (*O. glazioviana x biennis*): St Leonards, village hall, playing field, verges, SU1103; 27 Aug 2014; FAW. First for SU10.

\* **NA** *Ophioglossum azoricum* (Small Adder's-tongue): Appleslade Bottom, SU18090932; 09 Jun 2015; ALe; occasional. New tetrad. Black Down, SU355069; 18 May 2015; MR & AMC; rare. About 30% of plants in Ophioglossum population appeared to be this or intermediates. E bank of road, SU3555 0699. New tetrad.

**NN** Oxalis incarnata (Pale Pink-sorrel): Meyrick Park East, Wimborne Rd Cemetery west part, SZ0892; 30 Jun 2014; FAW. First for SZ09.

**NN** *Panicum capillare* (Witch-grass): Gibbet Firs, East Parley, track to Gibbet Firs, woods, SZ0999; 26 Sep 2014; FAW. First for SZ09.

NN *Panicum miliaceum* (Common Millet): North of West Meon, SU6425; 07 Aug 2014; AHP & EJC. From bird seed mix? First for SU62.

\* NA *Papaver dubium* (Long-headed Poppy): Tetrads: SU32K, SU60K, SU62L, SZ29G.

\* NA *Papaver lecoqii* (Yellow-juiced Poppy): Tetrads: SU41P, SU72Q.

\* NA *Paris quadrifolia* (Herb-paris): Weston, SW of, SU7221; 07 Apr 2015; DN & JOa det. DN. In Bopeep Copse. 3 at SU7221621515 9 at SU7219121491 - probably more, it was very young. First for tetrad since 1967.

**NN** *Parthenocissus quinquefolia* (Virginia-creeper): Kings Somborne, SU361310; 30 Apr 2015; MR & GCo. First for SU33. Fairmile, Marsh Lane, SZ1494; 19 Jun 2014; FAW. Up mature oak tree, at 14833 94715. Christchurch, SZ148946; 12 Sep 2014; EAP; 2plants. NW of road, SZ1484 9469. First for SZ19.

\* **?NA** *Persicaria bistorta* (Common Bistort): Danes Stream, Milford on Sea, SZ279921; 18 Jun 2015; DL. 1 plant by path at edge of wood, Studland Common at 27938 92192. First for SZ29.

\*\* **NA** *Persicaria minor* (Small Water-pepper): Anses Wood, SU224124; 27 Jul 2014; BSBI [MR] det. MR; rare. In dried-up gravelly bed of Dockens Water, unusually luxuriant. First for tetrad since 1975.

NA *Petroselinum segetum* (Corn Parsley): Everton, SZ288940; 12 May 2014; MWR. c 5 plants, SZ 2883 9405. New tetrad.

**NN** *Philadelphus 'Virginalis Group'* (Hairy Mock-orange): Sopley Church, mill, river and churchyard, SZ1596; 03 May 2014; FAW. South Bockhampton, SZ1795; 28 Apr 2014; FAW. As in 'Poland' (Lamoine group in Stace), on Hawthorn Rd, at S Bockhampton. First for SZ19.

**NN** *Picea abies* (Norway Spruce): Meyrick Park East, Meyrick Park from railway bridges south, SZ0892; 06 May 2014; FAW. First for SZ09.

\* **NA** *Pinguicula lusitanica* (Pale Butterwort): Smoky Hole area, SU2307; 09 Sep 2014; MWR. Several plants among Molinia tussocks in rather dry bog, SU 2306 0791. **New tetrad**.

**NN** *Pinus contorta subsp. contorta* (Lodgepole Pine): Bournemouth Hospital, Hospital grounds, car park C, SZ1294; 28 Aug 2014; FAW. In corner of car park C, staff area. **First for SZ19**.

\*\* **NA** *Plantago media* (Hoary Plantain): Bournemouth Hospital, Hospital grounds, car park C, SZ1294; 28 Aug 2014; FAW. At 12674 94470. **New tetrad**.

\* NA *Poa angustifolia* (Narrow-leaved Meadow-grass): Exton, SU611208; 30 May 2014; MR & RCR det. MR. Single tuft on wall top, N side of lane. **New tetrad**. Chewton Bunny (E side), SZ2293; 04 May 2014; MWR. For c 2m at edge of grass verge, A337, SZ 2285 9397. **New tetrad**.

\* **NA** *Poa bulbosa* (Bulbous Meadow-grass): End of Crableck Lane, Warsash, SU489084; 09 Apr 2015; MR. Just coming into flower. Patch less than 10cm x 10cm in informal car parking / turning area at end of lane. Area not searched exhaustively for more plants. **First for SU40**. Highcliffe, cliffs and cliff tops, SZ2193; 19 May 2014; FAW. At 21529 93183. **First for SZ29**.

\* NA *Poa infirma* (Early Meadow-grass): Hythe Village Marina, SU424084; 20 Feb 2015; MR & RCR det. MR; rare. Foot of

lamp-post on paved area near public hard. Anther size checked. **New tetrad**. Exbury, SU4200; 01 Apr 2015; DN & JOa det. DN. On edge of grass verge, west side of tearooms at Exbury Gardens. **New tetrad**. Lakeside North Harbour, SU64760491; 25 Mar 2015; CC; rare. Anthers were measured. **New tetrad**.

NA *Poa nemoralis* (Wood Meadow-grass): Blashford Lakes, SU1508; 29 Jun 2014; MWR. New tetrad.

**NN** *Polemonium caeruleum* (Jacob's-ladder): East Parley Common, East Parley track, tracks to E, Parley lakes, SZ1099; 26 Sep 2014; FAW; 0: Introduced. Garden throwout. First for SZ19.

\* **NA** *Polygonum rurivagum* (Cornfield Knotgrass): Fritham Plain, car park to Green Pond, W, track to SW, SU2213; 27 Jul 2014; FAW. Beside main track from car park. **New tetrad**.

**NN** *Pontederia cordata* (Pickerelweed): Lions Hill, Back Of Beyond campsite, heath, Moors River, Sharma, SU1003; 27 Aug 2014; FAW. In pond. First for SU10. Hurn Forest East, Matchams Lane verges, ski centre, SZ1299; 06 Sep 2014; FAW. Parley Green, around pond and habitations, Stour Valley Way, SZ1097; 30 Sep 2014; FAW. At 10176 97321. First for SZ19.

\*\* **NA** *Potentilla argentea* (Hoary Cinquefoil): Mudeford, Mudeford Community Centre Recreation Ground, SZ1892; 17 Jun 2014; FAW. 1826492891 pvmnt edge, 1 in tarmac, under + around barrier to rec, in long grass + herbs . **First for tetrad since 1950s**.

\* **NA** *Potentilla x italica (P. erecta x reptans)*: Hythe (Frostlane), SU4306; 18 Aug 2014; MWR. Or P. x mixta. Pavement by garden, Cormorant Drive, SU 4301 0686. **New tetrad**. Great Newbridge Copse, SZ3093; 15 Jul 2014; MWR. Or P. x mixta. Grassy roadside, Milford Road (A337), SZ 3006 9396. **New tetrad**.

\* NA Potentilla x mixta (P. anglica x reptans): Steamer Point BoC, SZ2093; 27 Jun 2015; DL. New tetrad.

**?NN** *Primula x polyantha* (False Oxlip (*P. veris x vulgaris*)): Wellow. North-east of, SU310193; 13 Apr 2014; PM. Flowering plant on green triangle at junction between Romsey Road and Whinwhistle Road at SU3105 1938. First for SU31.

NN Prunus cerasifera var. pissardii (Purple-leaved Cherry Plum): Dores Lane, Farley, SU403269; 06 Apr 2015; MR; 3 plants. Planted into roadside hedge and shelter belt beyond. First for SU42. Pokesdown, Kings Park, Petersfield Rd car park and Kings Park Dr, SZ1292; 16 Mar 2014; FAW. Friars Cliff, Steamer Point reserve, SZ1992; 13 Mar 2014; FAW. First for SZ19. Highcliffe Castle, St Marks Churchyards, SZ2093; 12 Mar 2014; FAW. Highcliffe Castle, Nea Meadows, SZ2093; 30 Mar 2014; FAW. First for SZ29.

NN *Prunus domestica subsp. domestica* (Plum): Newtown, north and north-east., SU6113; 30 Apr 2015; AHP & EJC; Planted. First for SU61.

**NN** *Prunus domestica subsp. insititia* (Damson / Bullace): Broughton NE monad, SU3133; 25 Jul 2014; MR & BMd det. MR; Introduced. **First for SU33**.

**NN** *Prunus serrulata* (Japanese Cherry): Hamble (NW part), SU4707; 19 Jun 2014; MWR. Planted in woodland strip; flore pleno. First for SU40. Hatch Grange area, SU4614; 16 Sep 2014; MWR. Planted in grass field, Hatch Grange, SU 4673 1476, and in churchyard, SU 4656 1410. First for SU41.

**NN** *Pseudofumaria alba* (Pale Corydalis): Kings Somborne, SU360309; 30 Apr 2015; MR & GCo. Garden escape onto waste ground. First for SU33.

NN *Pseudosasa japonica* (Arrow Bamboo): Penn's Place, SU7623; 23 Apr 2015; SP. Large clump at SU764 239. First for SU72.

**NN** *Pulmonaria officinalis* (Lungwort): Town Common, old railway line, heath east and west, lake, ponds, SZ1496; 15 Sep 2014; FAW; Escape. Hurn Bridge, lanes, river, fields, woodland edges, SZ1296; 02 Jul 2014; FAW; Escape. First for SZ19.

**NN** *Pyracantha coccinea* (Firethorn): Petersfield, West, SU7522; 31 Mar 2015; DN & JOa det. DN. Garden escape in crack on raised pavement Heath Rd West. First for SU72.

*Pyracantha coccinea* (Firethorn): Walkford, road verges, path through woods and stream, SZ2294; 17 Jun 2014; FAW. First for SZ29.

**NN** *Pyrus communis* (Pear): Soberton east, SU6116; 04 Jun 2015; AHP & EJC. One tree. First for SU51.

\* **NA** *Ranunculus aquatilis* (Common Water-crowfoot): Beaulieu, SU382028; 27 Apr 2015; MWR. Abundant over c 50 x 5m, just S of entrance to Motor Museum, SU 3826 0287. **New tetrad**.

\* NA *Ranunculus parviflorus* (Small-flowered Buttercup): Lower Canterton, west of, SU269133; 09 Apr 2015; PM. Small plant with one flower near ford east of Blackthorne's at SU2699 1339. First for SU21.

\* NA *Ranunculus sardous* (Hairy Buttercup): Tetrads: SU21G, SU51E, SZ29W (1979), SZ29Y.



Hairy Buttercup Ranunculus sardous, Mill Lawn, Burley, 23 June 2015 (Martin Rand)

NA *Reseda luteola* (Weld): Bratley Plain, SU2108; 25 Sep 2014; MWR. Layby, A31, SU 2168 0834. First for SU20.

**NN** *Ribes sanguineum* (Flowering Currant): Kings Somborne, SU353304; 01 Apr 2015; BSBI [MR] det. MR; 1 plant. Garden outcast into woodland strip. First for SU33.

NN Rosa gallica (Red Rose): Bournemouth Pier, West Cliff, SZ0890; 08 Jun 2014; FAW. First for SZ09.

**NN** *Rosa multiflora* (Many-flowered Rose): Iford Bridge, North, river banks to bridge upstream, SZ1393; 22 Sep 2014; FAW. First for SZ19.

\* NA Rosa obtusifolia (Round-leaved Dog-rose): Somerford, Normandy Drive meadow to east, comp 5., SZ1793; 18 Jun 2014; FAW. New tetrad.

NA Rosa rubiginosa (Sweet-briar): Knoll Down, Rockbourne, SU091191; 19 Jun 2015; MR & RCR det. MR; rare. Single bushes planted in replanted hedge line on VC boundary. First for SU01.

IN Rosa rugosa (Japanese Rose): Bournemouth Pier, West Cliff, SZ0890; 08 Jun 2014; FAW. First for SZ09.

\* **?NA** *Rosa spinosissima* (Burnet Rose): Wade Hill area, SU332160; 11 May 2014; PM. Large bush flowering on east side of Wade Hill Drove at SU3323 1600. First for SU31. Thorney Hill, All Saints Church, playing field, C road by Shirley Common, SZ1999; 25 Jun 2014; FAW. New tetrad.

\* NA *Rosa tomentosa* (Harsh Downy-rose): Shawford Down, SU469249; 27 Jun 2015; MR. Single chopped-down bush among swiped scrub with other Rosa spp. First for SU42 since 1988.

NN Rosmarinus officinalis (Rosemary): Week Wood, A338 verges, Matcham's Lane, SU1300; 05 Sep 2014; FAW. First for SU10.

NN *Rumex cristatus* (Greek Dock): A31 St Leonards, SU117034; 28 Jun 2015; MWS. First for SU10.

\* NA *Rumex pulcher* (Fiddle Dock): Jopps Common, MacPennys woodland, SZ1998; 10 Sep 2014; FAW. New tetrad.

\* **?NA** *Ruscus aculeatus* (Butcher's-broom): Moordown, Moordown Recreation Ground, Sylmor Gardens, SZ0994; 12 Jun 2014; FAW. In rec ground. Winton Rec, Winton Recreation Ground, SZ0993; 22 May 2014; FAW; established. First for SZ09.

\* NA Salix aurita (Eared Willow): S of Lodge Hill, SU198148; 13 May 2015; MR & GCo; 1 bush. In slope mire above stream. New tetrad. Furzey Lodge Area, SU3602; 16 Jun 2014; MWR. Bush at edge of bog, SU 3663 0262. First for tetrad since 1965. NN Salix elaeagnos (Olive Willow): Muscliff, Granby Road area, SZ0995; 24 Apr 2014; FAW. First for SZ09.

**?NN** Sanguisorba officinalis (Great Burnet): Parley Green, around pond and habitations, Stour Valley Way, SZ1097; 30 Sep 2014; FAW. First for SZ19.

**NN** *Saponaria officinalis* (Soapwort): Mottisfont, SU324267; 19 Aug 2014. Large patch of double-flowered variety on verge at SU3245 2679. First for SU32.

\* NA *Saxifraga tridactylites* (Rue-leaved Saxifrage): Petersfield Central (VC11 part), SU7423; 04 May 2015; SP. Many plants on top of wall in Station car-park at SU7433 2349. First for tetrad since 1930.

NN *Scilla siberica* (Siberian Squill): Lakewood, Highcliffe, SZ206941; 21 Apr 2015; DL. SZ2060 9418. First for SZ29.

NA Sedum album (White Stonecrop): Petersfield, West, SU7523; 31 Mar 2015; DN & JOa det. DN. First for SU72.

**NN** Sedum sexangulare (Tasteless Stonecrop): Mudeford, Mudeford Community Centre Recreation Ground, SZ1892; 17 Jun 2014; FAW. First for SZ19.

NN Senecio inaequidens (Narrow-leaved Ragwort): Bournemouth Central, Horseshoe Common, E side, roadsides, SZ0991; 08 Sep 2014; FAW. First for SZ09.

**NN** *Sisyrinchium montanum* (American Blue-eyed-grass): Ports Creek, Portsmouth, SU671042; 15 Jun 2015; ATh det. MR; 3 plants. Alongside a path on the north side of Ports Creek, Portsmouth. Grid ref. SU 6714 0424. ID'd from detailed photos and from tepal / bract measurements subsequently taken by AT MR's request. New tetrad.

\* **NA** *Sorbus torminalis* (Wild Service-tree): Spring Wood, Braishfield, SU370238; 28 Apr 2014; MR. Single tree planted in centre of wood. **New tetrad**.

NA *Spergularia marina* (Lesser Sea-spurrey): Scrape Bottom and Clayhill Bottom area, SU2301; 13 Sep 2014; MWR. Bare ground on roadside, Station Road, SU 2305 0122. First for SU20.

**NN** *Spiraea douglasii subsp. menziesii* (Steeplebush): Fairmile, Marsh Lane, SZ1494; 19 Jun 2014; FAW. **First for SZ19**.

\*\* **NA** *Spiranthes spiralis* (Autumn Lady's-tresses): Lymington (Buckland), SZ3196; 23 Aug 2014; MWR. 2 plants, urban verge, Southampton Road, SZ 3176 9603. **New tetrad**.

\*\* NA *Stachys arvensis* (Field Woundwort): Field north of Biddenfield farmhouse, SU554125; 18 Apr 2015; GCo. 20 plants. New tetrad.

\* **NA** *Stellaria neglecta* (Greater Chickweed): Puddleslosh Lane, Fordingbridge, SU139154; 23 Apr 2015; DL. A few plants, E side of verge, Puddleslosh Lane, Fordingbridge (13962 15470). **New tetrad**.

NN *Symphoricarpos x chenaultii* (Pink Snowberry): Bishopstoke, SU4619; 23 Sep 2014; MWR. Naturalised in recreation ground, Church Road, SU 4664 1943. First for SU41.

NN Symphytum tuberosum (Tuberous Comfrey): Ashley Heath, Castleman Trailway, N from Burton Close, SU1104; 04 May 2014; FAW. First for SU10.

\* NA *Thalictrum flavum* (Common Meadow-rue): E of East Moor Copse, Harbridge, SU146117; 15 May 2015; HFG [MR] det. MR; occasional. Scattered in tall herb fen vegetation. New tetrad.

\* NA *Torilis nodosa* (Knotted Hedge-parsley): Fratton, Portsmouth, SU6500; 25 Jun 2015; GFa; rare. Kingston Cemetery. First for tetrad since 1950. Moordown, Moordown Recreation Ground, Sylmor Gardens, SZ0994; 12 Jun 2014; FAW. First for SZ09. Barton on Sea (Durlston Court area), SZ243937; 04 Apr 2015; MWR. SZ 2431 9378. New tetrad.

\* NA *Trifolium ornithopodioides* (Bird's-foot Clover): Tetrads: SU10A, SU10B, SU51W, SZ39H.

\* NA *Trifolium scabrum* (Rough Clover): First for SU11. Also tetrads: SU20D, SU21A, SZ29B.

\* NA *Trifolium subterraneum* (Subterranean Clover): Tetrads: SU11X, SU30E, SU51W, SZ09W, SZ39Z.

\* **NA** *Trifolium suffocatum* (Suffocated Clover): Hayling Island, The Kench, SU690000; 19 May 2015; DN. SU6904 0000, quite a few plants in very short bare turf near parking area. **First for SU60**. Highcliffe, cliffs and cliff tops, SZ2193; 19 May 2014; FAW. At 21529 93183 with P bulbosa. **First for SZ29**.

**NN** *Tristagma uniflorum* (Spring Starflower): Barton on Sea (Durlston Court area), SZ2493; 04 Apr 2015; MWR. 1 plant on verge, Highlands Road, SZ 2433 9378 (rather rampant in garden c 3m away). First for SZ29.

**NN** *Tulipa gesneriana* (Garden Tulip): Keyhaven, SZ3091; 04 May 2015; MWR. 2 plants in flower at junction of footpaths, SZ 3074 9132. First for SZ39.

**?NA** *Typha angustifolia* (Lesser Bulrush): Parley Common South, East, W of bridleway, round solar fence, wood, SZ0998; 26 Sep 2014; FAW. At 09879 98671. First for SZ09.

**NA** *Typha x glauca (T. angustifolia* x *latifolia*): Lions Hill, Back Of Beyond campsite, heath, Moors River, Sharma, SU1003; 27 Aug 2014; FAW. **New tetrad**.

\* **NA** *Ulex gallii* (Western Gorse): Backley Plain, SU212072; 10 Feb 2015; NAS; locally abundant. Big area of Ulex gallii north of SU2137 0715 to SU2128 0729, where abundant, this was a transect through a band which appears to extend 100s metres west to east. Pod measurements from a sample of 10: mean 11.5mm standard deviation ?0.5. Nr Handy Cross, Backley Plain, SU212073; 10 Feb 2015; NAS. Above the [main U. gallii] band there was another big patch of Ulex gallii at SU2128 0736. **New tetrad**. Merritown, C road to Merritown Wood, Alice in W car park, footpath, SZ1197; 24 Sep 2014; FAW. **New tetrad**.

\* **NA** *Umbilicus rupestris* (Navelwort): Awbridge, SU325238; 04 Mar 2015; PM. Spreading along 5 metres of roadside bank on south side of Romsey Road at SU3254 2389. New tetrad.

*Umbilicus rupestris* (Navelwort): Hurn, Pussex Lane, junction by Hurn Bridge to airport SW Sector, SZ1297; 02 Jul 2014; FAW. At 12213 17588, 12210 97594, 12183 97633, many plants at each, and also scattered. **First for tetrad since 1984**.

\* **NA** *Urtica dioica subsp. galeopsifolia* (Stingless Nettle): Bishopstoke, SU4619; 23 Sep 2014; MWR conf. EJC. By River Itchen, Fair Oak Road (B3037), SU 4668 1913. First for SZ19. Sopley, lane by parish hall to N, Avon Valley Path north, SZ1597; 03 May 2014; FAW. New tetrad.

**NN** *Verbascum lychnitis* (White Mullein): Eastleigh, between Southampton Road and railway, SU45431807; 05 Jul 2015; WR. Opposite Chestnut Avenue. **New tetrad**.

NN Verbascum virgatum (Twiggy Mullein): Blashford Lakes, SU151081; 13 Jul 2014; NW. First for SU10.

\*\* NA *Veronica officinalis* (Heath Speedwell): Tetrads: SU11K, SU11P, SZ09W, SZ19N.

\*\* NA Viola canina (Heath Dog-violet): Little Cockley Plain, SU198153; 13 May 2015; MR & GCo; locally abundant.

Open ground in bed of old footings. **New tetrad**. Black Down, SU355070; 18 May 2015; MR & AMC det. MR; locally frequent. Both sides of road. **First for tetrad since 1953**.

**?NA** *Viola odorata var. imberbis* (Sweet Violet): Nursling Mill, SU351156; 05 Apr 2015; PM. Large patch flowering beside footpath south of mill at SU3517 1565. First for SU31.

NN Viola odorata var. praecox (Sweet Violet): Avon Heath (DCC), SU1203; 09 Apr 2015; MWR. Urban verge, Glenives Close, SU 1210 0383. First for SU10.

**NA** *Viola reichenbachiana* (Early Dog-violet): Parley Court South, Stour Valley N, Muscliff Riverside S, SZ0996; 24 Apr 2014; FAW. First for SZ09.

\*\* **NA** *Viola tricolor* (Wild Pansy): East of Croylands, Shootash, SU329226; 24 Mar 2014; PM. One plant with three flowers in stubble field at SU3295 2268. **First for SU32 since 1930**. Kings Park, Rec area, N of Athl. Stadium, to E, cemetery, verges, SZ1192; 09 Sep 2014; FAW. **New tetrad**.

NN Viola x wittrockiana (Garden Pansy): Soberton east, SU6116; 04 Jun 2015; AHP & EJC. Casual. First for SU61.

**NN** *Xanthocyparis nootkatensis* (Nootka Cypress): Iford Bridge, North, river banks to bridge upstream, SZ1393; 22 Sep 2014; FAW. First for SZ19.

\*\* NA *Zostera noltei* (Dwarf Eelgrass): Calshot Spit, SU48880250; 11 Jan 2015; CC; rare. New tetrad.

#### VC12 Records

#### Compiled by Tony Mundell (18 July 2015)

Here 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.

As usual I have omitted the 'SU' to save space and I remind you that inclusion of a record does not imply that there is public access, as some of these records were obtained during surveys at the owner's invitation. There have been some quite exciting finds during the last six months. Green hound's-tongue Cynoglossum germanicum was reported to me by Paula Marshall and has evidently been spread via its hooked seeds from its only known Hampshire colony some 300 metres away. An unusual grass that I am pretty sure can only be X Elytrordeum langei (Elytrigia repens x Hordeum secalinum) was found by Anna Stewart and me. A voucher specimen awaits expert confirmation and if correct it will be new for Hampshire. Sand Sedge Carex arenaria has been found for the first time on the NE heathlands, all previous VC12 records coming from further south on the Greensand Heaths around Woolmer. Another surprise was the discovery of Marsh Clubmoss Lycopodiella inundata new to the well-studied area of Eelmoor Marsh.

Simon Melville visited the known site for Greater Broomrape *Orobanche rapum-genistae* at Ashford Hill Meadows and amongst the 45 normal purplish-coloured spikes he found one that was bright yellow. It is well known that in Hampshire we have the bright yellow form of Ivy Broomrape *Orobanche hederae* forma *monochroma* in numerous sites around Winchester and Alresford but I have never heard of a yellow form of Greater Broomrape before. I presume it lacks the normal anthocyanin colouring.



Yellow form of Greater Broomrape Orobanche rapumgenistae, Ashford Hill Meadows, 11 June 2015 (Simon Melville)

Of course most of the unusual finds are of alien species. These include Lesser Canary-grass *Phalaris minor* (third record for Hants), Perfoliate Alexanders *Smyrnium perfoliatum* (second record for Hants, the previous being in 1932), White Butterbur *Petasites albus* (second record for Hants, the previous being in 1945), St Dabeoc's Heath *Daboecia cantabrica* (third record for Hants), Greater Honeywort *Cerinthe major* (fifth record for Hants) and Caucasian Comfrey *Symphytum caucasicum* (sixth record for Hants). Further details of these are given below.

On 14 July Steve Povey visited Blackmoor Fruit Farm to see if any of Lady Anne's old 'shoddy-weeds' were still around. He found, among one or two of the more common ones, Narrow Clover *Trifolium angustifolium* and Early Medick *Medicago praecox*, which shows that some are still hanging-on! These were last seen there in 1969 and 1972 respectively.

**Aconitum napellus subsp. napellus (Monk's-hood):** In damp area at Dipley 7411 5722 at edge of wood near footpath and houses. Probably originally planted but the native subspecies, Tony Mundell & Mary Parker 7 Apr 2015.

*Agrimonia procera* (Fragrant Agrimony): Hartfordbridge Flats 8064 5870, HFG 11 Jul 2015. Bramshill, one on south margin 7595 6131, Chris Hall 7 Jul 2015.

*Agrostis curtisii* (Bristle Bent): Hartfordbridge Flats, a few plants on raised bank at 7998 5861, HFG 11 Jul 2015.

*Allium paradoxum* (Few-flowered Garlic): Several patches alongside Whitmore Vale Road, Grayshott 872353, Steve Povey 17 Mar 2015. Small clump by National Trust car park, Headley



Lesser Canary-grass *Phalaris minor* specimen from Stratfield Saye, 25 June 2015 (*Tony Mundell*)

Down 836356, Steve Povey 31 Mar 2015. Well established on roadside near entrance to Conford Moor 830336, Steve Povey 24 Mar 2015.

*Allium roseum* (Rosy Garlic): In some quantity on lane-side bank, Ashford 742266, Steve Povey 13 Jun 2015.

**Allium triquetrum (Three-cornered Garlic):** Field bank near driveway to a house, Wolverton Common 574594, Sarah Ball & Sarah White 10 Jun 2015. Patch 2m x 0.5m on road verge E of Newtown at 4876 6325, Tony Mundell 14 Jun 2015.

*Alnus incana* (Grey Alder): At Stratfield Saye 6917 6047 beside stream, Tony Mundell & Anna Stewart 25 Jun 2015.

*Anacamptis morio* (Green-winged Orchid): 5,490 spikes systematically counted by about ten people on all grassland areas of the Headley Gravel Pit site 511627, Graham Dennis 17 May 2015.

*Anthemis cotula* (Stinking Chamomile): Four plants along recently sprayed edge of wheat crop, Ellisfield 644456, Geoffrey Farwell 26 Jun 2015.

*Anthriscus caucalis* (Bur Chervil): Several plants on shady bank 100m N of Springfield Nursery at Blackmoor 7708 3486, Steve Povey 11 Mar 2015.

*Argemone mexicana* (Mexican Poppy): Single plant growing in pavement beneath garden wall in Tanhouse Lane, Alton 715394, Steve Povey 7 May 2015.

*Asparagus officinalis* (Garden Asparagus): Single plant by roadside, Old Basing 679528, Adam Lucas 30 May 2015.

*Asplenium ceterach* (Rustyback): Chilbolton Village 393400, on old wall, Mike Wildish 20 May 2015. Single plant on roadside wall of Burgates Farm House, West Liss 7715 2873, Steve Povey 22 Apr 2015.

*Atropa belladonna* (Deadly Nightshade): Little Shoulder of Mutton 7402 2682, just starting to flower, also in Ashford Hangers above the path at 7420 2712, both Hants Flora Group 23 May 2015.

*Aucuba japonica* (Spotted-laurel): Chineham South and Daneshill North 6554, on wasteland, apparently not planted, Adam Lucas 27 Jun 2015.

*Azolla filiculoides* (Water Fern): Queen Elizabeth Park, a few fronds, north edge of pond amongst Lemna 8657 5607 Chris Hall 5 Mar 2015.

*Bromus racemosus* (Smooth Brome): Plentiful in damp, unimproved meadow, Crondall 8047 4832, 8058 4819 etc, Tony Mundell & Mary Parker 9 Jul 2015.

*Bromus secalinus* (Rye Brome): Locally plentiful at Crondall 8041 4834 near arable field corner, Tony Mundell & Mary Parker 9 Jul 2015.

*Calystegia pulchra* (Hairy Bindweed): Voucher specimen collected. Three plants in roadside garden hedge at Woolton Hill 4362 6229, Tony Mundell & Graeme Down 5 Jul 2015.

*Cardamine amara* (Large Bitter-cress): In several places in ditches and damp ground near River Wey, Passfield 8227 3413, Steve Povey 24 Mar 2015.

*Cardamine bulbifera* (Coralroot): Forma *ptarmicifolia* well established either side of path leading to woodland from National Trust car-park, Headley Down 836356, Steve Povey 31 Mar 2015.

*Cardamine raphanifolia* (Greater Cuckooflower): Three patches with numerous flowers beside Brookly Stream at 8185 5472, 8185 5471 and 8184 5470, plus another larger patch at 8177 5461, Tony Mundell 19 May 2015.

*Carex arenaria* (Sand Sedge): Cody Technology Park 8430 5381 forming a dense line for c. 9 metres along edge of a car park beside Buccaneer Way, Chris Hall 30 May 2015. Specimen confirmed by Tony Mundell. One patch in disused Sleaford Sandpit 805384, Steve Povey 11 May 2015.

*Carex canescens* (White Sedge): Still abundant at Fleet Pond 8237 5495, Tony Mundell 19 May 2015.

*Carex echinata* (Star Sedge): Beside footpath at Sydmonton Common 4935 6317, Tony Mundell 14 Jun 2015. Scattered plants in bog at Castle Bottom 798594, Tony Mundell & Mary



Greater Cuckooflower Cardamine rhaphanifolia, Brookly Stream, Fleet, 19 May 2015 (Tony Mundell)

Parker 18 Jun 2015. On turf scrape, c. 45 tufts Birch Bottom 7728 5925, Chris Hall 9 Jul 2015.

*Carex pallescens* (Pale Sedge): Five tufts Bramshill 7501 6177, Chris Hall 7 Jul 2015.

*Carex strigosa* (Thin-spiked Wood-sedge): Locally plentiful beside tracks at Lutcombe Bottom, e.g. 7336 2647 to 7335 2652, Hants Flora Group 23 May 2015. On road verge at Aldern Bridge 4903 6290, Tony Mundell 14 Jun 2015.

*Centaurium pulchellum* (Lesser Centaury): Many young rosettes beside track at Hawley Hill 8459 5889, Chris Hall 22 May 2015. *Centunculus minimus* (Chaffweed): One plant amongst *Radiola* on minor path at Cudbury 7615 6065 and eleven plants in damp area on Welsh Drive 7622 6056, both Chris Hall 9 Jul 2015.

*Cephalanthera damasonium* (White Helleborine): 20 new records so just a selection given here. 187 individual plants counted underneath a beech canopy on roadside, Redenham 291486, Graeme Davis 20 May 2015, some threatened by roadside cutting. 32 flowering spikes counted between Chilbolton 39732 37995 and 39750 37990, Glynne Evans 20 May 2015. Danebury 324375 at least 50 spikes, and 25 at 324374, along the south part of the rampart under beech, Mike Wildish 6 Jun 2015. Basingstoke at Shopmobility in area of recently cleared shrubs 6369 5209, also 6369 5205, 63715209 and Cross Street 6371 5203, Ed Rowsell 27 May 2015. Appleshaw, A342 roadside under beeches 2930 4844, Andrew Thompson 26 May 2015. Three plants in garden at 15 Southlea, Cliddesden, 6327 4951, Paul Beevers 13 Jun 2015.

*Cephalanthera longifolia* (Narrow-leaved Helleborine): 160 + spikes counted in main colony centred at Little Shoulder of Mutton 7404 2683 plus six outlier spikes at 7403 2683, Hants Flora Group 23 May 2015. Decreasing as area becoming overrun by scrub.

*Cerastium arvense* (Field Mouse-ear): Abundant over about 400 sq. m. around Worthy Down 4548 3547 on anthills etc in chalk

pasture, Martin Rand 11 May 2015, as noted by Andy Barker a few days previously. c. **40 plants (or stems):** at Eelmoor Marsh 8465 5347 on margin of Whirlwind Track, Chris Hall 24 Apr 2015. Specimen confirmed by Tony Mundell.

*Cerastium diffusum* (Sea Mouse-ear): Farnborough 866551 at the A327 roundabout, Chris Hall 15 Apr 2015.

*Ceratochloa carinata* (California Brome): Widely scattered in several places along bridleway west of Sherborne St John, e.g. many at 6137 5511 and 6141 5510, Tony Mundell, Adam Lucas & Mike Harrison 16 Jul 2015.

*Ceratochloa cathartica* (Rescue Brome): A patch at Brown Candover 5819 3965 extending along c.5 x 1m beside track to church, also along base of church wall at 5820 3970, and a huge patch several metres long at 5828 3969 beside the cricket pitch, Tony Mundell, Anna Stewart, Andrea Bassett & Loraine Martin 23 Jun 2015.

*Cerinthe major* (Greater Honeywort): Single plant of var. *purpurascens*, growing from beneath hedge alongside road in West Liss 7713 2862. Clearly not planted. Voucher specimen kept, Steve Povey 22 Apr 2015.

*Chrysosplenium alternifolium* (Alternate-leaved Golden-saxifrage): Around 200 + plants on damp ground beneath Poplars, Tankerdale Lane 769259, Steve Povey 11 Apr 2015. Around 25 plants on one small island in stream which feeds Lutcombe Pond at 7349 2643, only three of which were in flower, Steve Povey 9 Apr 2015.

*Cirsium acaule* (Dwarf Thistle): Single plant in north corner near top of area of chalk downland at Combe Wood 354597, Peter Billinghurst & Tony Mundell 16 Jun 2015. At Combe, Hog's Hole 360600, Peter Billinghurst 23 Jun 2015.

*Cirsium eriophorum* (Woolly Thistle): 4 plants at Combe, Summer Hill 3610 6118 and frequent along slope from 361612 to 363616, Peter Billinghurst 19 Jun 2015. Single plant at Combe Wood 3533 5987 beside Test Way, Tony Mundell & Peter Billinghurst 16 Jun 2015.

*Claytonia perfoliata* (Springbeauty): Wishanger (VC12 part) 841393, on bank among *Umbilicus rupestris*, Steve Povey 2 Apr 2015.

*Claytonia sibirica* (Pink Purslane): A couple of plants at Hartley Mauditt 7421 3658 under a hedge beside the road, Helen Boyce 16 May 2015. Wolverton Common 575598, in woods by stream where several paths converge, Sarah Ball & Sarah White 10 Jun 2015. Several plants beside footpath and on banks of stream, Hawkley 749306, Steve Povey 19 May 2015.

*Cornus mas* (Cornelian-cherry): Wood edge Linkenholt 3797 5998, Peter Billinghurst 23 Jun 2015.

*Corylus maxima* (Filbert): SW of West Worldham 739368, single plant of var. *purpurea* in hedgerow, away from nearest cottage, Steve Povey 25 May 2015.

*Crassula tillaea* (Mossy Stonecrop): Many plants, very locally abundant Hawley Hill 8459 5892, also along c. 8 metres of track side, c. 500 plants 8461 5892, Chris Hall 22 May 2015. Scattered on bare sandy ground at and around Broxhead Common 804374, Steve Povey 27 Apr 2015.

*Cynoglossum germanicum* (Green Hound's-tongue): A colony covering perhaps two or three square metres beside the Basingstoke Canal towpath where the strange seed pods first caught my eye in 2014, Paula Marshall 18 Jun 2015. Photos of plants in seed taken in June 2015 and identified by Kay Halley (of Group Facebook site 'Wildflowers of Britain and Ireland') and confirmed by Tony Mundell (who visited the site on 26 Jun 2015 and found about ten plants beside the WW2 Pill Box at 86058 52257). Evidently spread from the known main site in the woods between Shoe Lane, Farnborough and the army golf course where 153 plants were counted by Tony Mundell on 26 Jun 2015 spread across 859526, 860526, 861526 and 860527.

*Cyrtomium fortunei* (Japanese Holly-fern): Single plant at the side of the bridge onto Pondtail Heath at the end of Farnham Road 8275 5386, David Jewsbury 28 May 2015. [Originally thought by me to be House Holly-fern *C. falcatum*, but on seeing the photos (below) Martin Rand suggested that it may be *C. fortunei* and commented that the identification of this species is not helped by the fact that a large number of plants sold through 'the trade' as *C. falcatum* are actually *C. fortunei*. Fred Rumsey kindly confirmed the identification.



Japanese Holly-fern *Cyrtomium fortunei*, Pondtail Heath, 28 May 2015 (David Jewsbury)

**Daboecia cantabrica** (St Dabeoc's Heath): About 50 plants at Bramshott Common 8576 3276 shown to Pamela Lee by a fellow member of the Haslemere Nat. Hist. Soc. Half are pink and half white-flowered. First found by Dr Andy Swan. The site is well away from current buildings but is where thousands of Canadian troops were billeted during WW2.

**Darmera peltata (Indian-rhubarb):** Flowering in an inaccessible verge above the River Wey off Alton High Street behind Costa Coffee where the Wey heads towards a brewery. The odd-looking leaves were noted in March but are not visible now, Jonty Denton 16 May 2015, identified by Tony Mundell. Single large plant by footbridge over stream, Leckford Estate 373378, Martin Rand 21 Jun 2015.

*Dipsacus pilosus* (Small Teasel): Stratfield Saye 6898 6002 on stream bank, and 6916 6058 beside footpath, Tony Mundell & Anna Stewart 25 Jun 2015.

*Epilobium lanceolatum* (Spear-leaved Willowherb): A number of plants growing in stone walls near Headley Church 822363, Steve Povey 14 Apr 2015.

*Epilobium roseum* (Pale Willowherb): Verge of Cherrytree Track, North Eelmoor, two at 8415 5370, Chris Hall 30 May 2015.

*Epipactis purpurata* (Violet Helleborine): A solitary plant on roadside verge along College Lane, Ellisfield, Geoffrey Farwell 26 Jun 2015.

*Equisetum palustre* (Marsh Horsetail): Next to ditch by roadside, Old Basing 677525, Adam Lucas 30 May 2015.

*Eranthis hyemalis* (Winter Aconite): Amport, Roman Road, corner of road to Keepers Hill 303438, Graeme Davis 14 Apr 2015. In wood at Longparish 4375 4516, Simon Melville 20 May 2015.

*Erodium moschatum* (Musk Stork's-bill): Several densely glandular plants on wide grassy verge at Woolton Hill 4312 6203 near houses, Tony Mundell & Graeme Down 5 Jul 2015. Surprising number of plants in sandy arable field west of Blackmoor 778334, Steve Povey 14 Jul 2015.

*Euphorbia myrsinites* (Broad-leaved Glaucous-spurge): South of Monk Sherborne 6092 5498 by track with disturbed soil beside capped rubbish dump, Tony Mundell & Mike Harrison 16 Jul 2015..

*Euphorbia platyphyllos* (Broad-leaved Spurge): A few plants on raised bank of disturbed arable soil beside a footpath at Bradley 63926 41877 and 63911 41866, Tony Mundell 21 Jun 2015.

*Fallopia x bohemica* (Bohemian Knotweed *F. japonica x sachalinensis*): Voucher specimen retained. Large patch at Hartfordbridge Flats 8066 5866, HFG 11 Jul 2015.

*Filago minima* (Small Cudweed): A few plants scattered on bare sandy ground, Broxhead Common 804374, Steve Povey 27 Apr 2015. Eight young plants, Hawley Hill 8460 5891, Chris Hall 22 May 2015. Track junction, c. 80 plants Eversley Forest 7751 5947 and frequent along south margin of Sir Richard's Ride 776594 for some distance, both Chris Hall 9 Jul 2015.

*Filago vulgaris* (Common Cudweed): Connaught Road, Fleet 812542, c. 600 rosettes along 10 metre mown turf, Chris Hall 25 Apr 2015. Nine dead plants with seedlings germinating around them, Centre Hill 8419 5201, Chris Hall 20 Dec 2014.

*Filipendula vulgaris* (Dropwort): E of path, embayment into scrub / woodland, Worthy Grove 4546 3506, Martin Rand 11 May 2015.

*Fumaria muralis* subsp. *boraei* (Common Ramping-fumitory): Voucher specimen retained. At least a dozen plants scattered on B3011 road verge at Hazeley Lea from 7422 5937 to 7425 5926, Tony Mundell & Adam Lucas 15 May 2015.

*Galeopsis angustifolia* (Red Hemp-nettle): Micheldever Spoil Heaps 519444, more widespread and more numerous than previous years, Graham Dennis 18 Jul 2015.

**Galium parisiense** (Wall Bedstraw): Along the outside of the old wall at Old Basing (i.e. the road side) from 66145 52745 to 66155 52751 I estimate there were at least 150 plants, with another 50 on the inside of the wall along the same stretch. Also, along the outside wall from 66168 52758 to 66216 52772 there were probably a further 100 plants. Many in bud but none yet in flower, Judyth Swift 17 May 2015. Single patch on barish ground at Hartfordbridge Flats 8074 5861, HFG 11 Jul 2015.

**Genista anglica** (Petty Whin): Hazeley Heath, one at 76378 58203 in middle of one of the early scrapes positioned by Chris Hall in 2004. Probably two plants a metre apart in grazed area at 764217935.

One at 76302 58086 in ungrazed control area, also probably two plants a metre apart at 76307 58093. One at 76321 58110, one at 76320 58103 and one at 76431 58056 in ungrazed control area. All John Collman 7 May 2015.

*Geranium rotundifolium* (Round-leaved Crane's-bill): Longparish 4307 4451, single plant beside footpath, Simon Melville 20 May 2015. Many plants along grassy roadside bank at Dogmersfield 7863 5296, Tony Mundell 5 Apr 2015.

*Geum rivale* (Water Avens): A number of plants in the Hatch Reserve 678521, Adam Lucas 30 May 2015.

*Hedera colchica* (Persian Ivy): Plain green form in quantity along the base of a wooded slope below Hawkley Hurst 752305, Steve Povey 13 May 2015.

*Helleborus viridis* (Green Hellebore): 12 clumps at Squiresfield Hanger, nr Bradshott Hall 7614 3216 with 10 - 15 flowers per clump, Bill & Chris Wain 6 Apr 2015. Clump in bud at Lutcombe Bottom 7359 2640 near stream just below the pond, Steve Povey, Tony Mundell & Jill Oakley 1 Mar 2015. Eight plants NW of Ecchinswell 4955 6184 on roadside bank, Tony Mundell & Graeme Down 16 May 2015.

*Hordeum secalinum* (Meadow Barley): Stratfield Saye 687600, in meadow, Anna Stewart & Tony Mundell 25 Jun 2015. Locally plentiful in damp, unimproved meadow at Crondall 8058 4819 with much *Bromus racemosus*, Tony Mundell & Mary Parker 9 Jul 2015.

*Impatiens parviflora* (Small Balsam): Many plants among Himalayan Balsam on roadside at end of Tankerdale Lane, Flexcombe 769260, Steve Povey 11 Apr 2015.

*Juncus foliosus* (Leafy Rush): Four plants amongst much *Juncus bulbosus* at Eversley Common 7819 5947 in wet patch on gravelly track, Tony Mundell, Mary Parker & Guy Mason 18 Jun 2015.

*Juncus x kern-reichgeltii* (*J. conglomeratus x effusus*): At 7913 5964 beside track just outside Castle Bottom Reserve, with both parents, Tony Mundell, Mary Parker & Guy Mason 18 Jun 2015.

*Koeleria macrantha* (Crested Hair-grass): NW of Wherwell, S of Romsey Road 375411 on permissive headland path Mike Wildish 19 Jun 2015.

*Lactuca virosa* (Great Lettuce): Several plants on the banks of small stream at Binswood 7672 3665, Steve Povey 1 May 2015.

*Lathraea clandestina* (Purple Toothwort): Tankerdale Lane 768258, many plants beneath a large Poplar, and also a large clump growing in a fork of the same tree 5ft. from the ground (private land), Steve Povey 11 Apr 2015. SW of Liss 771269, on Salix sp. by river, Steve Povey 12 Apr 2015. Liss, beside River Rother clump of 50 plus flowers at 7795 2869, plus many more beneath Ramsons, Bill & Chris Wain 22 Apr 2015.

*Lathraea squamaria* (Toothwort): 50 - 60 spikes on northern side of road cutting at Wick wood 7591 3597, Bill & Chris Wain 6 Apr 2015. On right of way at Hurstbourne Tarrant, Doles Wood 3795 5241 on Hazel, Peter Billinghurst 27 Apr 2015

*Lathyrus nissolia* (Grass Vetchling): In extraordinary abundance in damp, unimproved meadow, Crondall 8048 4832Tony Mundell & Mary Parker 9 Jul 2015.

*Limnanthes douglasii* (Meadow-foam): In quantity on bank at end of Windmill Fields, East Worldham 750381, Steve Povey 21 Mar 2015.

*Luzula sylvatica* (Great Wood-rush): Around a dozen plants scattered over a small area beneath Poplar Plantation, Tankerdale Lane 768258 (private land), Steve Povey 12 Apr 2015. On Hampshire bank of River Enborne at 4902 6374, Tony Mundell 14 Jun 2015. One patch at Fusney Copse 7952 5076, Tony Mundell 18 Feb 2015. Small patch beside track at Bramshill 7467 6136, much larger patch at 7463 6136, Tony Mundell 12 May 2015.

*Lycopodiella inundata* (Marsh Clubmoss): Eelmoor Marsh on turf scrape adjacent to Albion Track at 8392 5328 where first found by Fred Rumsey on 11 June 2015. 33 separate stems in two groups c. 40cm apart. The plants are established so must have been present last year and possibly also in 2013. Dense *Molinia / Myrica* was stripped from this location in November 2006. Groups of ten, two and four (two strobili), Birch Bottom 7704 5896, Chris Hall 9 Jul 2015.

*Malva neglecta* (Dwarf Mallow): In Headley Village 822362 near church, Steve Povey 14 Apr 2015.

*Malva pusilla* (Small Mallow): West of Blackmoor 778334, single plant in sandy arable field, Steve Povey 14 Jul 2015.

*Matricaria chamomilla* (Scented Mayweed): Wolverton Common 567593, arable field edge, Sarah Ball & Sarah White 10 Jun 2015. S of Red Rice 336406, in field margins alongside Stockbridge Road, Mike Wildish 15 Jun 2015.

*Medicago praecox* (Early Medick): West of Blackmoor 778334, single plant in sandy arable field, Steve Povey 14 Jul 2015.

*Minuartia hybrida* (Fine-leaved Sandwort): Along the outside of the old wall at Basing from 66145 52745 to 66155 52751 there were only about a dozen plants. However, along the inside of the wall from 66186 52767 to 66167 52761 there were over 40 plants. A few were just coming into flower, Judyth Swift 17 May 2015.

*Narthecium ossifragum* (Bog Asphodel): In bog at Castle Bottom 7982 5946, Tony Mundell, Mary Parker & Guy Mason 18 Jun 2015.

*Neotinea ustulata* (Burnt Orchid): Total of 88 spikes for whole Ladle Hill site, 12 at 47785 56771, 6 at 47788 56761, 20 at 47788 56761, 13 at 47970 56811, 6 at 47855 56751, 2 at 47854 56740, 3 at 47809 56763, 19 at 47802 56755, 5 at 47976 56799, 2 at 47793 56825, Simon Melville 14 Jul 2015.

*Nepeta cataria* (Cat-mint): Field baulk, Worthy Down 4561 3555, 5 stems, Martin Rand 11 May 2015.

**Orobanche hederae (Ivy Broomrape):** By fence at North Walls Play Area, Winchester 4842 2996 and in Ivy on riverbank. Seen by WCC play area inspection team 19 Jun 2015, photograph sent to HBIC by Steve Jones, confirmed as the yellow forma *monochroma* by Tony Mundell. Several plants in shrub-border of forma *monochroma*. Alresford Station car-park 588324, Steve Povey 19 Jun 2015.

**Orobanche rapum-genistae** (Greater Broomrape): Ashford Hill Meadows National Nature Reserve 56288 62094, four groups with 21 spikes - all purple, 56296 62123, three groups 20 spikes - all purple, and 56311 62086, one group with five spikes - four purple and one yellow, Simon Melville 12 Jun 2015.

**Papaver argemone (Prickly Poppy):** Along 250m of raised bank of disturbed arable soil beside footpath at Bradley. In huge quantity of hundreds of plants, e.g. 63195 41874, 63927 41878, 63811 41844, 63837 41852, 63866 41860, 63884 41866, 63889 41866, 63889 41860, 63831 41847, Tony Mundell 21 Jun 2015.

**Papaver hybridum (Rough Poppy):** Along 250m of raised bank of disturbed arable soil beside footpath at Bradley. In huge quantity of hundreds of plants, e.g. 6378 4183, 63866 41860, 63889 41866, 63955 41872, 63945 41877, Tony Mundell 21 Jun 2015. Red Rice 349410, single plant in patch of disturbed soil SE of crossroads, Mike Wildish 15 Jun 2015.

*Papaver lecoqii* (Yellow-juiced Poppy): N of Warnborough Green at 7249 5246 beside the road, yellow latex, Tony Mundell 9 Jun 2015. Single plant in hedgerow near Harrow Inn, Steep at 7511 2509, Steve Povey 11 Jun 2015.

*Paris quadrifolia* (Herb-paris): About a dozen in flower at base of huge Wych Elm at Happersnapper Hanger 7350 2785, Hants Flora Group 23 May 2015. Many plants on several small islands in stream feeding Lutcombe Pond at 7349 2643, Steve Povey 9 Apr 2015.

*Parthenocissus inserta* (False Virginia-creeper): South of Monk Sherborne 6078 5580, on opposite side of road to a house. Tendrils with no sucker pads at tips, Tony Mundell, Adam Lucas & Mike Harrison 16 Jul 2015.

**Petasites albus** (White Butterbur): Several plants appear to have spread from cottage garden and are now growing beside the Hangers Way Footpath at 7557 3572, Steve Povey 10 Mar 2015. Flower photos and voucher specimen of leaf (collected later in 2015) confirmed by Tony Mundell.

*Phalaris minor* (Lesser Canary-grass): Voucher specimen retained. Very locally plentiful at Stratfield Saye 6823 6095 at edge of



White Butterbur *Petasites albus,* alongside Hangers Way, The Candovers, Hartley Mauditt, 10 March 2015 and pressed leaf showing distinctive venation (*Steve Povey*)

arable field, Tony Mundell & Anna Stewart 25 Jun 2015. See photos, p. 23.

*Pilularia globulifera* (Pillwort): Patches in shallow water at pond edge Bramshill 7583 6187 with 'pills' present, Tony Mundell & Peter Scott 12 May 2015. Heath Warren 768599, extensive patches on dried up pools; plants droughted, Chris Hall 9 Jul 2015. Two patches about 3 metres long on a pond margin Bramshill 7569 6200, Chris Hall 7 Jul 2015.

*Platanthera bifolia* (Lesser Butterfly-orchid): Selborne Common, two plants in thick Bracken at 7364 3296, Chris Webb 15 Jun 2015.

**Platanthera chlorantha** (Greater Butterfly-orchid): Probably several hundred plants, but still in green bud Roundhills Hanger 734280, Hants Flora Group 23 May 2015. Four spikes at Old Wood, Humbly Grove 7020 4498, still in bud, Helen Boyce 26 May 2015. 11 flower spikes just beside the track at Closedown Wood, Weston Common 7031 4467 and in the hedgerow with a few other individuals nearby, also two in flower at 7040 4478, Helen Boyce 10 Jun 2015. Excess of 60 scattered over NE quarter of Paul's Copse, Woodcott 4254, Peter Billinghurst 3 Jun 2015. Eight spikes at Tidgrove Warren 527548, Andrew Bolton 11 Jun 2015, identified by Tony Mundell from photos. One plant growing near two *P. bifolia* in thick Bracken, Selborne Common 7364 3296, Chris Webb 15 Jun 2015.

**Poa angustifolia** (Narrow-leaved Meadow-grass): Growing on concrete hard-standing by Eelmoor hut 839529, Chris Hall 28 May 2015, specimen identified by Tony Mundell. This confirms the tentative identification by Tom Cope and Barry Phillips of very droughted material they found here on 8 Aug 2012.

*Poa humilis* (Spreading Meadow-grass): Specimen from margin of Whirlwind Track, Eelmoor Marsh 846534½, Chris Hall 28 May 2015 identified by Tony Mundell. In four places on verge of Leyland Track, Eelmoor Marsh, e.g. 8403 5358, Chris Hall 30 May 2015.

**Polypogon monspeliensis** (Annual Beard-grass): Eversley Common, remarkably plentiful with hundreds of plants starting on raised gravel bank at 7836 5968 and extending beside the gravel track to 7829 5969, but also very plentiful on side track at 7818 5962 etc, Tony Mundell, Mary Parker & Guy Mason 18 Jun 2015.

*Potamogeton crispus* (Curled Pondweed): Bramshill 758619, in pond, Tony Mundell & Peter Scott 12 May 2015. Still just hanging on in Brookly Stream at 8173 5453 beside Avondale Road, Tony Mundell 25 May 2015.

*Potamogeton pectinatus* (Fennel Pondweed): North Warnborough, River Whitewater, single patch at 728520, Tony Mundell 19 Dec 2014.

**Potentilla x mixta (P. anglica x reptans):** Hartfordbridge Flats 8064 5858, with mix of four and five petals and mix of two, three, four and five leaflets. Virtually sterile, perhaps one achene formed, HFG 11 Jul 2015.

**Prunus serotina (Rum Cherry):** One bush beside a main track at Alice Holy Forest 8155 4260, Tony Mundell 3 Jul 2015. Voucher specimen collected. Flowers smaller than *P. padus*, petals only 3mm (not >5mm), leaves cuneate at base (not rounded or cordate). Row of hairs on midrib below leaf proximally.

*Pyrola minor* (Common Wintergreen): About 400 plants at Longmoor 81004 31443, Elliott Fairs 8 Jul 2015. Patch 2m x 1m at Hartfordbridge Flats 8109 5863 under pines, HFG 11 Jul 2015.

*Radiola linoides* (Allseed): On minor path, c. 250, Cudbury 7616 6064 and groups of 37 and c. 130, at 7615 6065, Chris Hall 9 Jul 2015.

*Ranunculus auricomus* (Goldilocks Buttercup): In small relic piece of woodland in fork of road/track, Red Ride 335415, Mike Wildish 20 Apr 2015. N of Alton, locally plentiful on verge of Southwood Road 699410, 699414, 701404 and 701405, also surprisingly plentiful beside footpath at 707404, Tony Mundell & Anna Stewart 16 Apr 2015. Small number of plants in a copse, Hawkley Road, Liss 763283, Steve Povey 22 Apr 2015.

*Ranunculus omiophyllus* (Round-leaved Crowfoot): Several large plants in shallow, slow-running stream SE of Kingsley at 7940 3732, Steve Povey 8 Apr 2015.

*Ranunculus sceleratus* (Celery-leaved Buttercup): Chilbolton Common 392401, alongside small stream, Mike Wildish 20 May 2015. At Stratfield Saye 6916 6053 beside stream, Tony Mundell & Anna Stewart 25 Jun 2015.

*Rubus marshallii* (a Bramble): One large bush along north edge of Hartfordbridge Flats 8054 5867, less than 100m west of path onto site from layby, John Norton 11 July 2015.

*Rumex pulcher* (Fiddle Dock): Rake, N of (VC12 part) just one patch, very close to south side of lane at 8049 2876, Dawn Nelson and Jill Oakley 23 Mar 2015.

*Rumex x pratensis (Rumex crispus x obtusifolius):* One plant with both parents at Stubbington Down 5196 5676, Tony Mundell, Sarah Ball & Sarah White 13 Jul 2015.

*Salix purpurea* (Purple Willow): Ibthorpe 376537 beside stream and road, just west of bridge, Peter Billinghurst 27 Apr 2015. *Salix x reichardtii* (*S. caprea x cinerea*): Stratfield Saye 6864 6084 in roadside hedge, Tony Mundell & Anna Stewart 25 Jun 2015.

*Saxifraga granulata* (Meadow Saxifrage): Plentiful in Ecchinswell churchyard 500598, Graeme Down 23 May 2015.

*Smyrnium olusatrum* (Alexanders): W (N-bound) verge of A34 on shallow bank at Larkwhistle 4536, Martin Rand 10 Apr 2015.

*Smyrnium perfoliatum* (Perfoliate Alexanders): Two groups of plants, 3 in one, 6 in the other, in a small, shady, un-improved meadow near Hawkley Hurst at 7535 3059, Steve Povey 13 May 2015, where first noted c. 3 May 2015 by Andrew Forbes and Julia Quigley.



Perfoliate Alexanders *Smyrnium perfoliatum* at Hawkley Hurst, found by Julia Quigley (*Steve Povey*)

*Stachys arvensis* (Field Woundwort): 14 plants at entrance to field south of Spain Lane, Burkham 645435, Geoffrey Farwell 4 Jul 2015.

*Stellaria pallida* (Lesser Chickweed): Now that it has past flowering and has turned that distinctive yellow-green colour there is an astonishing amount on the road banks in central Farnborough 8655, Chris Hall 15 Apr 2015. Verge of Crookham Road, frequent for eight metres 8034 5343, also verge behind fire station in Albany Road, two patches 8107 5388, both Chris Hall 25 Apr 2015.

*Symphytum caucasicum* (Caucasian Comfrey): Two large patches growing beside *Symphytum x uplandicum* at Longparish 4351 4496 Simon Melville 20 May 2015.

*Teesdalia nudicaulis* (Shepherd's Cress): Many thousands of plants covering at least one hectare of the disused Sleaford Sand-pit at 8059 3842, Steve Povey 11 May 2015. Several large patches of plants on sandy banks, Broxhead Common 803374, Steve Povey 27 Apr 2015.

*Teucrium botrys* (Cut-leaved Germander): Around 100 seedling plants germinated after spring disturbance of ground, Old Burghclere Lime Quarry 471572, Graham Dennis 2 Jun 2015. Estimate of 130 plants only two flowering all the rest seedlings, Micheldever Spoil Heaps 519444, Graham Dennis 18 Jul 2015.

*Torilis nodosa* (Knotted Hedge-parsley): Brown Candover 5828 3959 beside public footpath, Tony Mundell, Anna Stewart, Andrea Bassett & Loraine Martin 23 Jun 2015.

*Trifolium angustifolium* (Narrow Clover): Single non-flowering plant in sandy arable field, west of Blackmoor 778334, Steve Povey 14 Jul 2015.

*Trifolium incarnatum* subsp. *incarnatum* (Crimson Clover): At Eversley Common 7849 5963 on bank of disturbed soil at Quarry entrance, several plants in flower growing with *Trifolium resupinatum*, Tony Mundell & Mary Parker 18 Jun 2015.



Fodder Vetch Vicia villosa (top) and Tufted Vetch V. cracca (bottom), Ashmansworth 14 July 2015 (Tony Mundell)

*Trifolium resupinatum* (Reversed Clover): At Eversley Common 7849 5963 on bank of disturbed soil at Quarry entrance. In flower growing with several *Trifolium incarnatum* subsp. *incarnatum*, and arable plants like *Mercurialis annua* etc., Tony Mundell & Mary Parker 18 Jun 2015.

*Trifolium striatum* (Knotted Clover): Beside cycle path to north of M3 bridge, c.25 plants, Cove 8403 5684. Also in short turf beside a track, 30+ plants at Hawley Hill 8455 5887, both Chris Hall 22 May 2015.

*Turritis glabra* (Tower Mustard): A single small plant on roadside verge at Sleaford 8008 3837, Steve Povey 11 May 2015. It has been recorded near here in the past.

*Umbilicus rupestris* (Navelwort): Many thousands of plants on banks both sides of lane for 100m from Wishanger 8414 3941 to 8418 3911, Steve Povey 2 Apr 2015.

*Urtica dioica* subsp. *galeopsifolia* (Stingless Nettle): At Stratfield Saye 6916 6053 beside stream, Tony Mundell & Anna Stewart25 Jun 2015.

*Veronica agrestis* (Green Field-speedwell): About 6-8 plants on roadside verge along edge of garden at road junction at 7094 5708, whitish flowers, pale yellow-green leaves and only glandular hairs on capsules. Voucher specimen kept and scanned, Tony Mundell 8 Apr 2015.

*Veronica polita* (Grey Field-speedwell): Several plants on bare, recently disturbed ground W of Priors Dean at 7133 2904, Steve Povey 28 Apr 2015.

*Veronica scutellata* var. *scutellata* (Marsh Speedwell): Edenbrook Country Park 790545, in shallow pond, Tony Mundell, Neville & Mary Diserens 24 Mar 2015.

*Viola canina* (Heath Dog-violet): Three plants in short turf at Fleet Cemetery 8014 5314, Chris Hall 25 Apr 2015. Noted in seven spots at Hartfordbridge Flats with the main colony of 100 + plants at 8068 5859, HFG 11 Jul 2015.

*Vicia villosa* (Fodder Vetch): Locally frequent along arable field edge south of Ashmansworth 4168 5527, Tony Mundell & Peter Billinghurst 14 Jul 2015.

*Viola x contempta* (*V. arvensis x tricolor*): About a dozen plants on footpath across arable field at Aldern Bridge 4906 6360. Flowers much larger than *V. arvensis* and about half of them bi-coloured purple and yellow, Tony Mundell 14 Jun 2015.



Green Field-speedwell Veronica agrestis, Rotherwick, 8 April 2015 (Tony Mundell)

*X* Elytrordeum langei (Elytrigia repens x Hordeum secalinum): Voucher specimen collected for expert confirmation. A patch with long rhizomes at Stratfield Saye 6815 6145 in hedgerow beside a footpath along an arable field edge, in full sun. Very tall, growing to 185cm with inflorescence to 22cm, 8mm awns on glumes and 10mm awns on lemmas, glaucous stems and leaves. *E. repens* grows within 100m and *Hordeum secalinum* is in a wet meadow c. 160m away, Tony Mundell & Anna Stewart 25 Jun 2015.

*Yucca gloriosa* (Spanish-dagger): Growing at Newton Common 6913 3374 in a roadside pull-in on 15 February, obviously dumped but well rooted, Jonty Denton 15 Feb 2015. However by 10 March 2015 it had been dug up and returned to captivity!

#### 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:

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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.

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Taraxacologists at the joint Flora Group/BSBI workshop, April 2015 (see p.3) (Martin Rand)

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

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