

Flora News

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

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Dear Flora Group member

In this issue we have details of lots of events in 2015. Our AGM this year will be held on Saturday 23 May in the East Hampshire Hangers when we will be visiting Roundhills Hanger. If you attended the Flora Group event at Testwood on 6 December last year, you might recall seeing Tony Mundell's photo of this site where hundreds of Greater Butterfly-orchids can be seen at the end of May. John Richards, the BSBI's *Taraxacum* referee, will be leading a three-day workshop on dandelions in April and Martin Rand will lead workshops on the identification of 'dandelion-like' members of the Asteraceae, ferns and umbellifers during the summer. John Poland will be running a day focusing on identification of winter twigs and a training session on identification of plants using vegetative characteristics. Other events are well spread throughout the county, including visits to the New Forest, Fleet Pond, Hartfordbridge Flats, Bartley Heath and the Biddenfield estate near Shedfield.

This issue is a bumper one, with several short articles by Clive Chatters and a detailed account of the newly published Red List for England by Martin Rand, which includes an update to the Hampshire Notable plants list.

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 Chatters
Flora Group Secretary

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 8 March 2015, 10.30am–4pm **Winter Twig ID at Testwood Lakes Education Centre** **Leader: John Poland**

If you would like to improve your skills in identifying trees during the winter, join John Poland at Testwood Lakes for a day looking at twigs. Meet at Testwood Lakes Education Centre, Brunel Road, Totton, Southampton, SO40 3XP. Bring a hand lens and any specimens that you would like to identify. Bring a packed lunch. Tea and coffee will be available for a small donation. (Please note that when you arrive at Testwood Lakes Nature Reserve you will see a building on the right. This is the Sea Scouts' building; please drive on past this building and you will eventually reach the Testwood Lakes Education Centre.) Please park in the car park near the Education Centre.

Contact: John Poland, mobile: **07714 568361**, e-mail: jpoland197@yahoo.co.uk.

Friday 17 April–Monday 20 April 2015 **Taraxacum (Dandelion) Recording and Training Workshop,** **Ringwood and surrounding area** **Leader: John Richards, Organiser: Martin Rand**

Taraxacum is probably the least well studied and understood of all the critical species groups in Hampshire, and records are quite patchy. This workshop offers an opportunity to improve identification skills and contribute to our local knowledge in the company of the country's chief expert in the genus. The range of habitats will include sandy acid grasslands, New Forest grass heath and damp pasture, riverine pasture and old water-meadow (water levels permitting!) and ruderal and wayside sites.

The workshop will run from Friday late afternoon until midday on Monday, and there will be evening lab sessions on Friday, Saturday and Sunday. It is being promoted as a BSBI event in collaboration with the Hampshire Flora Group, and from past experience demand for places will be high. We shall take bookings only from people who can commit to the whole of the event (including the evening sessions).

The course is non-residential; some suggestions for places to stay locally will be sent out with a confirmation of your booking, along with a programme and directions. We shall meet up at Greyfriars Community Centre, Ringwood on Friday where there will be a short introductory talk and a chance to start fieldwork. The other evening lab sessions will also take place at the Greyfriars Community Centre which is in a central position in Ringwood town.

Hot or cold buffet meals can be provided at the venue for the evening lab sessions, and menus and prices will be sent out at the same time. Alternatively, Ringwood has a range of pubs and restaurants if you are prepared to eat before or after the sessions.

The cost per person for the workshop itself will be £20. Booking requests should be sent by contacting Martin Rand (see back page for contact information). Martin will then supply details for electronic and other means of payment, and your booking will be fully confirmed on receipt. Postal payments should be sent to Martin at his home address (see back page), enclosing a stamped self-addressed A4 or A5 envelope and a cheque for £20 made out to 'Hampshire and Isle of Wight Wildlife Trust' and inscribed '*Taraxacum* workshop' on the reverse. Bookings should be made not later than Monday 2 March. Refunds for cancellations after that date will only be made if the place can be filled from a waiting list.

Sunday 26 April 2015 10.30am–4pm **Identification using Vegetative Characteristics** **Leader: John Poland**

John Poland is well known as the co-author (with Flora Group member Eric Clement) of *The Vegetative Key to the British Flora* so this is an excellent opportunity to learn how to identify plants using vegetative characteristics. Meet at Testwood Lakes Education Centre, Brunel Road, Totton, Southampton, SO40 3XP. If you have a copy of *The Vegetative Key to the British Flora* please bring it with you. However if you do not already own a copy, John will bring some for sale at the special discount price of £20. Bring a hand lens and any specimens that you would like to identify. Bring a packed lunch. Tea and coffee will be available for a small donation. (Please note that when you arrive at Testwood Lakes Nature Reserve you will see a building on the right. This is the Sea Scouts' building; please drive on past this building and you will eventually reach the Testwood Lakes Education Centre.) Please park in the car park near the Education Centre.

Contact: John Poland, mobile: **07714 568361**, e-mail: jpoland197@yahoo.co.uk.

Saturday 23 May 2015, 10.30am– 4pm **Visit to East Hampshire Hangers and Flora Group AGM** **Leaders: Tony Mundell and Steve Povey**

The East Hampshire Hangers are a wonderful botanical area packed with uncommon plants. Amongst other 'goodies' we should see Greater Butterfly-orchid *Platanthera chlorantha*, Narrow-leaved Helleborine *Cephalanthera longifolia*, White Helleborine *Cephalanthera damasonium*, Juniper *Juniperus communis*, Bird's-nest Orchid *Neottia nidus-avis* and also, depending on how far we walk, both species of Hellebore and Opposite-leaved Pondweed *Groenlandia densa*. This is a chance to see our rare native Italian Lords-and-Ladies *Arum italicum* subsp. *neglectum* in its natural habitat.

Park on the grass verge towards the end of Honeycritch Lane near Hill Farm SU 7331 2769. If we can't all fit

onto grass verges we have permission for a few cars to park on the concrete apron of Hill Farm. After parking walk right to the end of Honeycritch Lane to meet there at 10.30am.

First we will visit Roundhills Hanger, including a splendid meadow with a large number of Greater Butterfly-orchids that should have started flowering. After that we will return to Hill Farm and squeeze into the minimum number of cars in order to travel on via very narrow lanes to the relatively small car park at Ashford Farm SU7432 2670. From here we will take a walk to the Shoulder of Mutton Hill, stopping en-route to eat our lunch and hold a brief AGM. Hopefully we can walk on as far as Lutcombe Bottom, as that offers more special plants.

Wear sturdy footwear for the steep climbs up and down and bring a packed lunch.

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

Hatchet Pond Survey

**Saturday 13 June 2015 and Sunday 23 August 2015,
10am–4pm**

Leader: Martin Rand

A review of vascular plant records for Hatchet Pond (New Forest) in 2014, undertaken for the Freshwater Habitats Trust, suggested that while the famous and very rich assemblage of wetland plants here manages to survive, the detailed records may be revealing a decline in the abundance and extent of key species, especially in the areas most heavily used by the public. To establish whether this is really the case, these two meetings will survey the whole pond area on a 100-metre square basis, noting habitats, site condition and presence/abundance of selected species. The information collected will be used by the two Trusts and the Forest 'powers that be', and should aid future management and monitoring.

We aim to put together six two-man teams to tackle six 100-metre squares each, so the numbers will be limited to 12 each day. We need one person in each team who is an experienced field botanist with good recognition skills; the other person can be less experienced, and the visits will provide an opportunity to learn from taking part in an intensive survey following a laid-down procedure. It will certainly be good if you can commit to both days, but don't be put off if you can only make one. Although this is not exactly arduous terrain, remember that by the nature of the task, you will be walking an absolute minimum of 7km each day. With such a visible activity taking place at weekends in one of the Forest's honeypot sites, please expect to engage with the public! (And hopefully spark their interest...)

Booking is essential and is needed by 15 May: this is so that the leader has good notice of whether he has a full complement of teams. Please note that the second date is provisional for the moment, as we are still discussing arrangements with the Forestry Commission. This should be resolved shortly. For further information and booking contact Martin Rand (see back page for details).

Ferns Workshop (at 21 Pine Road, Chandlers Ford)

Saturday 4 July 2015, 10am– 4.30pm

Leader: Martin Rand

As several people have asked for it, Martin will run a workshop for a limited number of people at his home in Chandlers Ford. We will cover fern life history and why this can sometimes make identification difficult, try out the available identification guides, and look at native and naturalising ferns. As he grows quite a wide range of ferns, there will be an opportunity to look at many native and non-native genera and species, covering *Asplenium*, *Athyrium*, *Blechnum*, *Cyrtomium*, *Dryopteris*, *Gymnocarpium*, *Matteucia*, *Onoclea*, *Osmunda*, *Osmundiastrum*, *Phegopteris*, *Polypodium* and *Polystichum*.

Booking is essential and is needed by 12 June: numbers will be limited to 8. The course fee is £5 and will include refreshments (but please bring your own lunch). For further details and booking contact Martin Rand (see back page for details).

Saturday 11 July 2015, 10.30am–4pm

Visit to survey Hartfordbridge Flats

Leader: Tony Mundell

HIWWT have recently taken on the management of this part of the Yateley Common SSSI for the private owner. It is a strip of heathland immediately south of Blackbushe Airport and the A30, about 1.6km long and 180m wide. The Flora Group has been requested to make a baseline botanical survey before grazing begins on the site. We will record all the plants we can find.

We have permission to park in the Bush Café car park, Terminal Buildings, Blackbushe Airport GU17 9LQ, SU8085 5880. So please meet there at 10.30am and we will start with at least a cup of tea or coffee in the café as 'courtesy payment' for using their car park. Wear sturdy footwear and bring a packed lunch.

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

Apiaceae (Umbellifers) Workshop at Testwood Lakes Education Centre

Saturday 18 July 2015, 10am–5pm

Leader: Martin Rand

Although this family includes only about 50 species in Britain that are easily encountered, representatives of at least 53 genera have been recorded at some time or other in Britain, and this is still only just over half the number of genera found on the near Continent. At the same time, many species on a superficial examination 'don't look very different'. This workshop will look at the distinctive features of the Umbellifer family and introduce participants to some of the native genera. We shall use the BSBI Handbook *Umbellifers of the British Isles* as the main identification guide, and copies will be available at a discounted price if ordered in advance. There will be an introductory lab session, followed by time in the field in the Lower Test Valley and the fringes of the New Forest.

Numbers will be limited so booking is essential and is needed by 26 June. Course fee: £6. Refreshments will be available for a small donation, but please bring your own lunch. For further information and booking contact Martin Rand (details on back page).

Saturday 25 July 2015, 10.30am–4pm

Visit to Fleet Pond

Leader: Tony Mundell

The areas around the margins of Fleet Pond are extremely rich botanically. An enormous amount of work has been underway at the site in recent years as part of a project aimed at dredging parts of the pond to try to improve the water quality. Large areas on the marshy pond margins have been cleared of scrub and trees and it is mainly here that uncommon plants can be found, though others are on the nearby dry heathland. Amongst others, we should see Pillwort *Pilularia globulifera*, Lesser Water-plantain *Baldellia ranunculoides*, Grey Club-rush *Schoenoplectus tabernaemontani*, Needle Spike-rush *Eleocharis acicularis* and Six-stamened Waterwort *Elatine hexandra*.

Meet at 10.30am in the car park at SU8248 5532 - this is reached by driving west along a bumpy track that starts from the railway bridge north-east of Fleet at SU8297 5546. Welly boots are advisable. Bring a packed lunch.

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

Sunday 9 August 2015, 10.30am

Biddenfield, Shedfield

Leader: Clive Chatters

The Flora Group have been invited to survey part of a private estate at Biddenfield. This farmland was created from the heaths and bogs of the Forest of Bere and was well botanised in the late nineteenth century by Frederick Townsend. We will be concentrating on the arable fields which we understand have a history of un-intensive cultivation. Intriguing historic records include Red-tipped Cudweed *Filago lutescens*, Small-flowered Catchfly *Silene gallica* and Weasel's-snout *Misopates orontium*. We will also see if we can rediscover the historic Biddenfield Bog.

We will meet at 10.30 at the farmhouse at grid reference SU 554 124 on the west side of Biddenfield Lane. This is approached best from Shedfield village. We will be driving into the estate from this point through locked gates. Please be timely in arriving. Bring a packed lunch if you want to join us for a full day of surveying. Please dress for rough, uneven ground and whatever the weather.

Contact: Clive Chatters, tel: **01489 774422**, e-mail: **Clive.Chatters@hiwwt.org.uk**.

Workshop on Asteraceae Tribe Cichorieae – 'Things that look a bit like Dandelions' at Kingsclere Village Club Hall Saturday 15 & Sunday 16 August 2015, 10am–4.30pm

Leader: Martin Rand

This large tribe of one of the largest flowering plant families occupies just 30 of the roughly 1100 pages of Stace's *New Flora of the British Isles*, which might lead

one to a false impression of its importance; by contrast, it takes up about 330 pages of Sell and Murrell's *Flora of Great Britain and Ireland*, and over 8% of the total identification text of the new *Flora Gallica*.

The British flora encompasses 18 genera of native or well naturalised species and several genera of casuals, most of which have yellow dandelion-like flowers and fruits with hairy pappuses. Even leaving aside the two critical genera of *Hieracium* (Hawkweeds) and *Taraxacum* (Dandelions) which contribute to so much of the diversity and difficulty of this group, that amounts to at least 57 species, some of which come in a bewildering variety of infraspecific forms.

This workshop will help you recognise the differences between the main genera by flowering, fruiting and vegetative characters, and introduce you to characteristic species in each main genus. Saturday will start with an introductory lab session before we spend the afternoon in the field. A brief indoor session on how to get started on *Hieracium* on Sunday morning will precede a day spent mostly in the field. A variety of habitats will be visited.

Numbers will be limited so booking is essential and is needed by 24 July. Course fee: £8. Refreshments will be available for a small donation, but bring your own lunch. For further information and booking contact Martin Rand (details on back page).

Marsh Gentian Count at Bartley Heath

Sunday 30 August 2015, 10am–1pm

Leader: Peter Vaughan

Help take part in the annual survey of this beautiful and rare plant at its last remaining site in the north of Hampshire, with an opportunity to see other humid heathland flora and fauna. Please note that that the event will involve walking approximately 3km over ground which is uneven in places. No experience required! Bring a picnic for lunch after the count. No dogs please. Meet at the entrance to the reserve off the B3349, SU 726 533.

For further details, including where to park, please contact Peter Vaughan on 01256 764225.

Future Training Sessions in Vegetation Classification

Leader: John Norton

The National Vegetation Classification (NVC) is the system now in widespread use amongst vegetation surveyors and nature conservation organisations for recording and mapping vegetation in the UK. It was commissioned by the former NCC in 1975 and eventually published in twelve chapters and five volumes of *British Plant Communities* between 1991 and 2000, edited by John Rodwell. Although it contains 295 described plant communities (and more than 800 'sub-communities') some chapters can be tackled fairly easily (e.g. the 10 commoner 'MG' types in the 'mesotrophic' (neutral) grasslands chapter).

John Norton would be willing to organise some future informal workshops to introduce members to the concept

of the NVC, probably beginning with neutral grassland. These would be completely field-based, and would include some basic training in the recording and analysis of quadrats and an introduction into the problems and pitfalls of classifying vegetation according to the NVC. A small charge would be made to participants.

If you would like to take part please contact John Norton, tel: **02392 520828**, e-mail: john@jnecology.com. We may be able to fit the first workshop into the autumn 2015 programme. Please let John know if you would be particularly keen in tackling other habitats, such as chalk grassland, woodland, tall herb fen, heathland or bog.

Reports of Recent Events

Visit to Greywell Moors and Pumping Station on Sunday 13 July 2014

A report by Tony Mundell

First we visited the two fields beside Greywell Pumping Station where Southern Marsh-orchid *Dactylorhiza praetermissa*, Marsh Fragrant-orchid *Gymnadenia densiflora* and Marsh Helleborine *Epipactis palustris* (including the rare white-flowered var. *ochroleuca*) were all down in numbers compared to most years. Here we noted a white-flowered form of Common Knapweed *Centaurea nigra*.

Then, crossing the road to Greywell Moors we were impressed by the scale of the tree/scrub clearance that has opened up more of the fen so that it can be accessed by grazing animals. We found Long-stalked Yellow-sedge *Carex lepidocarpa* in several places and confirmed that the rare Lesser Tussock-sedge *Carex diandra* is still present in at least two spots. The latter species is quite difficult to separate from immature small plants of Greater Tussock-sedge *Carex paniculata* and even from Brown Sedge *Carex disticha* (which were both present) so it was helpful to have Neil Sanderson with us who could point out the differences.

Many other special fen plants were seen such as Marsh Lousewort *Pedicularis palustris*, Marsh Valerian *Valeriana dioica*, Bogbean, *Menyanthes trifoliata*, Bottle Sedge *Carex rostrata*, Marsh Arrow-grass *Triglochin palustris* and Blunt-flowered Rush *Juncus subnodulosus*. In a ditch newly exposed to sunlight we found both Water Whorl-grass *Catabrosa aquatica* and Lesser Water-parsnip *Berula erecta*. All these uncommon plants now have a chance to spread across the newly exposed areas. Marsh Fern *Thelypteris palustris* has long been known at Greywell Moors where we found it in local abundance but we were delighted to also find three patches of it in the adjacent marshy woodland.

We took the opportunity to record every plant seen to add to the records for BSBI's *Atlas 2020* project, and collected over 330 plant records for the three 1km squares we traversed.

Grasses Workshop, 19–20 July 2014

A report by Martin Rand

This weekend workshop started with an indoor session at Swanwick Lakes Education Centre, where we considered the general features of the grass plant and then did a quick tour of the most important genera and their features using freshly collected material. The main identification guide for the weekend was the BSBI Handbook *Grasses of the British Isles*, and some tips were given on how to get to grips with its rather complex identification keys and occasionally abstruse terminology in order to get the best out of it.

The workshop was run quite late in the year for many grass species. Couple this with the hot dry summer, and there were fears that we would have only desiccated remains to admire on the warm southern slopes of Portsdown which was our afternoon destination. But luckily this proved not to be the case, and we were able to study a good range of grasses of calcareous and neutral soils including bromes, fescues and all the common oat-grasses before our own desiccation drove us into the beckoning arms of the ice-cream van.

Sunday was spent at Farlington Marshes Nature Reserve, where the Environment Agency had closed down most of the site at short notice for repairs to the sea defences. Fortunately they had left a narrow strip open at the northern edge, and this included some of the best of the grazed coastal grassland; so we spent a reasonably productive but hot and noisy day within earshot of the A27. The lanes and rough grassland gave us a chance to compare Common Couch *Elytrigia repens* with Sea Couch *Elytrigia atherica* and Bearded Couch *Elymus caninus*. The pastures and sea wall provided a good range of characteristic grasses for study, including bents *Agrostis* spp., Tall Fescue *Schedonorus arundinaceus*, Meadow Barley *Hordeum secalinum*, Marsh Foxtail *Alopecurus geniculatus* and Saltmarsh-grass species *Puccinellia*. Stars of the show were the fine populations of Sea Barley *Hordeum marinum* and Annual Beard-grass *Polypogon monspeliensis*. A final sortie out to the saltmarsh added Common Saltmarsh-grass *Puccinellia maritima* and Common Cord-grass *Spartina anglica*. By this time we were glad to retreat from the blistering heat of the afternoon and the roar of traffic, but with a notion of the tremendous diversity of grasses to be seen within a small compass in our best sites.

Fritham and Ocknell, 27 July 2014

A report by Martin Rand

Twenty BSBI and Hampshire Flora Group members attended this meeting, intended to collect records for another recently under-recorded tetrad in the north of the New Forest, but also to give visitors a taste of the botanical riches that can be found in almost any part of it.

Like all good field meetings it began on the fringes of the car park, where fine flowering plants of Hairy Buttercup *Ranunculus sardous* could be admired alongside the

signature plant of short damp Forest grassland: Chamomile *Chamaemelum nobile*. But this was all 'out of square', so we hastened along the track leading south-west. This part of the Forest consists of a remarkably flat plateau of outwash gravels dissected by several streams running westwards towards the Hampshire Avon. The dry gravelly ground of the flat ridge we followed bears tracts of open wood-pasture where Whitebeam *Sorbus aria*, Crab Apple *Malus sylvestris* and Yew *Taxus baccata* can be seen growing alongside Rowan *Sorbus aucuparia*, Silver Birch *Betula pendula* and Alder Buckthorn *Frangula alnus*; Holly *Ilex aquifolium* is also abundant here and is a major landscape feature. We met a few early-flowering plants of what is probably the Forest's commonest hawkweed and certainly one of its most easily identified: *Hieracium umbellatum*; recognising this species in the area is helped by the fact that nearly all Hampshire plants have distinctly recurved involucral bracts.

We made a short detour into the valley-head mire at Gorley Bushes, hoping to re-find an old record for Hare's-tail Cotton-grass *Eriophorum vaginatum*, an uncommon plant on the Forest and mostly confined to the upper fringes of valley-brow 'step mires'. Drainage operations in the recent past seem to have put paid to it, but there was a chance to see several characteristic wetland and damp heath species for the first time, including Meadow Thistle *Cirsium dissectum* and Petty Whin *Genista anglica*

Back on the plateau we quickly passed the rather dull Green Pond and immediately ran into a large population of Allseed *Radiola linoides*; but eager searching failed to reveal either of its two frequent companion plants Chaffweed *Centunculus minimus* or Yellow Centaury *Cicendia filiformis*. However, the species diversity of the heathy grassland picked up from here, giving us Field Gentian *Gentianella campestris* in bud, and some rather parched eyebrights that included *Euphrasia officinalis* subsp. *anglica* (English Eyebright).



Allseed *Radiola linoides* at Green Pond (Tony Mundell)

Dropping down towards the valley of the Dockens Water, we made a lunch stop by a small pond above Rakes Brakes Bottom, the star plant here being Pillwort *Pilularia globulifera* growing alongside mats of Floating Club-rush *Eleocharis fluitans*. The side-valley mire below is spring-

fed with acid water, much of it lying on sloping ground with rafts of *Sphagnum* and notable quantities of White Beak-sedge *Rhynchospora alba*. Here we fanned out over the bog surface hoping to find Bog Orchid *Hammarbya paludosa* in some of the runnels, but instead we came upon a previously unrecorded population of about 80 plants of Marsh Clubmoss *Lycopodiella inundata*. While this plant is widespread in the Forest it is rare to come across new sites, and for the leader at least this was the highlight of the day. (The Bog Orchid showed up here a week or so later.)

From here we turned back up the main stream axis of the Dockens Water, where the mire and damp heathland are clearly more base-enriched and yielded more Meadow Thistle and Petty Whin, Saw-wort *Serratula tinctoria*, Fen Bedstraw *Galium uliginosum*, Tawny Sedge *Carex hostiana* and Flea Sedge *Carex pulicaris*. By the stream itself we recorded Tubular Water-dropwort *Oenanthe fistulosa*, New Forest Water-crowfoot *Ranunculus x novae-forestae*, Small Water-pepper *Persicaria minor*, Leafy Rush *Juncus foliosus* and a host of other species.



Pond with Pillwort *Pilularia globulifera* (and Bog St John's-wort *Hypericum elodes*) (John Norton)



Leafy Rush *Juncus foliosus* (Tony Mundell)

At this point some participants left the group to return, while the remainder carried on across the valley through Anses Wood, where a small stand of Lemon-

scented Fern *Oreopteris limbosperma* was admired. The biologically wrecked and unappealing Cadman's Pool did not detain us long, but some Soft-leaved Sedge *Carex montana* was spotted by the trackside on emerging from the wood. We now came onto the old World War II aerodrome on Ocknell and Janesmoor Plains, where the past disturbance and introduction of lime in the form of concrete and mortar has created extraordinary communities of mixed calcicole and calcifuge plants. In damper turfy hollows we looked for Small Adder's-tongue *Ophioglossum azoricum*, but the dry season was not conducive to finding it so late in the year; nor did we spot the very small population of Moonwort *Botrychium lunaria*. However, amongst calcicoles such as Dwarf Thistle *Cirsium acaule*, Lady's Bedstraw *Galium verum*, Burnet-saxifrage *Pimpinella saxifraga* and Salad Burnet *Poterium sanguisorba* we noted lots of Heath Dog-violet *Viola canina*, Lesser Centaury *Centaureum pulchellum* and the hybrid Tormentil *Potentilla x suberecta*, as well as Small-flowered Sweet-briar *Rosa micrantha* and the eyebright *Euphrasia confusa*. Our return across the heath past the Bentley Inclosures yielded much more Petty Whin and some Dodder *Cuscuta epithymum*.

In the course of this visit, and others earlier in the year, the total species count of the tetrad has been raised from 289 to 378, and the number of species recorded since 2000 from 83 to 307. Thanks are due to all who took part.

Visit to Silchester Common, Pamber Heath and Pamber Forest on Sunday 10 August 2014

A report by Tony Mundell



Pamber Heath (Tony Mundell)

The weather forecast was for heavy showers (it was correct!) and no doubt that was why only three people turned up to join me. It was sad to see that on the road verge of Impstone Road, beneath the 30mph sign where the purplish colour form of Ivy Broomrape *Orobancha hederæ* used to be plentiful, the adjacent home owner had removed all the vegetation. A plastic sheet had been put over the site and this had been topped with a deep layer of bark chippings. Just one flower spike of the Ivy

Broomrape was hanging on, sprouting from the edge of the plastic sheeting but as no Ivy was visible the Ivy Broomrape is unlikely to survive.

We set off on a circular walk across Pamber Heath then via Silchester Common to Pamber Forest, recording every different plant we could find. On Pamber Heath we noted some Dodder *Cuscuta epithymum* but the richest area botanically was the bog on Silchester Common. Here we found Marsh St John's-wort *Hypericum elodes*, Marsh Willowherb *Epilobium palustre*, Bog Pimpernel *Anagallis tenella*, Lesser Skullcap *Scutellaria minor*, Star Sedge *Carex echinata* and the hairy form of Marsh Speedwell *Veronica scutellata* var. *villosa*. This bog had lots of Marsh Violet *Viola palustris* and I was delighted to find that most of the plants that I checked had hairy petioles so I am reasonably sure that this was subspecies *juressi* which has not been recorded in Hampshire before.

Near the bog we found several plants of Wood Horsetail *Equisetum sylvaticum* where there had been recent scrub clearance, and later we found more of it in a site new to me beside an ephemeral stream on the edge of Pamber Forest. Unfortunately the scrub cutters had removed all the Eared Willow *Salix aurita* from near the boardwalk though I'm sure it will re-sprout. However, we did find a plant of its hybrid with Grey Willow *Salix x multinervis*.

Visit to Hazeley Heath on Sunday 17 August 2014

A report by Tony Mundell

Ten people came to join me for this survey of plants on Hazeley Heath. We collected a remarkable total of 430 records covering three 1km squares. This included parts of both the southern area owned by Hart District Council and the northern part owned by RSPB. The car park in central Hartley Wintney where we met had several planted trees of a species I had not seen before. They turned out to be Narrow-leaved Ash, *Fraxinus angustifolius* subsp. *oxycarpa*.

Neil Sanderson made a couple of lichen collections from some White Poplars just south of the entrance to Hazeley Heath. One was *Leptorhaphis atomaria* which has mainly been recorded from Aspen in eastern Scotland. Recently this has been found on Aspen and Black Poplars in eastern England but has probably been overlooked elsewhere in England. Another lichen proved to be *Catillaria nigroclavata*, a much under-recorded species of high pH bark. Later on Neil, Andy Cross and Brian Gale found the lichen *Psilolechia clavulifera*, new to North Hampshire, on the root plate of a fallen tree. This is a mainly upland species of shaded earth banks, which is often found on root plates. It is occasionally recorded in the lowlands and has probably been overlooked in the past. Neil has written a report for the Wessex Lichen Group which can be accessed at: http://wessexlichengroup.org/Previous_Meetings/2014_Meetings/Hazeley/.

Neil also spotted a small patch of the bog-moss *Sphagnum molle* during the day from an area of wet heath with abundant Purple Moor-grass *Molinia caerulea*. This was

last recorded here in the early 1990s and is now very rare in North Hampshire.



Sphagnum molle (John Norton)

As soon as we reached the heath Bird's-foot Clover *Trifolium ornithopodioides* was found beside a puddle on the main track. This has been known for many years at Hazeley Heath but several hundred metres further north along the same track.

One botanically rich area at the southern end of the site was a set of 'scrapes' in a boggy area flushed with water seeping from the hillside. Here we found Many-stalked Spike-rush *Eleocharis multicaulis*, Bog Pimpernel *Anagallis tenella*, Star Sedge *Carex echinata*, Oblong-leaved Sundew *Drosera intermedia*, Round-leaved Sundew *Drosera rotundifolia* and Bog Asphodel *Narthecium ossifragum*.

Having still not reached the main area of wet heath we stopped for lunch under some woodland to shelter from a rain shower, and were pleased to find a group of the rare Parasitic Bolete (see photo below).



A group of the Parasitic Bolete *Pseudoboletus parasiticus*, a rare fungus whose only habitat is as a parasite growing on top of another fungus; here on Common Earth Ball *Scleroderma citrinum* (Tony Mundell)

We then descended into another rich area of wet heath and boggy ground near the boardwalk which gave us

Creeping Willow *Salix repens*, Meadow Thistle *Cirsium dissectum*, Marsh Willowherb *Epilobium palustre*, Marsh St John's-wort *Hypericum elodes*, Bristle Club-rush *Isolepis setacea*, Lesser Skullcap *Scutellaria minor*, Heath Milkwort *Polygala serpyllifolia* and Marsh Speedwell *Veronica scutellata* in its non-hairy form. In this area Saw-wort *Serratula tinctoria* was locally frequent, though it was inconspicuous in the grazed sward.

In drier areas we found Brown Bent *Agrostis vinealis* and Dodder *Cuscuta epithymum* growing on both Dwarf Gorse *Ulex minor* and Heather *Calluna vulgaris*. We refound Royal Fern *Osmunda regalis* in one of its formerly recorded spots but could not refind Lemon-scented Fern *Oreopteris limbosperma*. While searching for the Lemon-scented Fern at the disused gravel-pits we noted a water-plantain species growing in quite deep water. Through binoculars all the leaf bases were cuneate, possibly indicating the rarer Narrow-leaved Water-plantain *Alisma lanceolatum*, so John Norton sportingly volunteered to wade out and bring back a sample leaf and a few fruits (see photo). Sadly the fruits and sepals proved that it was just the common Water-plantain *A. plantago-aquatica*.



Grazing management on Hazeley Heath (John Norton)



The Editor putting his long legs to use (Tony Mundell)

Some of the party then turned back whilst others agreed to carry on further north a few hundred metres to see Leafy Rush *Juncus foliosus* which grows in

muddy puddles in one area. I think they were suitably underwhelmed! Nearby we also re-found a large patch of Royal Fern in another of its known sites.

Aquatic Plants Workshop, 23–24 August 2014

A report by John Norton

A total of 17 Flora Group members including myself and co-leader Martin Rand attended day 1 of this workshop, which took place at Hampshire County Council's Titchfield Haven nature reserve on the River Meon. Fourteen of us participated in the ID session held on the Sunday at the Trust's Swanwick Lakes Education Centre. We spent Saturday morning on the eastern side of the reserve, walking around an extensive area of reedbeds and dyke-like channels which were excavated in the late 1990s. Frogbit *Hydrocharis morsus-ranae* was first recorded here during a survey I undertook in 1998 and now dominates much of this area (I suspect it had survived here since historical times when most of the site was grazing marsh). Using my soon to be patented extendable weed collecting pole (see photo) and various grapnels we sampled the dykes at various points and collected a range of other aquatic species typical of eutrophic water bodies, including Rigid Hornwort *Ceratophyllum demersum*, Spiked Water-milfoil *Myriophyllum spicatum*, Canadian and Nuttall's Waterweeds *Elodea canadensis* and *E. nuttallii*, Ivy-leaved Duckweed *Lemna trisulca* and Broad-leaved Pondweed *Potamogeton natans*. Small Pondweed *P. berchtoldii* was also found in small quantity.

We had hoped to see at least two or three species of Starworts *Callitriche*, which I had recorded a couple of years previously, but on the day all we could find was Various-leaved Pondweed *C. platycarpa*, which is known to prefer this type of habitat according to the *New Atlas*. However, when we examined our specimens the next day we could not find any fruits on this to absolutely confirm the ID (and indeed I have never seen fruits on this species before). We were also hoping to demonstrate



Top: Frogbit *Hydrocharis morsus-ranae* (Debbie Allan);
bottom: Various-leaved Water-starwort *Callitriche platycarpa*
showing floating and submerged leaves (John Norton) (both
photos taken at Titchfield Haven in 2012)



Weed collector made from an extendable paint roller handle, large hook and four 2-inch no.8 screws. Materials purchased from the Range at total cost £3 (including packet of 2 hooks). The paint roller handle is 1m long, extending to 1.75m – another metre or so would be even better. It is made from iron, so is liable to rust after use. It is light enough to easily carry around but also strong enough to be used to bash emergent

plants away from the banks of waterbodies! Aquatic plants can be collected by a pulling and twisting motion – the screws provide the necessary friction.

the differences in the floating duckweeds *Lemna*, but the hoped-for Fat Duckweed *L. gibba*, which has been previously overlooked over much of southern England (see Martin's note in *Flora News* 46, p.15) seemed to be rare or absent, with only a few possible fronds found. Common Duckweed *L. minor* and Least Duckweed *L. minuta* were both locally abundant. Martin and I had undertaken a reconnaissance visit a week before and had come across a single shoot of Mare's-tail *Hippuris vulgaris* (which was new for the reserve), along with a tiny patch of Greater Duckweed *Spirodela polyrhiza*, but unfortunately we couldn't relocate these during the workshop either. However, during the day we were able to see a number of tall emergent species, including a nice comparison of Bulrush *Typha latifolia* and Lesser Bulrush *T. angustifolia* side by side (the latter species also apparently a new colonist to the site).

In the afternoon we looked at some small, shallow pools managed for dragonflies on the west side of the reserve, adding more Small Pondweed and the charophyte *Chara vulgaris* which had also survived from two years ago. A small colony of Water Soldier *Stratiotes aloides* occurs in a main ditch here, but couldn't be seen as the water level was quite high; however, after a bit of fishing around with my weed pole I was lucky enough to drag out a plant for us to look at.

At Swanwick Lakes we looked at our specimens from Titchfield Haven and at others brought in by Martin and me. We also had a look at the pond by the centre, the margin of which was locally dominated by New Zealand Pigmyweed *Crassula helmsii*, with some Spiked Water-milfoil also present around the shallower edges. A walk around a nearby fishing lake was not particularly fruitful due to the turbid water, but we did manage to find the aquatic liverwort *Riccia fluitans* growing amongst emergent reed stems.

The feedback from participants was very encouraging, so we may look towards organising a similar event at a different location at a future date.

Identification guides

If anyone is considering looking at aquatic plants in more detail there are a number of well-known books and keys available, of which Poland and Clement's *Vegetative Key* is one of the most useful. BSBI handbooks cover pondweeds (*Potamogeton* and *Ruppia*), water-starworts and charophytes. In case anyone is not aware, parts of the 1998 Plant Crib are available online, on the BSBI web site: http://www.bsbi.org.uk/plant_crib.html and in some cases these have been updated from the book accounts. The following are linked on this page: *Alisma*, *Apium*, *Ceratophyllum*, *Elodea*, *Lemna*, *Luronium* (and plants with similar leaves), *Myriophyllum*, *Nitella*, *Potamogeton*, *Ranunculus* (*Batrachium*), *Utricularia*, Fine-leaved Aquatics (includes *Potamogeton*, *Ruppia* and *Zannichellia* spp.) and Water-lilies. Also useful are the accounts of the genera containing emergent tall herb species, such as *Schoenoplectus*, *Sparganium* and *Typha*.

Bartley Heath Marsh Gentian (*Gentiana pneumonanthe*) Annual Count on Sunday 31 August 2014

A report by Peter Vaughan

The grand total of plants found was 279, down from 418 last year. The survey area was as in previous years, i.e. the main open area on Bartley Heath, contained within the 300m x 300m (9 hectare) square, the boundaries of which were SU 727 533, 730 533, 727 536 and 730 536.

The survey was carried out by a small but enthusiastic group of nine volunteers, all of whom had taken part in previous years, and we had warm and mostly bright weather. The Heath appeared to be in relatively good condition, with the site-management having kept on top of limiting the growth of birch. We followed our standard method of doing a total enumeration of plants in flower, by walking in a north-south line of people spaced 2m apart, across the southernmost section of the survey area from west to east, and repeating that, after moving northwards, in the opposite direction until the whole site has been covered. With our past experience and the good conditions we were able to make rapid progress, allowing for the uneven ground with large tussocks and occasional small gravel pits, even though ideally we

would have had a few more people. During the count we found one gentian with white rather than the usual deep blue flowers, and also came across Grass Snakes and Common Lizards.

As well as a fall in the number of gentians found, there appeared to be relatively few large, multi-flowered plants seen compared to earlier years. What might explain the apparent decline? The results for the surveys in previous years, all done at the end of August have been:

2014	279 plants
2013	418 plants
2012	276 plants
2011	974 plants
2010	654 plants
2009	335 plants
2008	no count done (poor weather)
2007	1,236 plants
2006	794 plants

The species has a long flowering period and, in the absence of repeating a survey several times over a season, we cannot be certain whether the end of August is always the optimal time, but this year we saw very few plants that appeared to have gone over, so I don't think we were too late and there was no widespread evidence of plants being grazed by the cattle or horses on site.

We count flowering plants (as those are the ones we can find!) but the results of a multi-year study by Rose, Clark & Chapman (1998) of sites in Purbeck and the New Forest found that the proportion of a Marsh Gentian population which flowers is weather dependent, and can vary between 12 and 49% and, in the same study, high rainfall during the dormant season (which we certainly had last winter) was found to increase plant mortality. Another factor mentioned in the Rose *et al.* paper is that new plants do not flower until they are at least three years old, and therefore there will be a lag between positive management interventions (such as the birch clearance at Bartley Heath over the winter of 2012/13) and any resulting increase in flowering plants.

The count next year will be on Sunday 30th August (the bank holiday weekend) - details in the future events listing of this newsletter.

Reference

Rose, R.J., Clarke, R.T. & Chapman, S.B. (1998). Individual variation and the effects of weather, age and flowering history on survival and flowering of the long-lived perennial *Gentiana pneumonanthe*. *Ecography* 21: 317-326.

Exhibition meeting at Testwood on Saturday 6 December 2014

A report by Catherine Chatters

Flora Group members enjoyed the opportunity to meet at Testwood Lakes Education Centre for our annual December gathering, to share information about records



Martin Rand suggested 'it is never too early in the year to do some recording' (Pleated Snowdrop *Galanthus plicatus* at Itchen Abbas) (Martin Rand)

made during the past year and to look ahead to more botanical recording in 2015. As it was such a beautiful sunny day, I wondered whether many people would turn up, thinking they might be tempted to be outside enjoying a walk in the bright winter sunshine but my fears were unfounded, with over thirty people attending what proved to be another excellent and most enjoyable day organised once again by Martin Rand and Tony Mundell.

People enjoyed perusing the herbarium sheets and photographs, examining a selection of recent publications and purchasing copies of books written by Flora Group members.

After a buffet lunch we were treated to a selection of photographs taken by Peter Vaughan, David Leadbetter, Clive Chatters, Martin Rand, Peter Burrows, Debbie Allan, John Norton and Tony Mundell. Peter Vaughan's interesting finds included a 'Wasp' Orchid at Greywell Pumping Station, Lady's Slipper Orchids at Gait Barrows and a Twayblade and Broad-leaved Helleborine which he discovered growing in his lawn; the Helleborine having been photographed earlier that day. David showed us some photographs of characteristic chalk grassland species he'd seen at Martin Down National Nature Reserve and an attractive picture of Sea Wormwood and Golden Samphire growing at Hurst Castle.

Clive's visit to Hinton Admiral (open for charity under the National Gardens Scheme) revealed vast quantities of Pignut and a population of Greater Burnet, making the point that you never know when or where you might come across interesting plants.

Martin reminded us that we don't need to wait until the summer to start botanising; there are plenty of plants flowering in the spring that are worth recording. He asked people to keep an eye open for snowdrops and Winter Heliotrope *Petasites fragrans* and emphasised that daffodils are worth recording as 60-70% can be named with the help of Stace's *New Flora*. Unfortunately, misguided people sometimes plant daffodil cultivars in woods where our native wild daffodil grows.

Martin's photos of commons and ponds in Wales, grazed by ponies and sheep and supporting species such as Lesser Marshwort *Apium inundatum*, Pennyroyal *Mentha pulegium* and Mudwort *Limosella aquatica* illustrated the similarities to sites in the New Forest. I was particularly interested to see his photos of the islands in Langstone Harbour supporting shingle and saltmarsh communities, where he had organised a recording visit for a lucky few local botanists.

Peter Burrows shared his photographs of species seen during a Field Studies Council field course at Box Hill, including the delightfully-named Squinancywort *Asperula cynanchica* which, apparently, was used to make a concoction to soothe sore throats.

John showed us some of the plants that he and Debbie had recorded at Browndown, Gosport, including a number of clovers which had been particularly good in 2015. John had found *Allium paradoxum* growing in acid woodland in the Woolmer Forest area; Martin warned that this non-native species has become very invasive in Scotland.

Tony's selection of photos included the magnificent population of Greater Butterfly-orchids at Roundhills Hanger, the White Helleborine *Cephalanthera damasonium* which flowered well at Noar Hill in 2014 and Angular Solomon's-seal *Polygonatum odoratum*. I was interested to see Tony's photo of Common Wintergreen *Pyrola minor* which occurs in over 20 sites in north-east Hampshire but is absent from South Hampshire. Martin commented that, rather frustratingly, this species grows in a quarry in Wiltshire about 6 metres from the Hampshire border! Tony showed a photo of the lilac-coloured Scarlet Pimpernel *Anagallis arvensis* f. *lilacina* and made a plea for us to record the different colour forms.

Many thanks to Clare Rand and Pat Mundell for supplying us with tea and coffee throughout the day and to Martin and Tony for arranging yet another very pleasant and sociable event.



Rosemary Webb and Nigel Johnson treated us to another superb selection of stunning photographs of orchids (Catherine Chatters)

Features

The *Vascular Plant Red List for England*: What does it mean for Hampshire?

By Martin Rand

A history of British Red Lists

It is now 10 years since the 3rd edition of the *Vascular Plant Red Data List for Great Britain* was published. This was a radical departure from its two predecessors, in that it used the newly redrafted criteria of the International Union for Conservation of Nature (IUCN) to determine the level of threat to each species. Previous inclusion on the Red List was purely on rarity, as measured in Britain by the number of 10km x 10km squares in which a plant occurs – a fairly crude measure, and not necessarily related to the threat it is under. Updates to the Great Britain Red List were issued in 2010, and it remains under periodic review.

The first Red List for a single country (Wales) within Britain appeared in 2008, and this has now been followed by *A Vascular Plant Red List for England* in 2014. These also follow the IUCN criteria. The criteria are based on measured declines or extremely restricted populations. Unlike some other species groups, good estimations of populations of plants other than the very rarest species can be hard to come by, so it is measures of decline that assume the greatest prominence: these obviously depend on comparable sets of data being gathered over two periods of time. 'Comparable' does not mean 'exactly equivalent', which would be impossible to achieve on a national programme of recording, undertaken in different time periods largely by volunteers, with different numbers of people serving different geographical areas. Fortunately there are statistical methods for compensating for different levels of recording effort when making the assessments.

Criteria for threat assessment

The IUCN criteria break down as follows, with thresholds in each category defining the level of threat:

Proportional population reduction, which can be either the result of direct observation, or (where there is good circumstantial evidence based on reductions in geographic range or decline in habitat quality) estimated, inferred, or suspected in the past.

Loss of geographic range. This can be defined as either 'Extent Of Occurrence' (EOO) (broadly, the distributional range of the species) or 'Area Of Occupation' (AOO) (the amount of ground it actually sits in). The threat to a species is then founded on a very small number of locations, or a decline in either of the above, or loss or degradation of suitable habitat.

Decline in a small overall population. Here the criteria rest on a very small and declining number of individuals, coupled with small numbers of individuals

in each sub-population, or a very high proportion of individuals all in one sub-population.

A very small population, or a small population with a very small number of locations and an imminent threat of extinction.

A high probability of extinction in the wild within 10 years or 3 generations (of the species), based on quantitative analysis.

Clearly there are quite complex interdependencies between these, and it is often possible to justify a threatened status on more than one criterion.

Levels of threat

Ignoring for the moment actual extinction, the IUCN defines three levels of threat: Critically Endangered, Endangered and Vulnerable, based on different thresholds within the criteria. Beyond this there is Near Threatened, with lower thresholds still – an amber light, if you like – as well as various pigeonholes for taxa that are not yet fully assessed or are problematic in some respect, such as uncertain taxonomic status. All of this makes for a system that is based on more or less objective, or at least explicit and defensible, criteria – and can be applied at different places and times, and at different geographical scales, to yield comparable answers. (Incidentally, only three flowering plant species currently occurring in Britain are given a global listing – but they include the Near Threatened Lesser Water-plantain *Baldellia ranunculoides*, for which the New Forest plays such an important role.) The IUCN draws a careful distinction between threat status and conservation priorities. The latter will be influenced by many other human considerations, and many species not considered threatened will still be worthy of conservation action.

Issues for a regional Red List

With conservation (especially government departments and agencies) becoming ever more devolved to the separate countries and states within Great Britain, there is a justification and demand for regional Red Lists to inform conservation policy. But what does it mean in practice for England to have its own? Complications arise, but the IUCN has considered these, especially where a region is part of a larger biogeographical unit. One is the effect of having a strong population of a species in a neighbouring region, from which migration and re-population is likely to occur. Unfortunately for plants, this is less likely to happen than in some other species groups, but in a few cases where populations in neighbouring parts of Scotland or Wales are of Least Concern, the status in England has been downgraded. Then there is the question of a plant having a different threat status in the region from that in the containing territory. If it is higher in the region, then fairly clearly it makes a case for enhancing the conservation responsibilities and priorities within the region. But if it is lower, the converse does not apply, since the region will still have a responsibility defined nationally or even internationally. Indeed, if the region has a significant and stable proportion of the global population, its responsibility can be argued to be

the greater. In sum, the higher threat status trumps the lower in conservation considerations.

Finally there are issues that arise simply from dealing with a smaller area. The IUCN warns about the applicability of using its criteria on ever smaller regions; and given that 'Criterion B' includes absolute thresholds for EOO and AOO, it eventually becomes self-defeating. Unless a finer granularity of data is available for a smaller region, there is also a question of reliable inference from the information to hand. Given that the only data set complete enough for the majority of species across Great Britain is at 10km resolution, the Wales Red List had to avow its limitations in this respect for scarcer and more dispersed species, and look forward to the day when adequate tetrad data was available. For EOO, applying a crude measure such as drawing a box around all the points that represent population sites (a technique that sounds more mathematically respectable when called the 'convex hull') will over-estimate the extent through two factors: isolated sites remote from the main centre of distribution, and holes in the main centre of distribution which correspond to barriers to colonisation (geology, urbanisation, intensive agriculture...) On the other hand, since records are rarely complete, some allowance must be made for the probability that lacunae near a centre of distribution are at least in part due to missed data. The Great Britain and England Red Lists address this situation by applying a tuneable method defining the ' α -hull', and the England book presents a nice illustration of how this works for Round-leaved Sundew *Drosera rotundifolia* to reveal its recent further decline in southern England and East Anglia.

Comparison between the GB and England lists

Of the 1,859 native and archaeophyte taxa assessed in England 19.9% are considered threatened (rated as Critically Endangered, Endangered or Vulnerable). This compares with 21% in Great Britain as a whole, with 2,191 taxa assessed. A further 1.9% of the total are considered extinct in England, as against 1.3% in Great Britain as a whole.

There are only 11 species that are not unique to England and have a lower threat status in England than in Great Britain. In some cases the change in status is due to changes in knowledge, but for several there has been a measurable change in fortunes, either through conservation efforts (Wild Asparagus *Asparagus prostratus*) or the vagaries of natural behaviour and human activity (Rye Brome *Bromus secalinus*).

There is a much larger number of taxa that have a higher threat status in England than in Great Britain as a whole – a total of 198, excluding those taxa which only ever occurred in England and whose change is therefore purely down to reassessment. The England Red List authors warn that there are several reasons for changes in status, some of which are purely artefactual, but nonetheless conclude that most are actually faring worse in England than in Great Britain as a whole. Many of these are plants of infertile or stressed environments in acid or alkaline, nutrient-poor, dry or wet habitats often bearing short

vegetation. The removal of Scotland and Wales from the scope of the listing means the discounting of large areas of upland. These largely infertile, relatively wild, relatively stable and undeveloped environments remote from (if not immune from) centres of diffuse pollution contrast strongly with the extensive English lowlands. It is reasonable to impute most of these more severe losses to habitat destruction and degradation.

Perhaps the most startling result is the list of 150 taxa that in England now bear the status Near Threatened. Some of the species listed will cause jaws to drop: they include Heather *Calluna vulgaris*, Cross-leaved Heath *Erica tetralix* and Bell Heather *Erica cinerea*; Quaking-grass *Briza media* and Field Scabious *Knautia arvensis*; and even Wild Strawberry *Fragaria vesca*.

The position in Hampshire

The publication of the England Red List has motivated the vice-county recorders to review the Hampshire Notables list, adding all those taxa that have been newly assigned a threat status or designated Near Threatened. Of the 11 species whose status is now lower, 6 occur in the county; none of these is considered of Least Concern in England. But in any case, as the Great Britain status is still relevant for the reasons given earlier, downgrading would not in itself result in any removals.

Of the plants designated as threatened in either Great Britain or England, a remarkably high number (155) have been recorded in Hampshire (and not as recent introductions) within the last couple of decades. And of the Near Threatened, 91 have recent records on the same basis. The tables below show the updates to the Hampshire Notables list resulting from upgraded status, and a list of all threatened plants for which we can reasonably be tasked with a national responsibility. The fact that many of these plants are reasonably abundant in Hampshire is cause for rejoicing but not for relaxation: it merely emphasises a pressing responsibility that the county holds for species that are disappearing or have already gone from swathes of the English lowlands. Even more it argues for safeguarding the heathland, mire, chalk grassland and other habitats that support them. As Norman Moore commented in his 1987 book *The Bird of Time* (quoted by the authors of the English Red List): 'It cannot be said too often that it is as much the conservationist's job to keep common species common as it is to ensure the survival of rare species.'

Links and references

The IUCN global Red List web site is at: <http://www.iucnredlist.org/>

The Vascular Plant Red Data List for Great Britain is available at: <http://jncc.defra.gov.uk/page-3354#download> where there is a PDF file of the original 2005 publication and a spreadsheet with all amendments.

The Vascular Plant Red List for England is available at: <http://www.bsbi.org.uk/england.html> where there is the PDF file of the published report, a list of minor corrections since publication, and a spreadsheet of the raw data.

The Hampshire Rare Plant Register is available from Summerfield Books <http://www.summerfieldbooks.com/> or from the authors, Martin Rand and Tony Mundell.

Online additions and updates, a spreadsheet of the full Hampshire Notables list, and other resources are available at: <http://hantsplants.org.uk/hrprresources.php>

Added to Hampshire Notables List from new English threat status:

Taxon	English name	GB status	English Status	Local rarity
<i>Briza media</i>	Quaking-grass	Least Concern	Near Threatened	Not Scarce
<i>Calluna vulgaris</i>	Heather	Least Concern	Near Threatened	Not Scarce
<i>Campanula rotundifolia</i>	Harebell	Least Concern	Near Threatened	Not Scarce
<i>Carex echinata</i>	Star Sedge	Least Concern	Near Threatened	Not Scarce
<i>Carlina vulgaris</i>	Carline Thistle	Least Concern	Near Threatened	Not Scarce
<i>Cruciata laevipes</i>	Crosswort	Least Concern	Near Threatened	Not Scarce
<i>Drosera intermedia</i>	Oblong-leaved Sundew	Least Concern	Vulnerable	Not Scarce
<i>Drosera rotundifolia</i>	Round-leaved Sundew	Least Concern	Near Threatened	Not Scarce
<i>Erica cinerea</i>	Bell Heather	Least Concern	Near Threatened	Not Scarce
<i>Erica tetralix</i>	Cross-leaved Heath	Least Concern	Near Threatened	Not Scarce
<i>Eriophorum angustifolium</i>	Common Cottongrass	Least Concern	Vulnerable	Not Scarce
<i>Euphrasia nemorosa</i>	Common Eyebright	Least Concern	Near Threatened	Not Scarce
<i>Fragaria vesca</i>	Wild Strawberry	Least Concern	Near Threatened	Not Scarce
<i>Gentianella amarella</i>	Autumn Gentian	Least Concern	Near Threatened	Not Scarce
<i>Helianthemum nummularium</i>	Common Rock-rose	Least Concern	Near Threatened	Not Scarce
<i>Hydrocotyle vulgaris</i>	Marsh Pennywort	Least Concern	Near Threatened	Not Scarce
<i>Knautia arvensis</i>	Field Scabious	Least Concern	Near Threatened	Not Scarce
<i>Lathyrus linifolius</i>	Bitter-vetch	Least Concern	Near Threatened	Not Scarce
<i>Limonium vulgare</i>	Common Sea-lavender	Least Concern	Near Threatened	Not Scarce
<i>Melampyrum pratense</i>	Common Cow-wheat	Least Concern	Near Threatened	Not Scarce
<i>Mentha arvensis</i>	Corn Mint	Least Concern	Near Threatened	Not Scarce
<i>Nardus stricta</i>	Mat-grass	Least Concern	Near Threatened	Not Scarce
<i>Oxalis acetosella</i>	Wood-sorrel	Least Concern	Near Threatened	Not Scarce
<i>Pedicularis sylvatica</i>	Lousewort	Least Concern	Vulnerable	Not Scarce
<i>Plantago media</i>	Hoary Plantain	Least Concern	Near Threatened	Not Scarce
<i>Polygala serpyllifolia</i>	Heath Milkwort	Least Concern	Near Threatened	Not Scarce
<i>Potentilla erecta</i>	Tormentil	Least Concern	Near Threatened	Not Scarce
<i>Prunus cerasus</i>	Dwarf Cherry	Least Concern	Near Threatened	Rare
<i>Ranunculus flammula</i>	Lesser Spearwort	Least Concern	Vulnerable	Not Scarce
<i>Salix repens</i>	Creeping Willow	Least Concern	Near Threatened	Not Scarce
<i>Sanicula europaea</i>	Sanicle	Least Concern	Near Threatened	Not Scarce
<i>Senecio aquaticus</i>	Marsh Ragwort	Least Concern	Near Threatened	Not Scarce
<i>Silene flos-cuculi</i>	Ragged-Robin	Least Concern	Near Threatened	Not Scarce
<i>Solidago virgaurea</i>	Goldenrod	Least Concern	Near Threatened	Not Scarce
<i>Succisa pratensis</i>	Devil's-bit Scabious	Least Concern	Near Threatened	Not Scarce
<i>Taraxacum palustre</i>	Fen Dandelion	Least Concern	Vulnerable	Rare
<i>Valeriana dioica</i>	Marsh Valerian	Least Concern	Near Threatened	Not Scarce
<i>Valeriana officinalis</i>	Common Valerian	Least Concern	Near Threatened	Not Scarce
<i>Veronica scutellata</i>	Marsh Speedwell	Least Concern	Near Threatened	Not Scarce

Hampshire Notables candidate list into main list:

Taxon	English name	GB status	English Status	Local rarity
<i>Catabrosa aquatica</i>	Whorl-grass	Least Concern	Vulnerable	?Infrequent
<i>Cichorium intybus</i>	Chicory	Least Concern	Vulnerable	Not Scarce
<i>Erysimum cheiranthoides</i>	Treacle-mustard	Least Concern	Near Threatened	Infrequent
<i>Filago minima</i>	Small Cudweed	Least Concern	Near Threatened	Not Scarce
<i>Genista tinctoria</i>	Dyer's Greenweed	Least Concern	Vulnerable	Infreq. (North)
<i>Hypericum elodes</i>	Marsh St John's-wort	Least Concern	Near Threatened	Not Scarce
<i>Lepidium campestre</i>	Field Pepperwort	Least Concern	Near Threatened	Infreq. (North)
<i>Triglochin palustris</i>	Marsh Arrowgrass	Least Concern	Near Threatened	Infreq. (North)

Promoted from local to national status from new English threat status:

Taxon	English name	GB status	English Status	Local rarity
<i>Antennaria dioica</i>	Mountain Everlasting	Least Concern	Vulnerable	Rare
<i>Apium inundatum</i>	Lesser Marshwort	Least Concern	Vulnerable	Scarce (North)
<i>Arabis hirsuta</i>	Hairy Rock-cress	Least Concern	Near Threatened	Infrequent
<i>Artemisia maritima</i>	Sea Wormwood	Least Concern	Near Threatened	Infrequent
<i>Botrychium lunaria</i>	Moonwort	Least Concern	Vulnerable	Infrequent
<i>Carex elata</i>	Tufted-sedge	Least Concern	Near Threatened	Infrequent
<i>Carex lasiocarpa</i>	Slender Sedge	Least Concern	Vulnerable	Rare
<i>Carex limosa</i>	Bog-sedge	Least Concern	Endangered	Rare
<i>Carex vesicaria</i>	Bladder-sedge	Least Concern	Vulnerable	Infrequent
<i>Carum verticillatum</i>	Whorled Caraway	Least Concern	Vulnerable	?Extinct
<i>Comarum palustre</i>	Marsh Cinquefoil	Least Concern	Near Threatened	Infreq. (North)
<i>Deschampsia setacea</i>	Bog Hair-grass	Least Concern	Vulnerable	Infrequent
<i>Eleocharis acicularis</i>	Needle Spike-rush	Least Concern	Near Threatened	Infrequent
<i>Epipactis palustris</i>	Marsh Helleborine	Least Concern	Near Threatened	Infrequent
<i>Eryngium maritimum</i>	Sea-holly	Least Concern	Near Threatened	Infrequent
<i>Euphrasia arctica</i>	Arctic Eyebright	Data Deficient	Vulnerable	Rare
<i>Euphrasia confusa</i>	Confused Eyebright	Data Deficient	Vulnerable	Infrequent
<i>Euphrasia micrantha</i>	Slender Eyebright	Data Deficient	Endangered	Infrequent
<i>Euphrasia tetraquetra</i>	Western Eyebright	Least Concern	Near Threatened	Rare
<i>Gentiana pneumonanthe</i>	Marsh Gentian	Least Concern	Near Threatened	Infrequent
<i>Glaucium flavum</i>	Yellow Horned-poppy	Least Concern	Near Threatened	Infrequent
<i>Hammarbya paludosa</i>	Bog Orchid	Least Concern	Vulnerable	Infrequent
<i>Hieracium cantianum</i>	Kent Hawkweed	Least Concern	Endangered	?Extinct
<i>Hieracium rigens</i>	Rigid Hawkweed	Least Concern	Endangered	Rare
<i>Hottonia palustris</i>	Water-violet	Least Concern	Vulnerable	Infrequent
<i>Jasione montana</i>	Sheep's-bit	Least Concern	Vulnerable	Infreq. (North)
<i>Moenchia erecta</i>	Upright Chickweed	Least Concern	Vulnerable	Infreq. (North)
<i>Myrica gale</i>	Bog-myrtle	Least Concern	Near Threatened	Infreq. (North)
<i>Oenanthe lachenalii</i>	Parsley Water-dropwort	Least Concern	Near Threatened	Infrequent
<i>Ononis spinosa</i>	Spiny Restharrow	Least Concern	Near Threatened	Infrequent
<i>Pedicularis palustris</i>	Marsh Lousewort	Least Concern	Vulnerable	Infreq. (N)
<i>Phleum arenarium</i>	Sand Cat's-tail	Least Concern	Near Threatened	Rare
<i>Pinguicula vulgaris</i>	Common Butterwort	Least Concern	Vulnerable	Rare
<i>Potamogeton alpinus</i>	Red Pondweed	Least Concern	Vulnerable	Scarce
<i>Pyrola minor</i>	Common Wintergreen	Least Concern	Near Threatened	Rare
<i>Rhynchospora alba</i>	White Beak-sedge	Least Concern	Near Threatened	Scarce (North)
<i>Ruppia maritima</i>	Beaked Tasselweed	Least Concern	Near Threatened	Infrequent
<i>Sagina nodosa</i>	Knotted Pearlwort	Least Concern	Vulnerable	Infrequent
<i>Sagina subulata</i>	Heath Pearlwort	Least Concern	Near Threatened	Rare (North)
<i>Salvia verbenaca</i>	Wild Clary	Least Concern	Near Threatened	Infrequent
<i>Sparganium natans</i>	Least Bur-reed	Least Concern	Vulnerable	Rare
<i>Taraxacum anglicum</i>	English Dandelion	Least Concern	Vulnerable	Rare
<i>Trifolium fragiferum</i>	Strawberry Clover	Least Concern	Vulnerable	Scarce (North)
<i>Utricularia minor</i>	Lesser Bladderwort	Least Concern	Vulnerable	Infrequent

Nationally threatened plants with significant Hampshire populations:

Taxon	English name	GB status	English Status	S Hants	N Hants
<i>Adonis annua</i>	Pheasant's-eye	Endangered	Endangered	Rare	Rare
<i>Ajuga chamaepitys</i>	Ground-pine	Endangered	Endangered	--	Rare
<i>Anacamptis morio</i>	Green-winged Orchid	Near Threatened	Vulnerable	Not Scarce	Infrequent
<i>Anthemis arvensis</i>	Corn Chamomile	Endangered	Endangered	?Scarce	Infrequent
<i>Anthemis cotula</i>	Stinking Chamomile	Vulnerable	Vulnerable	Not Scarce	Not Scarce
<i>Apium inundatum</i>	Lesser Marshwort	Least Concern	Vulnerable	Not Scarce	Scarce
<i>Baldellia ranunculoides</i>	Lesser Water-plantain	Near Threatened	Vulnerable	Not Scarce	Rare
<i>Bromus secalinus</i>	Rye Brome	Vulnerable	Near Threatened	?Infrequent	Not Scarce
<i>Bupleurum tenuissimum</i>	Slender Hare's-ear	Vulnerable	Vulnerable	Infrequent	-
<i>Campanula rapunculus</i>	Rampion Bellflower	Endangered	Endangered	Rare	-

Taxon	English name	GB status	English Status	S Hants	N Hants
<i>Carex diandra</i>	Lesser Tussock-sedge	Near Threatened	Vulnerable	?Extinct	Scarce
<i>Carex divisa</i>	Divided Sedge	Vulnerable	Least Concern	Not Scarce	--
<i>Carex lasiocarpa</i>	Slender Sedge	Least Concern	Vulnerable	Rare	-
<i>Carex limosa</i>	Bog-sedge	Least Concern	Endangered	Scarce	-
<i>Carex vesicaria</i>	Bladder-sedge	Least Concern	Vulnerable	Infrequent	Not Scarce
<i>Catabrosa aquatica</i>	Whorl-grass	Least Concern	Vulnerable	Not Scarce	?Infrequent
<i>Centunculus minimus</i>	Chaffweed	Near Threatened	Endangered	Not Scarce	?Scarce
<i>Cephalanthera damasonium</i>	White Helleborine	Vulnerable	Vulnerable	Not Scarce	Not Scarce
<i>Cephalanthera longifolia</i>	Narrow-leaved Helleborine	Vulnerable	Endangered	Scarce	Scarce
<i>Chamaemelum nobile</i>	Chamomile	Vulnerable	Vulnerable	Not Scarce	Infrequent
<i>Chenopodium bonus-henricus</i>	Good-King-Henry	Vulnerable	Vulnerable	Scarce	Infrequent
<i>Chenopodium glaucum</i>	Oak-leaved Goosefoot	Vulnerable	Vulnerable	Infrequent	Rare
<i>Chenopodium murale</i>	Nettle-leaved Goosefoot	Vulnerable	Endangered	Infrequent	?Extinct
<i>Chenopodium urbicum</i>	Upright Goosefoot	Crit. Endangered	Crit. Endangered	Extinct	Rare
<i>Cicendia filiformis</i>	Yellow Centaury	Vulnerable	Vulnerable	Not Scarce	-
<i>Cichorium intybus</i>	Chicory	Least Concern	Vulnerable	Not Scarce	Not Scarce
<i>Clinopodium acinos</i>	Basil Thyme	Vulnerable	Vulnerable	Not Scarce	Not Scarce
<i>Coeloglossum viride</i>	Frog Orchid	Vulnerable	Vulnerable	Not Scarce	Infrequent
<i>Cuscuta epithymum</i>	Dodder	Vulnerable	Vulnerable	Not Scarce	Not Scarce
<i>Cynoglossum germanicum</i>	Green Hound's-tongue	Crit. Endangered	Near Threatened	-	Rare
<i>Cyperus fuscus</i>	Brown Galingale	Vulnerable	Vulnerable	Rare	-
<i>Daphne mezereum</i>	Mezereon	Vulnerable	Vulnerable	Extinct	Scarce
<i>Deschampsia setacea</i>	Bog Hair-grass	Least Concern	Vulnerable	Not Scarce	Extinct
<i>Dianthus armeria</i>	Deptford Pink	Endangered	Endangered	Rare	Rare
<i>Drosera anglica</i>	Great Sundew	Near Threatened	Endangered	Scarce	-
<i>Drosera intermedia</i>	Oblong-leaved Sundew	Least Concern	Vulnerable	Not Scarce	Not Scarce
<i>Eleocharis parvula</i>	Dwarf Spike-rush	Least Concern	Endangered	Rare	-
<i>Eriophorum angustifolium</i>	Common Cottongrass	Least Concern	Vulnerable	Not Scarce	Not Scarce
<i>Eriophorum gracile</i>	Slender Cottongrass	Near Threatened	Vulnerable	Rare	Extinct
<i>Euphorbia exigua</i>	Dwarf Spurge	Near Threatened	Vulnerable	Not Scarce	Not Scarce
<i>Euphrasia arctica</i>	Arctic Eyebright	Data Deficient	Vulnerable	Rare	Rare
<i>Euphrasia confusa</i>	Confused Eyebright	Data Deficient	Vulnerable	Infrequent	Rare
<i>Euphrasia micrantha</i>	Slender Eyebright	Data Deficient	Endangered	Not Scarce	Rare
<i>Euphrasia officinalis</i> subsp. <i>anglica</i>	English Eyebright	Endangered	Endangered	Not Scarce	Scarce
<i>Euphrasia pseudokernerii</i>	Chalk Eyebright	Endangered	Vulnerable	Infrequent	Scarce
<i>Fallopia dumetorum</i>	Copse-bindweed	Vulnerable	Vulnerable	Scarce	Rare
<i>Filago lutescens</i>	Red-tipped Cudweed	Endangered	Endangered	-	Rare
<i>Fumaria vaillantii</i>	Few-flowered Fumitory	Vulnerable	Endangered	Rare	Scarce
<i>Galeopsis angustifolia</i>	Red Hemp-nettle	Crit. Endangered	Crit. Endangered	Infrequent	?Infrequent
<i>Galium parisiense</i>	Wall Bedstraw	Vulnerable	Vulnerable	Scarce	Scarce
<i>Genista anglica</i>	Petty Whin	Near Threatened	Vulnerable	Not Scarce	?Infrequent
<i>Genista tinctoria</i>	Dyer's Greenweed	Least Concern	Vulnerable	Not Scarce	Scarce
<i>Gentianella campestris</i>	Field Gentian	Vulnerable	Endangered	Scarce	Rare
<i>Gladiolus illyricus</i>	Wild Gladiolus	Least Concern	Vulnerable	Not Scarce	-
<i>Glebionis segetum</i>	Corn Marigold	Vulnerable	Vulnerable	Not Scarce	?Scarce
<i>Gnaphalium sylvaticum</i>	Heath Cudweed	Endangered	Endangered	?Scarce	?Infrequent
<i>Hammarbya paludosa</i>	Bog Orchid	Least Concern	Vulnerable	Not Scarce	-
<i>Herminium monorchis</i>	Musk Orchid	Vulnerable	Endangered	Scarce	Rare
<i>Hieracium pollichiae</i>	Roffey's Hawkweed	Vulnerable	Least Concern	-	Rare
<i>Hieracium rigens</i>	Rigid Hawkweed	Least Concern	Endangered	Rare	Rare
<i>Hordeum marinum</i>	Sea Barley	Vulnerable	Vulnerable	Infrequent	-
<i>Hottonia palustris</i>	Water-violet	Least Concern	Vulnerable	Scarce	Scarce
<i>Hydrocharis morsus-ranae</i>	Frogbit	Vulnerable	Vulnerable	Scarce	Scarce

Taxon	English name	GB status	English Status	S Hants	N Hants
<i>Hypochaeris glabra</i>	Smooth Cat's-ear	Vulnerable	Vulnerable	Infrequent	Scarce
<i>Hypopitys monotropa</i>	Yellow Bird's-nest	Endangered	Endangered	Infrequent	Infrequent
<i>Illecebrum verticillatum</i>	Coral-necklace	Endangered	Endangered	Not Scarce	Infrequent
<i>Jasione montana</i>	Sheep's-bit	Least Concern	Vulnerable	Not Scarce	Infrequent
<i>Juncus compressus</i>	Round-fruited Rush	Near Threatened	Vulnerable	Rare	Rare
<i>Lathyrus aphaca</i>	Yellow Vetchling	Vulnerable	Vulnerable	Scarce	Extinct
<i>Lithospermum arvense</i>	Field Gromwell	Endangered	Endangered	Scarce	Scarce
<i>Lobelia urens</i>	Heath Lobelia	Vulnerable	Vulnerable	Rare	–
<i>Lycopodiella inundata</i>	Marsh Clubmoss	Endangered	Endangered	Not Scarce	Infrequent
<i>Melittis melissophyllum</i>	Bastard Balm	Vulnerable	Vulnerable	Scarce	Extinct
<i>Mentha pulegium</i>	Pennyroyal	Endangered	Crit. Endangered	Infrequent	–
<i>Minuartia hybrida</i>	Fine-leaved Sandwort	Endangered	Endangered	Rare	Scarce
<i>Misopates orontium</i>	Weasel's-snout	Vulnerable	Vulnerable	Not Scarce	Not Scarce
<i>Moenchia erecta</i>	Upright Chickweed	Least Concern	Vulnerable	Not Scarce	Infrequent
<i>Myosurus minimus</i>	Mousetail	Vulnerable	Vulnerable	Not Scarce	Scarce
<i>Neotinea ustulata</i>	Burnt Orchid	Endangered	Endangered	Rare	Rare
<i>Neottia nidus-avis</i>	Bird's-nest Orchid	Near Threatened	Vulnerable	Not Scarce	Not Scarce
<i>Nepeta cataria</i>	Cat-mint	Vulnerable	Vulnerable	Infrequent	Scarce
<i>Oenanthe fistulosa</i>	Tubular Water-dropwort	Near Threatened	Vulnerable	Not Scarce	Infrequent
<i>Onobrychis viciifolia</i>	Sainfoin	Near Threatened	Vulnerable	Not Scarce	Not Scarce
<i>Ophrys insectifera</i>	Fly Orchid	Vulnerable	Vulnerable	Infrequent	Infrequent
<i>Orobanche rapum-genistae</i>	Greater Broomrape	Near Threatened	Vulnerable	Scarce	Rare
<i>Papaver argemone</i>	Prickly Poppy	Vulnerable	Endangered	?Infrequent	Not Scarce
<i>Pedicularis palustris</i>	Marsh Lousewort	Least Concern	Vulnerable	Not Scarce	Infrequent
<i>Pedicularis sylvatica</i>	Lousewort	Least Concern	Vulnerable	Not Scarce	Not Scarce
<i>Persicaria mitis</i>	Tasteless Water-pepper	Vulnerable	Vulnerable	Scarce	?Extinct
<i>Pilularia globulifera</i>	Pillwort	Near Threatened	Vulnerable	Not Scarce	Infrequent
<i>Platanthera bifolia</i>	Lesser Butterfly-orchid	Vulnerable	Endangered	Not Scarce	?Rare
<i>Polygonum maritimum</i>	Sea Knotgrass	Vulnerable	Vulnerable	Rare	–
<i>Potamogeton alpinus</i>	Red Pondweed	Least Concern	Vulnerable	Scarce	?Scarce
<i>Pulicaria vulgaris</i>	Small Fleabane	Crit. Endangered	Endangered	Infrequent	?Extinct
<i>Radiola linoides</i>	Allseed	Near Threatened	Vulnerable	Not Scarce	Scarce
<i>Ranunculus flammula</i>	Ranunculus flammula	Least Concern	Vulnerable	Not Scarce	Not Scarce
<i>Sagina nodosa</i>	Knotted Pearlwort	Least Concern	Vulnerable	Infrequent	Scarce
<i>Scandix pecten-veneris</i>	Shepherd's-needle	Crit. Endangered	Endangered	?Extinct	Scarce
<i>Scleranthus annuus</i> subsp. <i>annuus</i>	Annual Knawel	Endangered	Endangered	Scarce	Scarce
<i>Silene gallica</i>	Small-flowered Catchfly	Endangered	Endangered	Scarce	Rare
<i>Silene noctiflora</i>	Night-flowering Catchfly	Vulnerable	Vulnerable	?Scarce	Infrequent
<i>Sparganium natans</i>	Least Bur-reed	Least Concern	Vulnerable	Scarce	–
<i>Spergula arvensis</i>	Corn Spurrey	Vulnerable	Vulnerable	Not Scarce	Not Scarce
<i>Stellaria palustris</i>	Marsh Stitchwort	Vulnerable	Vulnerable	Scarce	Scarce
<i>Taraxacum anglicum</i>	English Dandelion	Least Concern	Vulnerable	–	Rare
<i>Taraxacum palustre</i>	Fen Dandelion	Least Concern	Vulnerable	Rare	Rare
<i>Tephrosieris integrifolia</i>	Field Fleawort	Endangered	Vulnerable	Scarce	Scarce
<i>Torilis arvensis</i>	Spreading Hedge-parsley	Endangered	Endangered	Scarce	Scarce
<i>Trifolium fragiferum</i>	Strawberry Clover	Least Concern	Vulnerable	Not Scarce	Scarce
<i>Turritis glabra</i>	Tower Mustard	Endangered	Endangered	–	Rare
<i>Utricularia minor</i>	Lesser Bladderwort	Least Concern	Vulnerable	Not Scarce	Rare
<i>Valerianella dentata</i>	Narrow-fruited Cornsalad	Endangered	Endangered	Infrequent	Not Scarce
<i>Valerianella rimosa</i>	Broad-fruited Cornsalad	Endangered	Endangered	?Rare	Rare
<i>Viola canina</i>	Heath Dog-violet	Near Threatened	Vulnerable	Not Scarce	Infrequent
<i>Viola lactea</i>	Pale Dog-violet	Vulnerable	Endangered	Not Scarce	Rare
<i>Zostera marina</i>	Eelgrass	Near Threatened	Vulnerable	Infrequent	–
<i>Zostera noltei</i>	Dwarf Eel-grass	Vulnerable	Vulnerable	?Infrequent	--

News and Views

Narrow-leaved Lungwort

A note by Clive Chatters

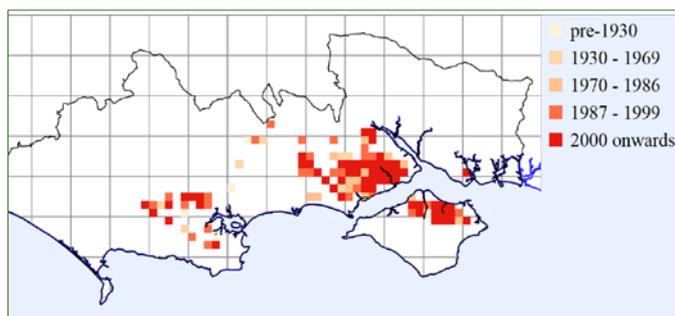
The Narrow-leaved Lungwort *Pulmonaria longifolia* is one of our most attractive spring flowers. The distinctive navy-blue blooms over silvered leaves have attracted records since 1620 and a host of vernacular names including 'Jerusalem Cowslip', 'Virgin Mary and Beelzebub' and 'Snake Flowers'.

In Britain Narrow-leaved Lungwort is intriguingly restricted in its distribution to the headwaters of the prehistoric Solent River which in turn was a tributary of the Seine. The national distribution is therefore mostly in Hampshire and the Isle of Wight but there are further populations westward to Purbeck.

The Lungwort is often written about as a woodland flower but it is found in a much wider range of habitats including hedgebanks, shady road verges and railway lines and even within heaths and species rich grasslands. The best places to see it in quantity include the northern borders of Parkhurst Forest on the Isle of Wight and the paths which leads from Beaulieu Village to Buckler's Hard. The extension of worked coppice at our Roydon Woods nature reserve has seen it released from shade and blooming in the sunny coupes.

Sofie Meus of the University of Leuven in Belgium has been looking at the genetics of Lungwort species across Europe. The 1972 *Flora Europaea* lists thirteen species of Lungwort and comments on the variability between species possibly derived from hybridization between 3 or 4 'basic species'. Sofie visited the New Forest and the Island to collect material to see where our populations fit.

Whilst European populations show evidence of hybridization the Narrow-leaved Lungwort populations of northern France and England don't. This 'purity' reflects the relative isolation of these populations from most other European species. In addition the populations in France and England are not genetically distinct from one another, nor are those of the Island and the mainland different. Further sampling using even more genetic markers may detect some subtle differences, but given the short period of evolutionary time separating England from the continent and the Island from the Mainland the current results are not surprising



Distribution of Narrow-leaved Lungwort in Hampshire, Dorset and Isle of Wight from the BSBI distribution database



Narrow-leaved Lungwort *Pulmonaria longifolia*, St Katherine's, Exbury (Clive Chatters)

Sofie's investigations follow an honourable tradition. Charles Darwin was looking at hybridization of Lungworts from the Isle of Wight in 1864. Modern molecular studies have confirmed Darwin's findings that our native Lungwort is a difficult species to hybridise with the most common garden Lungwort, *Pulmonaria officinalis*. This is reassuring as there are a growing number of records of garden Lungworts from the countryside as they 'jump the garden fence' or are survivors of dumping garden waste.

Micheldever

A cautionary tale by Clive Chatters

The construction of the railway tunnel through the chalk grasslands and wood pastures of Popham Beacons in 1840 created one of Hampshire's most intriguing botanical localities.

Part of this complex of habitats by Micheldever Station falls within the Micheldever Spoilheaps Site of Special Scientific Interest (SSSI), an area known more affectionately to the locals as 'The Chalkies'. A recent proposal to develop land to the south of the SSSI around the disused oil terminal has revealed a major extension to the botanically-rich habitats of the Chalkies. This site has been recognised as a Site of Importance for Nature Conservation since 1995 but the full extent of its interest had yet to be revealed. The proposed development was for an anaerobic digester and associated works.

All planning applications are accompanied by environmental statements. Very early on in the application process the Wildlife Trust, along with the Hampshire Biodiversity Information Centre (HBIC), challenged the environmental studies which accompanied the development proposal as they clearly contained an inadequate description of a site known to be of exceptional interest for over a century. HBIC then re-surveyed the land, the results of which required the prospective developers to undertake a thorough survey which revealed the true character of the site.

The habitats include a sparse and parched chalk grassland type classified by the NVC as CG7 which is known



Cut-leaved Germander *Teucrium botrys* (Clive Chatters)

from only a handful of small sites in Hampshire. This is one of the most botanically-rich of lowland grassland communities. Unsurprisingly the exceptional habitat supports a suite of exceptional species. The great rarities long known from the Micheldever area were found here in abundance, including the Nationally Rare and protected Cut-leaved Germander *Teucrium botrys* which is a protected species under Schedule 8 of the Wildlife and Countryside Act, the Nationally Scarce and County Rare Spring Cinquefoil *Potentilla neumanniana*, the Nationally Scarce and County Rare Mat-grass Fescue *Vulpia unilateralis*, the Nationally Scarce and Vulnerable and County Rare Wall Bedstraw *Galium parisiense*, the Nationally Vulnerable, County Scarce and NERC Act (Section 41) listed Basil Thyme *Clinopodium acinos* and the Nationally Vulnerable, County Notable and NERC Act (Section 41) White Helleborine *Cephalanthera damasonium*.

In addition, to these flowering plants a remarkable lichen flora is also present. This includes the Nationally Scarce and NERC Act (Section 41) *Toninia sedifolia*, the Nationally Scarce *Agonimia gelatinosa* and the even rarer (Nationally Rare) fungal parasite *Polycoccum peltigerae*. This latter species has never previously been recorded in Hampshire. The moss flora was equally interesting with two Nationally Scarce mosses recorded at the site, *Abietinella abietina* var. *histrucosa* and *Didymodon acutus*.

Following a comprehensive suite of objections from the local community, The Wildlife Trust, Plantlife and the BSBI, together with the local MP, the proposed development was refused consent.

The case however has its disturbing elements. After an initial and detailed letter of concern supporting our case, Natural England, the statutory conservation advisors, changed their stance and did not sustain an objection. Natural England went further to suggest the site did not merit protection as an extension to the SSSI and went so far as to suggest the loss of the site could be 'offset' by the transfer of an unremarkable adjacent field to some unspecified sort of conservation management. The Wildlife Trust asked Natural England to explain their

reasoning behind this inexplicable change of heart. The answer we received was far from persuasive. The Trust have decided this is such an important site that we need to continue to press the case for the proper designation and long-term conservation of this botanical gem.

Wood Calamint on the Isle of Wight

A note by Clive Chatters



Wood Calamint *Clinopodium menthifolium* on the Isle of Wight (Keith Marston)

Each year the Wildlife Trust makes an award in memory of the late Peter Brough 'to acknowledge and encourage the work of amateur naturalists'. This year the award was made to the Isle of Wight Natural History and Archaeological Society for their work with Wood Calamint *Clinopodium menthifolium*.

Wood Calamint has always been a great rarity in Britain with historic records being available along the south coast counties from Devon to Kent. Most of these records have proved unreliable and, with the possible exception of a late nineteenth century record from Kent, the plant appears confined to the Isle of Wight. The plant was discovered on the Island in 1841 and its historic and current distribution is confined to a single valley in the chalk hills. At the time of its discovery this valley supported ancient coppice woods, scrubs and sheep-walks. Over time the woodlands have grown darker, the scrub has developed into secondary woodlands and the sheep-walks are now farmland. By the mid twentieth century the population of Wood Calamint was in decline and its very survival in Britain was at threat.

For some fifty years the Isle of Wight Natural History and Archaeological Society has organised volunteers to work with the estate and maintain the open habitats in which the plant germinates and flowers. To keep the population of Wood Calamint healthy it is necessary to keep the woodland edge where it grows open and sunny.



Wood Calamint work party at Rowridge, 1962 (IWNHAS)

The plant lives, quite literally, on the edge. Most winters work is required to cut back the previous year's growth. The habitat is an important part of a shoot and so the conservation work goes hand in hand with the work of the gamekeepers.

Conserving Wood Calamint requires dedication over decades. The work has been a great success and Wood Calamint remains part of the British Flora.

Bibliography

Marston, A. (2007). The distribution and abundance of Wood Calamint on the Isle of Wight 1999-2005. *Proceedings of the Isle of Wight Natural History and Archaeological Society* 22: 42-60.

Riley, A. (2000). Further studies in the ecology and conservation of Wood Calamint on the Isle of Wight. Report to the Hampshire and Isle of Wight Wildlife Trust and the Isle of Wight Natural History and Archaeological Society, Eastleigh.

Winship, H.R (1995). The conservation of Wood Calamint on the Isle of Wight. Report to the Hampshire and Isle of Wight Wildlife Trust and the Isle of Wight Natural History and Archaeological Society, Eastleigh.

Slender Cottongrass

A note by Clive Chatters

Slender Cottongrass *Eriophorum gracile* is the rarest of the British cottongrasses and has one of its strongholds in the New Forest. Over the years, the Flora Group has been active in surveying the species and undertaking experimental conservation management. Under a contract to the Forestry Commission, Hampshire and Isle of Wight Wildlife Trust has undertaken a detailed review of the species, its habitats and conservation. Through this study we have gained an insight into the issues of conserving the New Forest's richer mires and fens.

The story is complex. As part of the study Neil Sanderson has undertaken detailed field surveys and so we have a deep understanding of the plant and its habitat requirements. Over the last twenty years there have

been various conservation initiatives to prevent the species becoming locally extinct. Where these have been undertaken on a sufficient scale and thoroughness they have proved effective. The research has shown that drainage work has disrupted the ecological processes within the Forest's bogs resulting in a great expansion of Alder moor and willow scrubs. If the Slender Cottongrass and its habitats are to be conserved it is necessary to re-instate the ecological functions of the bogs. The full report when finalised will be published on the Trust's website.



Slender Cotton-grass *Eriophorum gracile*, Widden Bottom, New Forest (Neil Sanderson)

Pitcher Plant Prey in the New Forest

A note by Clive Chatters

In the past the Pitcher Plant *Sarracenia purpurea* has been planted in New Forest bogs by misguided enthusiasts and nurserymen. The species has also been planted elsewhere in Britain and Ireland where it has become of conservation concern (Walker 2014). The Pitcher Plant, once established, can become an invasive species. Once well established the plant can come to dominate mire communities. At Wedholme Flow National Nature Reserve (Cumbria) 6 tonnes of plants were removed between 2000 and 2013 without any discernible effect on the overall size of the population.

This insectivorous plant is native to the eastern seaboard of the United States and Canada and is the hardiest of the genus. It is a very handsome plant and has been adopted as the State flower of Newfoundland. The leaves are rolled to produce a flask holding fluids with digestive enzymes into which insects fall and are digested to provide nutrients for the plant.

The New Forest Non-Native Plants Project is removing Pitcher Plants from Forest bogs (Sanderson 2012). In September 2014 the pitchers of plants collected from the mire near Wootton Bridge on the Avon Water (SZ 2599) were drained and the resultant 'gunk' was preserved in alcohol. Paul Brock, an entomologist from Brockenhurst and scientific associate at the Natural History Museum kindly volunteered to identify the remains. Paul has

written a photographic guide to insects of the New Forest (Brock 2011) which is invaluable to the entomologically curious botanist.

The majority of the remains Paul identified were of Sexton Beetles, mostly *Nicrophorus vespilloides* but also some *N. investigator*. Sexton Beetles feed on carrion and can detect dead creatures from a great distance. Anyone who has handled them will know of the revolting smell of decay associated with them. Sexton Beetles are clearly attracted to pitcher plants and are readily trapped. Also present was a single *Margarinotus brunneus*, a Hister Beetle species which one may expect to find under cowpats or under carrion, together with a hunting ground beetle *Pterostichus melanarius*. The only fly recorded was a 'green bottle' blow fly *Lucilia sericata*. None of these invertebrates are rare in a local context, as the New Forest remains a stronghold of species associated with dung and carrion.

Enthusiasts for carnivorous plants are working closely with the non-native plants project to dissuade future plantings and to celebrate the diversity of native carnivorous plants of the Forest's bogs.



Sexton Beetle *Nicrophorus vespilloides* (Paul Brock)

References

Walker, K.J. (2014). *Sarracenia purpurea* subsp. *purpurea* in Britain and Ireland, *New Journal of Botany* Vol. 4 No.1.

Sanderson, N.A. (2012). Ecological importance of Holmsley Bog in relation to the exotic pitcher plant *Sarracenia purpurea*. Report to HIWWT on behalf of the New Forest Non-Native Plants Project.

Brock, P.D. (2011). *A photographic guide to insects of the New Forest and surrounding area*, Pisces Publications, Newbury.

Fungi in the New Forest

A note by Clive Chatters

Whilst fungi are not plants the Flora Group have always taken an interest in their study and conservation. The scale of commercial 'foraging' for fungi in the New Forest reached a crescendo the autumn of 2014. Despite the unauthorised taking of fungi for sale or gain clearly being an offence under the Theft Act, numerous websites celebrate the unfettered systematic exploitation of the New Forest. At the same time the Corporation of the City of London have been clamping down on collecting in Epping Forest and Burnham Beeches and have publicised successful prosecutions of collectors. The biological case for and against collecting is complex but as the Corporation explained to local people, the collection of birds eggs and arms-full of wildflowers is now considered utterly unacceptable, the collection of fungi is the same.



Bearded Tooth Fungus, a highly protected species in highly protected habitats, which continues to be exploited in the New Forest (Tony Mundell)

The New Forest Non-Native Plants Project

An update by Catherine Chatters

With the help of enthusiastic volunteers and co-operation from landowners, great progress continues to be made to control the invasive non-native Himalayan Balsam *Impatiens glandulifera* along watercourses in the New Forest area. In fact some of the work parties I had organised for 2014 had to be cancelled, due to a lack of balsam, but fortunately I managed to find alternative sites for us to tackle further downstream. I will be arranging another busy programme of balsam-pulling for summer 2015 so if you have a bit of time to spare and would like to help, please contact me at Catherine.Chatters@hiwwt.org.uk or telephone me on **023 8042 4205** or **07770 923315** and I will send you the list of dates and meeting places. Our friendly group of volunteers will make you very welcome. The work parties are a great opportunity to visit parts of the countryside that are not usually accessible to the public. As Himalayan Balsam has short roots it is easy to pull up and balsam-pulling is



Happy volunteers with pile of Himalayan Balsam removed from Cadnam River, 2 June 2014 (Catherine Chatters)

very satisfying, but I must warn you that it can become quite addictive!

Other invasive non-native species such as Japanese Knotweed, Parrot's-feather and American Skunk-cabbage continue to be tackled by professional contractors.

We are hoping to secure funding through a bid to the Heritage Lottery Fund to enable the work by contractors and volunteers to continue until 2020. This 'Landscape Partnership' bid is being co-ordinated by the New Forest National Park Authority on behalf of a number of conservation organisations in the New Forest area to ensure the New Forest's distinctive landscape survives through future change and modern day pressures.

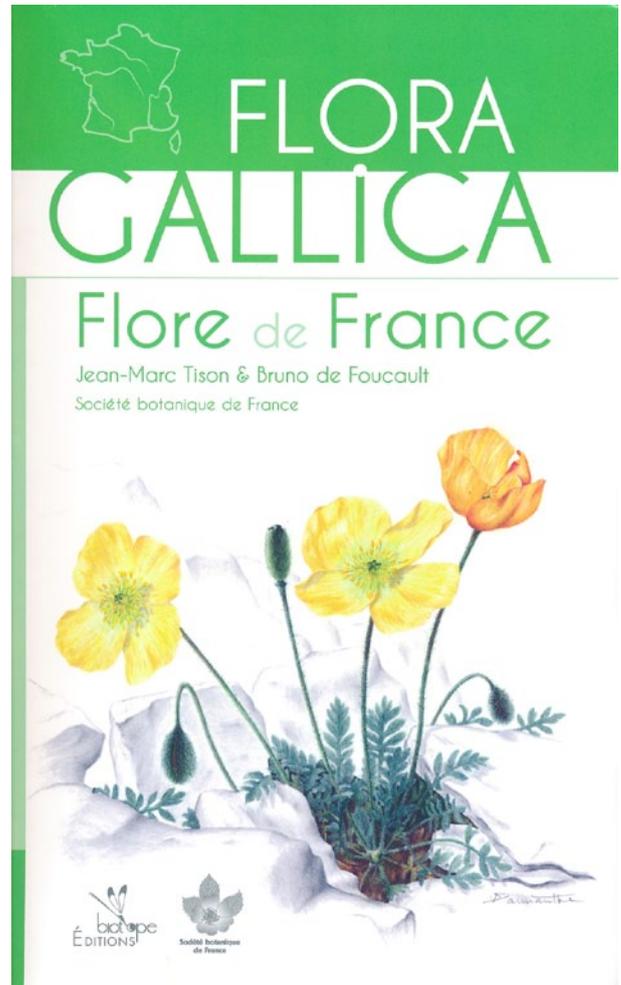
Flora Gallica

A book review by Eric Clement

Flora Gallica (Tison & de Foucault 2014) is a fascinating, portable, one-volume botanical key to the flora of France (and Corsica) which, unsurprisingly, includes almost all the plants of Hampshire (some of our rarer aliens are absent). It is written by two authors, assisted by 74 collaborators spread across Europe, but apparently includes no-one from Britain. It covers some 6200 taxa in full (and another 2450 are mentioned) and took 13 years to compile. There is no room for individual descriptions of genera or species, but the taxa are keyed out, sometimes down to varietal level.

The work incorporates all the latest phylogenetic (molecular) findings and is strangely indicative of what Stace's *New Flora*, ed. 4 might look like! But, unlike any British Flora (so far), it is arranged in an alphabetical order of family and genus within the major divisions of (roughly) ferns, conifers, monocots and dicots. As a result, one does not need the index (unless one forgets that e.g. *Digitalis* is now in Plantaginaceae).

Even without schoolboy French, there are several hundred brilliant small line drawings along the page edges depicting important characters used in the keys.



Generic boundaries chosen are often very narrow, even monospecific, e.g. *Puccinellia rupestris* appears on its own as *Pseudosclerochloa rupestris*. In contrast, some genera disappear, e.g. *Anagallis* is hidden within a broad *Lysimachia*.

Some hybrids as yet unknown in Britain appear, e.g. *Kickxia elatine* x *spuria* is noted as being sometimes partially fertile. Has anyone 'suspected' this in the past?

Some species suffer a name change – our precious New Forest *Gladiolus* becomes *G. gallaecicus*, the true *G. illyricus* being restricted to SE Europe.

Amsinckia micrantha has been wrongly claimed for France; it is *A. calycina* (true of Britain too?)

Parthenocissus quinquefolia is stated to be rarely cultivated; the escapee is *P. inserta* but a footnote says that it is possible that these are really the hybrid between the two species! Such gems of intrigue (and science) abound.

Summerfield Books can currently supply a copy for £79.

Reference

Tison, J.-M. & de Foucault, B. (coords) (2014). *Flora Gallica. Flore de France*. Biotope, Mèze.

Recording

Atlas 2020: Progress in Hampshire

A note by Martin Rand

We have now finished our third season of targeted recording for this national project, with five more years to go. Thanks to the hard work of a lot of people (aided by the generally excellent weather), we've already taken in 55,000 records for 2014. Once we've processed those in hand and received others we know are coming, we should attain the levels of 70,000 to 75,000 we've achieved in the last two years. This really is a phenomenal effort, putting us in a position that many other counties would envy – and not just those in the remote uplands. Every hectad (10km square) and part-hectad in Hampshire has now passed the minimal threshold the BSBI nationally has set for recording – that is, that at least two-thirds of all species ever recorded in the square have been recorded since 1999. In fact, using the more stringent criteria we've used in Hampshire to say that a tetrad (2km square) is 'lowest priority' for further recording, only one part-hectad doesn't yet have 80% recorded from 2000 onwards. Rather surprisingly, that is the south coast of Hayling Island, with just three part-tetrads along the coast. A rather nice project for someone, given the very rich and interesting flora there!

This is not to say that we can all go to sleep now for the next five years; there are areas where from a county point of view it would be very desirable to have better up to date coverage at tetrad resolution. The picture won't be clear until all the data are in place in the early spring, but I expect we shall need to keep hacking our way through the extreme south-west of the county. Our neighbours in Dorset are recognising some shortfalls in the same area, so expect to see some proposed joint visits to border tetrads in the next few years.

Also, be aware that I am digitising 'dots' from the distribution maps from the 1996 *Flora of Hampshire* where we don't have a more up to date or better localised record. This means that the recent recording level for a tetrad sometimes goes backwards proportionally, as these older records (mostly identified as simply '1930 to 1995') increase the total species count. Don't be disheartened. It will take probably another three years to complete this process.

Increasingly we can begin to turn the focus away from relentless square-bashing and focus on more specific investigations. One approach is to concentrate on a smaller number of 1km squares and record them even more intensively, with more attention to recording within habitat and choosing recording areas accordingly. This will fit in with the aims of the Plant Monitoring project being launched jointly by the BSBI and Plantlife, which will extend this intensive approach over longer periods of time to track changes to our wild plant life with more precision. But even for a 'one-off' recording project, experience shows that repeat visits to the same sites

will continue to increase the species list for those sites, albeit with diminishing returns.

Another important issue is uneven coverage in some species. Inevitably there will be some difficult and critical species that not everyone will feel able to record, and it's better to have no record than a 'false positive'. But some of the gaps in post-2000 recording are quite surprising. Do they represent a real very recent decline, or are they just being missed? Here are a few arbitrarily selected examples. They include things that one expects to be quite common, things that are localised and things that have always been fairly rare.

<i>Achillea ptarmica</i>	Sneezewort
<i>Aethusa cynapium</i>	Fool's Parsley
<i>Cardamine amara</i>	Large Bitter-cress
<i>Carex pallescens</i>	Pale Sedge
<i>Filago minima</i>	Small Cudweed
<i>Fumaria muralis</i> subsp. <i>boraiei</i>	Common Ramping-fumitory
<i>Genista anglica</i>	Petty Whin
<i>Isolepis cernua</i>	Slender Club-rush
<i>Jasione montana</i>	Sheep's-bit
<i>Linaria vulgaris</i>	Common Toadflax
<i>Lolium multiflorum</i>	Italian Rye-grass
<i>Medicago arabica</i>	Spotted Medick (especially away from the coast)

Now one or two of these might be a bit more challenging, but I'm sure many Flora Group members won't have too much trouble with most of them. So if you are able to take on one or a few of these, or others like them, and look out for them around the county, you will be helping to make the record more complete. To help you, the Hants Plants web site will soon include latest distribution maps for these species showing where the gaps in recent records are.

There are several web site enhancements to support Atlas 2020 in the pipeline, and there will be some meetings in the spring to review progress and talk through anything to do with recording for the project. During the main recording season Tony and I will again be publicising our own trips out on the web diary and welcoming one or two people on any day to join us. It doesn't matter whether you consider yourself an expert or a rank beginner – having the extra pair of eyes is always productive, and for me at least, having to justify my IDs to someone else is usually salutary! So whether you are already participating, or would like to join in for the first time this year, check out 'Hants Plants' (<http://hantsplants.org.uk>) for news and dates. You may also like to look at the BSBI's national web site (<http://bsbi.org.uk>) where there is now a dedicated page for Atlas 2020. The only thing I would say about that is not to use the customised 'vice-county' recording cards that they provide there for Hampshire; they give a false idea of what we would consider 'notable' in the county and which need a more detailed record. Also, the priority 1km squares shown on the national map don't match up to

our own local priorities, and should be replaced with an alternative Hampshire set in January or early February.

Cotoneasters Crib

John Norton has put together a simple table of leaf and berry characters of the commoner species of Cotoneasters likely to be found as escapes in the wild. This can be downloaded from Martin Rand's Hants Plants web site (<http://hantsplants.org.uk/articles.php>)



Late Cotoneaster *Cotoneaster lacteus*, a commonly planted and naturalised species which forms a small tree (John Norton)

VC11 Notes and Records

Compiled by Martin Rand (November 2014)

2014 Round-up

Once again the fine weather for much of the summer season, and the effort going into Atlas recording, has thrown up a big crop of records. The dry hot weather didn't suit everything, but some plants obviously enjoyed it. Clive Chatters and Andy Byfield attempted an estimate of the Autumn Lady's-tresses *Spiranthes spiralis* flowering on Wilverley Plain (SU20), and came up with a figure of between 1 and 2 million! Elsewhere this species has been popping up in newly recorded sites, including the suburban lawns it often favours these days. 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. But even if you didn't get your name in lights, your record is still valued and adds to the knowledge of our flora.

For the less common species (and especially for Red List plants – see elsewhere in this issue) one thing that is extremely helpful is the recording of detailed localities, to 10-metre precision if possible, with counts or measured extents. I have no great objection to separate sites with 10-metre (8-figure) grid references provided they are not multiplied hugely for common plants (Tony's views may differ); but if you have several dispersed small

populations in a small area, then a 100-metre (6-figure) overall site reference, with a comment listing the sub-site references, may be better.

Clive Chatters and Simon Currie have done this independently for Green-veined Orchid *Anacamptis morio* this year on Beaulieu Heath, building up a detailed picture of a widely dispersed but modest population. But it took a 'foreigner' (Mike Shaw, Recorder for West Sussex) to make the first record ever from what is surely a much visited site, the front lawn at Exbury House – which the estate people know about, cherish, and publicise at the entrance gate! Elsewhere Andrew Leonard of the British Pteridological Society has provided an astonishingly detailed set of fern records for South-east Hampshire. Data like these make it easier for surveyors to target areas for more in-depth survey, and allow populations to be monitored over time. Of course many people now have GPS, and the modern ones will give you a reading of 3-5m accuracy most of the time. If you have one of the newer models, make sure to turn on the tracking of the Russian GLONASS satellites as well as the US GPS ones. This will ensure a faster arrival at a small error reading after power-up, using less power in the process – and, from the very limited tests I've done, better repeatability and better matching to large-scale mapping.

Failing that, there are now several web sites where it's possible to get Ordnance Survey grid references (please use these and not latitude / longitude!) against street mapping, Ordnance Survey mapping and satellite imagery. We've mentioned 'Where's the Path' (<http://wtp2.appspot.com/wheresthepath.htm>) in the past; but my favourite of the moment is the 'Cucaera' web site (<http://www.cucaera.co.uk/>). From the menu, select 'Tools / Grid reference plotter'. Type a grid reference at any resolution (e.g. 'SU20', 'SU314217') in the toolbar at the top and click 'Submit' for a map at the right scale with a graticule – or just use the pan and zoom tools to get you there. 'Options' in the toolbar will let you switch between street mapping, Ordnance Survey mapping (down to 1:25,000) and satellite imagery – with the option to select modern maps or any of the historical OS map editions. Click on the map graticule and it will give you the full grid reference, along with a location name, postcode, elevation and the vice-county. And of course, if you are entering your records electronically, Living Record will give you similar mapping facilities for locating sites.

While we're on the subject of detailed recording, I'll also mention the New Forest Study Group who carry out census checks on two key species (Wild Gladiolus *Gladiolus illyricus* and Marsh Gentian *Gentiana pneumonanthe*) each year. Clive counts Brown Galingale *Cyperus fuscus* annually, as well as organising the 4- or 5-year monitoring of Small Fleabane *Pulicaria vulgaris*. And in the east of the county, several people are leading surveys into orchid populations at places such as South Moors, Havant and Chappetts Copse, East Meon. Meanwhile Cath Shellwell of Plantlife has done a very detailed field-by-field survey of arable fields on several important farming estates in the county, and generously

made the full results available to the recorders. There is such a lot of data here that I am still in the process of getting it organised for incorporation into the database.

Frequent surveys are particularly valuable for species that have large population fluctuations from one year to the next, including annuals and any other plants that rely on particular ground conditions to prosper or at least make them conspicuous. The information gives land managers an idea of what range of performance to expect from year to year, and prevents erroneous conclusions being drawn from limited data. There is scope for a lot more of this work; if racing around the county is not your thing, please ask for suggestions of plants in your neighbourhood that would be worth year-on-year monitoring.

Having mentioned a couple of orchids, I'll also report on a couple more. I was beginning to have fears that Man Orchid *Orchis anthropophora* had actually gone extinct in South Hampshire, but Mike Chalk put me right and was able to provide records for some of the intervening years. There were just three flowering spikes in 2014, one of which got broken off, perhaps accidentally by humans – which is why I'm not publishing the full site details in this case, although I am sure more than a few local people will already know where this is. There was plenty of evidence of visiting when I went. BSBI members who have read their *BSBI News* will also know of Mike's report last year of the hybrid between Man and Monkey Orchid, *Orchis x bergonii*. This is one of the commonest hybrids in the genus on the Continent, but is understandably rare in Britain given the rarity of one of the parents. Since Monkey Orchid is unknown in the wild in Hampshire and rare even in captivity, it's hard not to think that it was helped into its current site. In 2013 there was one flowering spike but in 2014 there were two. Again, I withhold site details but its whereabouts is evidently becoming a rather open secret, and at least one person managed to come across it by good luck last year.



Orchis x bergonii (the hybrid between Man and Monkey Orchid) (Martin Rand)

The storms of last winter proved good at reconfiguring sandy shores as well as beach huts – some of that sand having been kindly provided in earlier years by councils trying to promote their beaches. John Moon reported on finding the rare and Red Listed Sea Knotgrass *Polygonum maritimum* farther east from Highcliffe Castle than previous records, and a subsequent visit revealed a few plants of this, some Ray's Knotgrass *Polygonum oxyspermum*, one or two Sea Spurge *Euphorbia paralias*, good quantities of Sea Rocket *Cakile maritima* and other sand-lovers all thriving for some distance east of their former stations. Less expected was the strand in Southampton Water north of Calshot, which has yielded up Prickly Saltwort *Salsola kali* (first noted in 2013) and Sea Holly *Eryngium maritimum* among other things.

There are some plants one would be pleased to see the back of, however beautiful they may be, and hopefully one of them (Water-primrose *Ludwigia grandiflora*) will soon be no more in Hampshire. After delays and difficulties that must have been very frustrating for Jo Gore of the Wildlife Trust who has been trying to deal with it, the permissions are at last in place to re-excavate Round Pond, Breamore as a drastic but necessary extirpation measure. This is not before it had actually made it out of the pond into an outflow channel during the floods of the early part of the year. Jo and I spent a sunny autumn morning on our hands and knees in the ditch, painstakingly trying to remove every scrap of plant by hand. Nevertheless Jo was able to find more on a visit a few weeks later, showing its power of rapid regeneration and the difficulty of getting up all rhizome fragments when it is enmeshed with other vegetation. Fortunately it seems not to have made it as far as the main watercourse on Breamore Marsh, from which it would have a route to the River Avon. This was a blatant introduction a few years ago of a plant now banned for sale in Britain, and we are astonishingly lucky that so far all appearances in the wild here have been a little way away from river systems. Even so, its eradication in this one small spot is costing a lot of effort and money. If the person who put it there happens to read this (unlikely, I know) I hope they feel suitably contrite to the point where they will never be tempted to do anything similar again. This plant destroys ecosystems, wrecks water quality, wipes out fisheries and other economic and recreational uses of fresh water, boosts mosquito populations, strangles navigation and increases flood risks. In 20 years in the Marais Poitevin in France it went from nowhere to infesting 750 km of waterways; in this single region, about one quarter the size of Hampshire, costs in recent decades simply of mitigating its effects have run at about a quarter of a million euros a year. There is no longer any question of eradication there, or indeed in several European countries.

Every so often, the world and its activities throw up a huge and bizarre collection of exotic plants – Blackberry Drive at Fair Oak and Thruxton Race Circuit spring to mind in recent years, and this year Dawn Nelson and Jill Oakley were lucky enough (I think that counts as lucky!) to come across one such on Portsdown. I don't know

whether it was intended to be a wild flower sowing, but it would stretch anyone's definition of 'wild'. However, out of it came a couple of new vice-county records for *Amaranthus* species, confirmed by the BSBI referee. You will see others listed below.

One of the more interesting trips out this year for me provided a chance to explore the small islands in Langstone Harbour that are run as a bird reserve by the RSPB. During the breeding season these are of course 'off limits', but thanks are due to Wez Smith, the site manager, for extending the invitation and providing the boat transport. These islands have a few plant records in the past (mostly the more exciting things) but don't appear to have been comprehensively recorded. We succeeded in drawing up a list for each of the five islands separately and added numerous species. There were four botanists on board, and they included four vascular plant people (myself, Geoff Farwell, John Norton and Neil Sanderson), two bryologists (John and Neil) and one lichenologist (Neil, of course). The lead bryologist (John) had slim pickings but the rest of us did quite well. All the islands are very low-lying – most are overtopped at times – but most have a fringe of shingle sheltering strips of saltmarsh, which was rather well-developed on several islands and supported a nice mosaic of saltmarsh vegetation communities. One rises to a stately 5 metres above mean high tides and supports a scrub of Oak and Blackthorn (though the Oak is pretty moribund). One island has some remains of walls and enough of a sandy beach to support a couple of Yellow Horned-poppy. The records will make an interesting comparison with any such surveys carried out in the future, as sea levels rise. It is possible that these islands can self-stabilise by accreting shingle and mud to match levels.



Perennial Glasswort *Sarcocornia* and Seablite *Suaeda* on one of the Langstone Harbour islands (Martin Rand)

Finally, I hope you have seen the new Planning Blog page on the Wildlife Trust's web site (<http://www.hiwwt.org.uk/blog/hiwwt-planning>). Here particular instances of the Trust's involvement in planning issues are highlighted. Both the cases featured at the time of writing are of great importance to the County's plant life (and, of course, other wildlife). Another page (<http://www.hiwwt.org.uk/we-influence-planning-systems>)

<http://www.hiwwt.org.uk/we-influence-planning-systems>) has a guide on how you can support the Trust's work through personal action. It's hard to overstate how much such support is needed at present.

List of Records

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:

ACla = Alex Clayton; AD = Tony Davis; AHP = Andrew Powling; AJB = Andy Byfield; AJe = Anne Jenks; AJR = John Richards; AJW = Alan Willmot; ALe = Andrew Leonard; ARGM = Tony Mundell; BGo = Barry Goater; BF = Brian Fellows; BMd = Ben Mead; BSBI = BSBI field meeting (leader's initials in brackets); CC = Clive Chatters; CCha = Catherine Chatters; CWW = Charles Whitworth; DBa = David Ball; DC = David Caals; DGe = Duncan Gee; DHu = David Hughes; DL = David Leadbetter; DLG = Deborah Griffiths; DMit = Di Mitchell; DN = Dawn Nelson; DRA = Debbie Allan; EAP = Ted Pratt; EJC = Eric Clement; FAW = Felicity Woodhead; GCo = Ginnie Copsey; GDF = Geoffrey Field; GFa = Geoff Farwell; GK = Geoffrey Kitchener; GKn = Gareth Knass; HFG = Hampshire Flora Group meeting (leader's initials in brackets); ILR = Ian Ralphs; JAN = John Norton; JDe = Jonty Denton; JF = Jeanette Fryer; JFra = Jeremy Fraser; JGo = Jane Goater; JLM = Judy Mason; JMill = Joel Miller; JOa = Jill Oakley; JTM = Jez Martin; MBer = Matthew Berry; MCole = Dr M Coleman; MMu = Meg Mulcahy; MPa = Mary Parker, MR = Martin Rand; MSha = Mike Shaw; MWR = Mike Rowe; NSq = Nick Squirrel; PAB = Phil Budd; PAM = Pat Mundell; PDS = Paul Stanley; PG = Paul Green; PJB = Peter Burrows; PM = Peter Marston; PW = Pat Woodruffe; RCR = Clare Rand; RMW = Robin Walls; SJP = Sharon Pilkington; TSpe = Tim Speller; VAJ = Vic Johnstone.

NN *Abies grandis* (Giant Fir): Avon Heath CP South, SU127022; 07 Jul 14; MR & GCo; Planted. N side of car park. First for SU10.

Tote Hill, SU296245; 29 Mar 13; MR & GCo; Planted. Single tree planted in woodland belt. First for SU22.

NN *Acer cappadocicum* (Cappadocian Maple): Hursley, SU427 253; 31 Jul 14; PM. Very large tree with many suckers at recreation ground at SU4271 2535. First for SU42.

NN *Aconitum napellus* (Monk's-hood): Rookery Lane, Broughton, SU312 327; 12 May 14; MR & GCo. Robust garden form, established on road verge from garden across road. First for SU33.

NN *Ageratum houstonianum* (Flossflower): Pennington (S side), SZ3194; 24 Aug 13; MWR. 1 plant, edge of pavement, Southlands, SZ 3116 9463. First for SZ39.

NN *Alchemilla mollis* (Garden Lady's-mantle): North of West Meon, SU6425; 07 Aug 14; AHP & EJC. East Meon and N and W of East Meon, SU6822; 28 Aug 14; AHP & EJC. First for SU62.

NN *Allium oleraceum* (Field Garlic): W of Bridge Farm, East End, SZ360 970; 19 Aug 13; MWR conf. EJC. SZ 3600 9702; c 45 inflorescences, mostly within 1 x 1m. Not seen before despite frequent visits over 22 years. First for SZ69.

NN *Allium roseum* (Rosy Garlic): Emsworth, SU7437 0735; 12 May 14; BF. Cotton Drive. First for SU70. Olivers Battery, SU452 270; 06 Jun 14; MR & RCR. 4 plants. Bank of green lane, presumed escape from neighbouring gardens. First for SU42.

NN *Alnus cordata* (Italian Alder): Hythe Village Marina area, SU420 086; 31 Aug 13; MWR. Planted, edge of rough grassland, SU 4205 0867. Hamble (NW part), SU4707; 19 Jun 14; MWR. Planted in woodland strip, SU 4792 9716. Bursledon, SU4809; 01 Oct 13; MWR. 1m tall, presumed planted. First for SU40.

NN *Alnus cordata* (Italian Alder): Old Idsworth Farm monad, SU7414; 24 Apr 14; MR, EJC & GCo. Rather frequent laneside and small copse planting. Huckswood Copse / Robin Wood monad, SU7514; 24 Apr 14; MR, EJC & GCo. Laneside planting. First for SU71.

NN *Alnus incana* (Grey Alder): Stanley Park area, SZ2596; 16 Jul 14; MWR. Planted, SZ 2554 9620. First for SZ29.

NN *Alnus rubra* (Red Alder): Brooke's Hill, SU332 159; 07 Jul 14; PM. Planted trees with fruit forming on east side of Wade Hill Drove at SU3324 1597 and SU3324 1599. New vice-county record.

NN *Alnus viridis* (Green Alder): Forest of Bere, SW of Denmead, SU6411; 03 Jul 14; AHP. Planted. First for SU61.

** NA *Althaea officinalis* (Marsh-mallow): Marine Parade East / Elmore, SZ568 997; 20 Sep 2013; DRA, JAN & EJC. 1 plant, SZ 5680 9977, NW side of lake just S of viewing platform. First for SZ59.

NN *Amaranthus caudatus* (Love-lies-bleeding): East Meon and N and W of East Meon, SU6822; 28 Aug 2014; AHP & EJC. First for SU62.

NN *Amaranthus hybridus* (Green Amaranth): North of West Meon, SU6425; 07 Aug 2014; AHP & EJC. From bird seed mix. First for SU62.

NN *Amaranthus hypochondriacus* (Prince's-feather): Ports Down Hill, SU6406; 16 Sep 2014; DN & JOa conf. QG. New vice-county record.

NN *Amaranthus powellii* (Powell's Amaranth): Ports Down Hill, SU6406; 16 Sep 2014; DN & JOa det. QG. New vice-county record.

NN *Amaranthus retroflexus* (Common Amaranth): North of West Meon, SU6425; 07 Aug 2014; AHP & EJC; 0: Not recorded. from bird seed mix. First for SU62.

* NA *Ammophila arenaria* (Marram): Branksome Chine beach, SZ0664 8972; 30 Aug 2014; JTM det. Jez T Martin; -4: Not recorded. around groyne. First for SZ08 in VC11.

** NA *Anacamptis morio* (Green-winged Orchid): Beaulieu Heath, SU3471 0212; 06 May 2014; CC. 7 plants. New tetrad. Exbury Gardens, SU423 000; 07 May 2014; MSha. SU4234 0009.

About 100 plants in a small triangle of lawn in front of Exbury House. The owners are aware, conserve the site, and publicise the plants' presence at the gardens entrance. New tetrad.

NN *Anemanthele lessoniana* (New Zealand Wind-grass): Barton Common - in woods west of car park, SZ2455 9321; 24 Feb 2013; PAB det. EJC. Second vice-county record.

NN *Angelica archangelica* (Garden Angelica): Hollybrook Cemetery - western side, SU400 153; 12 May 2013; PAB. Second vice-county record.

NN *Anisantha diandra* (Great Brome): Gorswood, SU6024; 24 Jul 2014; AHP & EJC. First for SU62.

NN *Anisantha diandra* (Great Brome): Fagg's Farm, SU738 195; 10 Jul 2014; MR & DMit. Rare weed in failed wheat crop. First for SU71.

* NA *Anisantha madritensis* (Compact Brome): Southampton (Town Quay area), SU419 110; 29 Sep 2013; MWRSeveral plants. First for tetrad since 1963.

NN *Anthemis austriaca* (Austrian Chamomile): Sowley Brooms area, SZ3696; 06 Aug 2014; MWR. Several plants, rather bare ground, footpath, field edge, SZ 3606 9673, evidently sown (with *Glebionis segetum* and *Centaurea cyanus*). First for SZ39.

** NA *Anthemis cotula* (Stinking Chamomile): North Binness Island, SU6904; 15 Aug 2014; MR, GFa et al. One straggly plant amongst Phragmites (with much more plentiful *Tripleurospermum*). New tetrad. Coulters Dean Farm, Buriton, SU747 195; 10 Jul 2014; MR & DMit. Locally abundant. Margin of arable N of South Downs Way, SU7474 1950. First for SU71.

* NA *Apium graveolens* (Wild Celery): Swanwick Shore - SE of car park, SU495 089; 13 Sep 2013; PAB. First for tetrad since 1958.

** NA *Apium inundatum* (Lesser Marshwort): Blackwell Common, SU4301; 10 Jun 2014; MWR. Several plants in very small pond, SU 4331 0142. First for tetrad since 1977.

NN *Aralia elata* (Japanese Angelica-tree): Land off Aerodrome Road, SU591 032; 07 Aug 2013; JMill. Full GR: SU5914 0323. New vice-county record.

NN *Araucaria araucana* (Monkey-puzzle): Great Cole Copse, SU361104; 30 Apr 2013; ILR. Bowmoor Copse, SU365104; 30 Apr 2013; ILR. First for SU31.

NN *Arbutus unedo* (Strawberry-tree): Lepe, SZ455986; 02 Sep 2013; MWR; 0: Not recorded. Presumed planted, SZ 4554 9863. First for SZ49.

NA *Arctium lappa* (Greater Burdock): Broad Woods Lane, Wellow, SU299 210; 17 Sep 2013; MR & RCR. Single plant in field gate. First for SU22.

NA *Arctium minus* subsp. *pubens* (Lesser Burdock): Blashford Lakes (East), SU1507; 10 Sep 2014; MR & GCo. First for SU10.

NA *Arctium minus* subsp. *pubens* (Lesser Burdock): Breakhill Copse area, SZ265 949; 18 Aug 2013. Ssp. *pubens*, shady edge of grass field, SZ 2658 9494, near ssp. *minus*. First for SZ29.

NN *Aronia x prunifolia* (*A. arbutifolia* x *melanocarpa*): St Catherines Hill, Christchurch - woodland near Sandy Lane, SZ145 948; 03 May 2013; PAB. 2 plants. ID confirmed by observation of sterile purple fruit on 10th October 2013. New vice-county record.

NA *Asplenium trichomanes* (Maidenhair Spleenwort): Rowlands Castle, SU7339 1067; 19 Oct 2014; ALe. Rare. Railway bridge. Buriton, SU7397 1999; 23 Aug 2014; ALe. Locally abundant. First for SU71.

NN *Aster x versicolor* (Late Michaelmas Daisy (*A. laevis* x *novibelgii*)): Halterworth, SU378 214; 31 Aug 2014; PM. Large area in bud beside field. First for SU31 since 1977.

* NA *Atriplex laciniata* (Frosted Orache): Inchmery, Lepe, SZ439 985; 17 Aug 2013; MR. Single plant just above strand line. First for tetrad since 1975.

NN *Barbarea verna* (American Winter-cress): Lepe (Lepe Farm area), SZ440 999; 25 Jun 2013; MWR. Numerous plants at

edge of rape field, SZ 4402 9996. Fruits and petals measured. First for SZ49 since 1958.

NN *Berberis gagnepainii* (Gagnepain's Barberry): Back Lane, Broughton, SU312 328; 12 May 2014; MR & GCo. Single small plant on verge of path just outside garden. First for SU33.

NN *Berberis thunbergii* (Thunberg's Barberry): Sway, SZ2798; 11 May 2014; MWR. Planted in roadside hedge by grass field, SZ 2762 9873. First for SZ29.

NN *Betula utilis* var. *jacquemontii* (Jacquemont's Birch): Moors Valley Country Park, SU106 057; 04 Sep 2014; MR, FAW et al. Planted. New vice-county record.

NN *Briza maxima* (Greater Quaking-grass): Tetrads: SZ19C, SZ19F, SZ19H, SZ19L, SZ39H.

** NA *Briza media* (Quaking-grass): Tetrads: SU10A, SU61L, SU61Y.

* NA *Briza minor* (Lesser Quaking-grass): Barton on Sea, SZ253 934; 10 Aug 2013; MWR. Abundant at field edge around SZ 2537 9342. New tetrad.

* NA *Bromus commutatus* (Meadow Brome): S of Kingsland Copse, SU665 250; 29 Jul 2014; MR, MPa & GCo. Locally frequent. First for SU62.

* NA *Bromus racemosus* (Smooth Brome): Fagg's Farm, SU738 195; 10 Jul 2014; MR & DMit. Locally abundant. Weed in failed wheat crop. First for SU71.

** NN *Bromus secalinus* (Rye Brome): Ladwell, SU428 240; 22 Jun 2014; MR & RCR. Margin of winter wheat field below Ladwell. One tuft at SU428 240, one at SU428 244. First for SU42.

* NA *Butomus umbellatus* (Flowering-rush): Parley Green, Hicks Farm North, Field B2, SZ105 971; 27 Jul 2013; FAW. First for tetrad since 1976.

* NA *Callitriche brutia* subsp. *brutia* (Pedunculate Water-starwort): Tetrads: SZ19M, SZ19X.

* NA *Callitriche brutia* subsp. *hamulata* (Intermediate Water-starwort): Tetrads: SU20A, SU20M, SU30A.

NN *Calystegia pulchra* (Hairy Bindweed): Hinton Admiral Station, South, Smugglers Lane N, SZ200 944; 04 Aug 2013; FAW. In hedgerow by cricket ground at SZ20057 94459. First for SZ29.

NN *Camelina sativa* (Gold-of-pleasure): North of West Meon, SU6425; 07 Aug 2014; AHP & EJC; 0. From bird seed mix. First for SU62.

NN *Campanula portenschlagiana* (Adria Bellflower): Tetrads: SZ19A, SU61A.

NN *Capsella rubella* (Pink Shepherd's-purse): Throop West, 16 Chesilbourne Grove, SZ106 950; 25 Jul 2013; FAW. Sev pls(10+ flat rosettes)on block paving,front of 16 Chesilbourne Grove SZ1065 9509. Throop West, Chesildene Drive, Fritham Gardens, SZ107 953; 03 Sep 2013; FAW. At SZ10735 95334 corner Fritham Gdns and Chesildene Dr. First for SZ19.

NA *Cardamine amara* (Large Bitter-cress): Avon Water, Boundway Hill, SZ263 988; 08 Jun 2014; MR & Northumberland Naturalists det. AJR. First for SZ29 since 1989.

* NA *Carex arenaria* (Sand Sedge): Moyles Court, Rockford, SU163 083; 28 Sep 2013; BSBI (MR). Disturbed sand on N slope of pit, SU1637 0835. New tetrad.

NA *Carex disticha* (Brown Sedge): Bournemouth West, Upper Gardens, SZ0791; 18 Jun 2013; FAW. First for SZ09 in VC11.

** NA *Carex echinata* (Star Sedge): Burton Common, SZ195 951; 17 Jul 2013; JAN & DRA. Occasional. New tetrad.

NA *Carex leporina* (Oval Sedge): Bournemouth Upper Gardens, SZ0692, SZ0791; 18 Jun 2013; FAW. First for SZ09 in VC11.

* NA *Carex montana* (Soft-leaved Sedge): Cadmans Pool, SU227 122; 27 Jul 2014; BSBI (MR). Beside track at wood edge. First for tetrad since 1974.

* NA *Carex oederi* (Small-fruited Yellow-sedge): Crockford Bridge, SZ349 989; 13 Aug 2013; MR, GCo & Mber. Marl pit,

SZ3498 9899, in small quantity mixed with more abundant *C. demissa*. First for tetrad since 1986.

NA *Carex pseudocyperus* (Cyperus Sedge): Catherington village pond, SU6952 1444; 10 Jul 2013; AHP. New tetrad.

** NA *Carex pulicaris* (Flea Sedge): Tetrads: SU21G.

* NA *Carex rostrata* (Bottle Sedge): Foxbury, SU298 163; 12 Oct 2014; CC. A fringe of C.r here and some visible on the Island. Floating marginal vegetation. New tetrad.

** NA *Carlina vulgaris* (Carlina Thistle): Winding Stonard, SU239 111; 18 Sep 2013; PM. Two at SU2397 1112 and one at SU2399 1110. New tetrad.

IN *Carpobrotus edulis* (Hottentot-fig): Lee-on-the-Solent Beach, SU563 003; 25 Jun 2013; JMill. First for SU50.

NA *Catapodium rigidum* (Fern-grass): Romsey Abbey, SU3509 2124; 26 May 2014; CC. Corbel above Abbess' door. First for SU32.

NN *Catapodium rigidum* subsp. *majus* (Fern-grass): Boscombe Chine, N of high footbridge, SZ1091; 20 Jul 2013; FAW. First for SZ19 for subsp.

NA *Centaurea debeauxii* (Chalk Knapweed): Leybrook Common area, St Leonards, SU1302; 07 Jul 2014; MR & GCo. On involucre and phyllary characters. First for SU10.

* NA *Centaurea pulchellum* (Lesser Centaury): Tetrads: SU10W, SU21K, SU30D (1969), SU32M, SU71E (1985).

NN *Centranthus ruber* (Red Valerian): Romsey South, SU3520; 10 Sep 2013; PM. Romsey East, SU3621; 31 Aug 2014; PM. First for SU32 since 1969. Broughton NW monad, SU3033; 12 May 2014; MR & GCo. First for SU33 since ?1970.

** 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 *Cerastium tomentosum* (Snow-in-summer): Exton and Corhampton, SU6120; 15 May 2014; AHP & EJC. First for SU62.

** NA *Chamaemelum nobile* (Chamomile): Tetrads: SU10P (?1950), SU20U (1987), SU21N (?1970), SU30M.

NN *Chenopodium quinoa* (Quinoa): North of West Meon, SU6425; 07 Aug 2014; AHP & EJC. From bird seed mix. First for SU62.

** NA *Cicendia filiformis* (Yellow Centaury): Nr Station Road, Holmsley, SU231 009; 08 Jun 2014; MR & Northumberland Naturalists. Single large branched plant in flower W of road. First for tetrad since 1938.

** NA *Cichorium intybus* (Chicory): By Ivy Lane, Blashford Lake, SU156 076; 29 Apr 2014; MR & DHu. First for SU10 since 1955.

NN *Clarkia unguiculata* (Clarkia): Ports Down Hill, SU6406; 16 Sep 2014; DN & JOa. W of Carpark by roundabout SU647 066 in disturbed area near new Pylon. First for SU60.

NN *Claytonia sibirica* (Pink Purslane): Mount Pleasant Farm area, SZ3097; 19 Jun 2013; MWR. Galley Hill area, SZ3197; 01 Jul 2013; MWR. New tetrad.

NN *Clematis montana* (Himalayan Clematis): Milford (Studland Common area), SZ2792; 24 Apr 2014; MWR. 1 plant, edge of copse opposite houses, Blackbush Road, SZ 2791 9254. First for SZ29.

* NA *Clinopodium ascendens* (Common Calamint): Hamble, SU478 068; 12 Sep 2013; MWR3 plants. Checked in Stace. New tetrad.

** NA *Comarum palustre* (Marsh Cinquefoil): Pithouse Farm East, beyond farmyard, track to East, around pylon, SZ1498; 18 Sep 2013; FAW. In stream. New tetrad.

NN *Conyza floribunda* (Bilbao's Fleabane): Nr Tigwell, SU676 243; 29 Jul 2014; MR, MPa & GCo. East Meon and N and W of East Meon, SU6822; 28 Aug 2014; AHP & EJC. First for SU62.

NN *Conyza sumatrensis* (Guernsey Fleabane): Palmersford, bridleway E from Trickett's Cross, SU0900; 23 Sep 2013; FAW. First for SU00 in VC11.

NN *Cornus alba* (White Dogwood): Old Down Farm, SU672 250; 05 May 2014; MR & GCo. Planted in hedge. First for SU62.

NN *Cornus sanguinea subsp. australis* (Dogwood): Dibden Purlieu (Roy's Copse area), SU4007; 13 May 2013; MWR. Planted in hedge, SU 4011 0753. Netley (E side), SU4608; 05 Jun 2013; MWR. Planted. Bursledon, SU4809; 01 Oct 2013; MWR. Planted at edge of grass field. Holly Hill Woodland Park, SU4907; 01 May 2013; MWR. Holly Hill Woodland Park, SU 4978 0787; presumed planted. First for SU40.

NN *Cotoneaster bullatus* (Hollyberry Cotoneaster): Angels Cottage area, SZ251 934; 10 Aug 2013; MWR det. JF. At least 4 bushes in wood, N of Barton Common Road, Barton on Sea, SZ 2515 9347. Sway, SZ2798; 11 May 2014; MWR. Planted in roadside hedge round grass field, SZ 2762 9873. First for SZ29.

NN *Cotoneaster conspicuus* (Tibetan Cotoneaster): Markway Hill area, SU244 026; 30 Jun 2013; MWR det. JF. By A35, Markway Hill, SU 2442 0266. probably planted. First for SU20.

NN *Cotoneaster franchetii* (Franchet's Cotoneaster): Fort Road / Gilkicker Road / Spithead Close, SZ611 981; 20 Sep 2013; DRA, JAN & EJC. SZ 6119 9812 S side of Fort Rd, opposite junction with Gilkicker Rd. One large bush with immature fruits present. First for SZ69.

NN *Cotoneaster hjelmqvistii* (Hjelmqvist's Cotoneaster): Ringwood (centre), SU151 056; 01 Sep 2013; MWR. 1 bush by A31, SU 1515 0560, presumed planted. First for SU10. Brockbridge area, SU6118; 27 Aug 2013; AHP & EJC. First for SU61.

NN *Cotoneaster salicifolius* (Willow-leaved Cotoneaster): East Meon and N and W of East Meon, SU6822; 28 Aug 2014; AHP & EJC. First for SU62.

NN *Cotoneaster sternianus* (Stern's Cotoneaster): Blackfield, SU4401; 15 Apr 2013; MWR det. JF. Hedge near houses, Kings Ride, Langley, SU 4404 0131. Not obviously planted. First for SU40.

NN *Cotoneaster x watereri* (Waterer's Cotoneaster): Markway Hill area, SU246 029; 30 Jun 2013; MWR det. JF. By A35, Markway Hill, SU 2465 0298. Probably planted. First for SU20.

* NA *Crassula tillaea* (Mossy Stonecrop): Beaulieu Heath Airfield (south east), SU3500; 04 May 2014; CC. Locally abundant, c.2m square on trackside at SU3581 0082. New tetrad.

* NN *Crataegus laevigata* (Midland Hawthorn): S of Everton, SZ291 934; 17 May 2013; MWR. Leaf shape as in Plant Crib 1998: 181; 8 flowers checked all had 2 styles; flowers 15-16mm across. New tetrad.

NN *Crataegus persimilis* (Broad-leaved Cockspurthorn): Milford on Sea, SZ2991; 20 May 2014; MWR. Planted between car park and reed bed, Sea Road, SZ 2922 9173. First for SZ29.

* NN *Crepis biennis* (Rough Hawk's-beard): Sherfield English, SU291 224; 17 May 2014; PW. First for SU22. M27 J11, Ports Down W, SU593071; 14 Jun 2013; DRA & JAN. Locally frequent. NW part of flyover, near E-bound exit slip road. New tetrad.

NN *Crocus tommasinianus* (Early Crocus): SW of Curlew's Farm, Lockerley, SU285 256; 06 Mar 2014; MR & RCR. Planted in remote spot by memorial seat. First for SU22.

NN *Crocus vernus subsp. vernus* (Spring Crocus): Hordle (Golden Hill area), SZ268 956; 15 Mar 2013; MWR;. Planted on roadside by war memorial, SZ 2685 9565. First for SZ29.

NN *Cupressus macrocarpa* (Monterey Cypress): Bournemouth East Cliff, seafront, SZ0990; 01 Jan 2013; FAW. First for SZ09 in VC11.

NN *Cupressus macrocarpa* (Monterey Cypress): Tetrads: SZ29G, SZ29R. First for SZ29.

NN *Cupressus macrocarpa* (Monterey Cypress): Inchmery, SZ446 986; 27 Jan 2013; MR & RCR. Planted. First for SZ49 in VC11.

** NA *Cuscuta epithymum* (Dodder): East Boldre (Peaked Hill), SZ3699; 18 Jul 2014; MWR. Heath, SZ 3630 9951, on *Calluna vulgaris*. New tetrad.

NN *Cyclamen hederifolium* (Sowbread): Cadnam, SU292 135; 12 Oct 2014; PM. Small group flowering on verge at SU2923 1357. First for SU21.

NN *Cyrtomium fortunei* (Fortune's Holly-fern): Longmeadow Wood, Barton-on-Sea, SZ2443 9326; 24 Feb 2013; GPa det. EJC. Naturalised. New vice-county record.

NN *Cyrtomium fortunei* (Fortune's Holly-fern): West Totton, SU3497 1233; 11 Aug 2014; CC. Rare. Second vice-county record.

* NA *Dactylorhiza incarnata subsp. pulchella* (Early Marsh-orchid): Bull Hill area, SZ336 994; 06 Jul 2013; MWR. 6 plants scattered in bog, 1 at SZ 3365 9941. First for tetrad since ?1970.

** NA *Deschampsia setacea* (Bog Hair-grass): Hurn Forest, SZ1205 9946; 16 Jun 2014; NSq. Locally frequent. The area between the ride and wet heath to the south. New tetrad.

NN *Digitaria sanguinalis* (Hairy Finger-grass): Lymington (centre), SZ328 952; 09 Oct 2013; MWR. Abundant at edge of garden, Queen Katherine Road, SZ 3285 9521. First for SZ39.

NN *Diploaxis muralis* (Annual Wall-rocket): North Waterlooville inc. Queen's Inclosure and Park Wood., SU6810; 30 Aug 2014; AHP. First for SU61.

* NA *Dipsacus pilosus* (Small Teasel): Silkstead, North of, SU449 257; 25 Jul 2014; PM. Large flowering plant on west side of Silkstead Lane at SU4499 2573. First confirmed for SU42.

NN *Doronicum pardalianches* (Leopard's-bane): Damson Hill, SU577181; 15 May 2014; GCo. Beechen Copse/Phrympt Copse, SU583 183; 14 Jun 2013; JMill. First for SU51.

* NA *Dryopteris x complexa agg.* (D. filix-mas x D. affinis agg.): Clanfield, SU6974 1793; 22 Aug 2014; ALe. Very rare. First for SU61.

* NA *Dryopteris x deweveri* (D. carthusiana x dilatata): Fairthorne Manor, Botley, SU522 123; 29 Aug 2013; MR & RCR. New tetrad.

NN *Echinochloa esculenta* (White Millet): Broughton NW, SU285 343; 12 Sep 2014; ARGM & PAM. Sown (with other species) to attract game birds in arable field corner. Voucher specimen retained. First for SU23.

NN *Elaeagnus x submacrophylla* (E. macrophylla x pungens): Chewton Bunny, Highcliffe, SZ217 933; 06 Jan 2014; MR. First for SZ29.

* NA *Eleogiton fluitans* (Floating Club-rush): Tetrads: SU10G, SU20Y.

NA *Elymus caninus* (Bearded Couch): Palmersford, bridleway E from Trickett's Cross, SU0900; 23 Sep 2013; FAW. First for SU00 in VC11.

* NA *Epilobium lanceolatum* (Spear-leaved Willowherb): Tiptoe, SZ256 977; 24 Jun 2013; MWR. c.10 plants. Junction of Middle Road and Wootton Road, SZ 2566 9773. New tetrad. Milford on Sea, SZ290 919; 20 May 2014; MWR. 3 plants, SZ 2905 9197. New tetrad. Everton, SZ289 944; 22 Jun 2013; MWR. c 10 plants. Greenmead Avenue, junction with Wainsford Road, SZ 2899 944. New tetrad. Sway (Birchy Hill), SZ283 981; 23 Jun 2014; MWR. At least 4 plants, SZ 2833 9815. New tetrad.

* NA *Epilobium roseum* (Pale Willowherb): Ringwood Forest, SU116080; 03 Sep 2014; MR. A couple of plants, shaded ride side near Blue Haze infill site. First for SU10 since 1967. N of Wittensford, Cadnam, SU286140; 12 Sep 2014; EAP & DL. 3 plants, SU2864 1407. First for tetrad since ?1960s. Broad Woods Lane, Woodington, SU300 207; 11 Sep 2013; MR & RCR. A couple of plants in damp disturbed verge, SU30098 20769. New tetrad. Trinity Close / Town Ramparts, Gosport, SZ621 995; 17 Jul 2013; EJC & JAN. A few plants in shady front 'garden' of house, just east of Ramparts main gate, growing on raised concrete/stonework. Long petioles and pale fls. Approx SZ 6217 9959. New tetrad.

NA *Epilobium x vicinum* (E. obscurum x ciliatum): Milford (church area), SZ298 923; 22 Aug 2013; MWR det. GK. 1 plant in ditch,

Lymore Lane, S of Lymore, SZ 2988 9234. *E. ciliatum* nearby. First for SZ29.

* NA *Equisetum x litorale* (Shore Horsetail (*E. arvense* x *fluviatile*)): Milford on Sea, SZ281 934; 09 May 2014; MWR. Abundant for 32 paces, SZ 2812 9346. Known for several years. New tetrad.

** NA *Erica cinerea* (Bell Heather): Tetrads: SU10K.

NN *Erica lusitanica* (Portuguese Heath): Poole Cliff, SZ069 899; 18 Feb 2013; JTM. Locally abundant. Mature plants. First for SZ08 in VC11.

** NA *Erica tetralix* (Cross-leaved Heath): Tetrads: SU72L.

NN *Erigeron glaucus* (Seaside Daisy): Saltgrass Lane, Keyhaven, SZ305 913; 16 Mar 2014; MR & RCR. Lane verge outside gardens. First for SZ39.

NN *Erigeron karvinskianus* (Mexican Fleabane): Sway, SZ2798; 11 May 2014; MWR. SZ 2758 9861 and elsewhere. First for SZ29. Bursledon, SU487 093; 01 Oct 2013; MWR. Abundantly escaped, High Street, mostly on wall, SU 4873 0937. First for SU40. East Meon and N and W of East Meon, SU6822; 28 Aug 2014; AHP & EJC. North Exton and Manor Farm area, SU6121; 15 May 2014; AHP & EJC. First for SU62.

* NN *Erodium maritimum* (Sea Stork's-bill): Bournemouth Airport NE, track to Merritown Heath, SZ1198; 17 Aug 2013; FAW. At SZ 11935 98678. First for SZ19.

* NA *Erodium moschatum* (Musk Stork's-bill): Fairthorne Manor House, SU521 122; 15 Oct 2013; PAB. At base of wall at SE corner of house. First for SU51.

NN *Eruca vesicaria* (Garden Rocket): Old Down Farm, SU672 250; 05 May 2014; MR & GCo. Relic of sowing. First for SU62.

** NA *Eryngium maritimum* (Sea-holly): Fawley Marsh, SU477 024; 05 Aug 2014; CC. A single non flowering plant about half way along the spit. First for SU40 since 1969.

** NA *Erysimum cheiranthoides* (Treacle-mustard): North of West Meon, SU6425; 07 Aug 2014; AHP & EJC. First for SU62 since 1983.

NN *Escallonia rubra* var. *macrantha* (Escallonia): E of Kingfisher Lake, Blashford, SU156 067; 10 Sep 2014; MR & GCo. SU1568 0670. First for SU10.

NN *Euonymus japonicus* (Evergreen Spindle): Hythe Village Marina area, SU420 086; 31 Aug 2013; MWR. Planted at edge of rough grassland, SU 4201 0861. First for SU40.

NN *Euphorbia amygdaloides* subsp. *robbiae* (Turkish Wood Spurge): Setley Pond area, SZ3099; 07 May 2014; MWR. Several plants, footpath by garden, SZ 3089 9958. First for SZ39.

NN *Euphorbia cyparissias* (Cypress Spurge): Hinton Admiral Station, South, Marston Grove, SZ202 942; 04 Aug 2013; FAW. Escape, on wall opp Marston Grove at SZ20219 94288. First for SZ29.

** NA *Euphorbia exigua* (Dwarf Spurge): Tetrads: SU51Y, SU61X, SU62A, SU62D.

NN *Euphorbia maculata* (Spotted Spurge): Boscombe Pier, Boscombe Overcliff, Rotary Garden, SZ1191; 18 Sep 2013; FAW. In Rotary Garden, in edge of beds and edge of paths, many plants 11596 91306. First for SZ19.

NN *Euphorbia oblongata* (Balkan Spurge): Lyndhurst (Pondhead Inclosure), SU3007; 28 Jun 2014; MWR. Several plants on waste ground by garden, Clayhill, SU 3034 0717. First for SU30.

* NA *Euphorbia paralias* (Sea Spurge): Highcliffe beach, SZ206930, SZ209930; 03 Oct 2014; MR & RCR. 2 plants. First for SZ29.

** NA *Euphrasia confusa* (Confused Eyebright): Moors Valley Country Park, SU108 048; 04 Sep 2014; MR, FAW et al. Locally abundant, verges of entrance road to park, e.g. SU1085 0485. New tetrad. Vales Moor, SU188 039; 12 Sep 2014; MR & GKn. Locally abundant, roadside bank, SU1880 0399. New tetrad.

** NA *Euphrasia micrantha* (Slender Eyebright): N of Ober Heath, SU276 041; 28 Jul 2013; BSBI (MR). Occasional. First for tetrad since 1971. Nr. Brockenhurst Bridge, Brockenhurst, SU300 031; 24 Jun 2014; MR, BGo & GCo. Locally abundant, heathy grassland at E end of Black Knowl. As well as pure plants there were many which appeared to be hybridised either with *E. nemorosa* (also present) or *E. confusa* (not found), and one or two looking more like hybrids with *E. tetraquetra* (which was however not found). New tetrad.

NA *Euphrasia nemorosa* x *confusa*: Coulters Dean, SU748 191; 10 Jul 2014; MR & DMit. Small quantity in reserve, scattered mostly on ant hills. First for SU71.

NA *Euphrasia x areschougii* (*E. nemorosa* x *micrantha*): Pipers Wait, SU249 165; 16 Sep 2013; MR, GCo & AD. Occasional with parents in Calluna / grass heath mosaic. Very variable in floral bract width, mostly with rather blunt bract teeth, flowers ranging from white to violet and typically a little larger than *micrantha*, branches slender but ascending less erectly than typical *micrantha*. New tetrad.

NN *Fagopyrum esculentum* (Buckwheat): E of Yewtree Copse, Romsey Extra, SU348 190; 12 Sep 2013; MR & BGo. In nectar / seed strip. First for SU31 since ?1969.

IN *Fallopia baldschuanica* (Russian-vine): Hurst Road, Blashford, SU151 062; 10 Sep 2014; MR & GCo. First for SU10.

IN *Fallopia x bohémica* (Bohemian Knotweed (*F. japonica* x *sachalinensis*)): St Leonards Hospital South, hospital grounds S, cricket ground, SU1001; 12 Sep 2013; FAW. c.20 pieces at SU10242 01952. First for SU10.

* NA *Festuca arenaria* subsp. *oraria* (): Southbourne, Overcliff Drive and Coast Rd, SZ1491; 08 Jun 2013; FAW. Specimen retained. New tetrad and first for SZ19 for subspecies.

NN *Ficaria verna* subsp. *chrysocephala* (Lesser Celandine): Walkford, SZ216 944; 10 Mar 2014; MWR. Abundant on roadside, SZ 2166 9443. First for SZ29. Walhampton and Ferry Terminal, SZ3395; 02 May 2014; MWR. 3 or 4 plants on roadside, junction of Snooks Lane and South Baddesley Road, Walhampton, SZ 3388 9586. First for SZ39.

** NA *Filago vulgaris* (Common Cudweed): Tetrads: SU10B, SU10E.

NA *Filipendula vulgaris* (Dropwort): Duncombe Lodge, SU1206; 20 Jun 2014; MWR. By B3081 in several places, eg SU 1259 0616. New tetrad, off chalk.

NN *Fragaria ananassa* (Garden Strawberry): North Exton and Manor Farm area, SU6121; 15 May 2014; AHP & EJC. First for SU62.

NN *Galanthus nivalis* x *plicatus*: Ramsdean, nr Barrow Hill Farm, SU704 225; 14 Feb 2013; DN. Several clumps on verges, no sign of *G. nivalis* or *G. plicatus*. New vice-county record.

NN *Galanthus woronowii* (Green Snowdrop): Bolton's Bench, SU302 081; 01 Mar 2014; CC. Rare, on the ungrazed side of the Forest fence. Almost certainly planted. First for SU30. Warsash Church, SU500 055; 07 Feb 2014; MR. One small clump looking recently planted in SE part of churchyard. First for SU50.

* NA *Galium constrictum* (Slender Marsh-bedstraw): Roydon Woods, SU3100; 15 Jul 2013; PJB. New tetrad.

NA *Galium odoratum* (Woodruff): Boscombe Chine, N of high footbridge, SZ1091; 20 Jul 2013; FAW. First for SZ19.

NA *Galium palustre* subsp. *elongatum* (Great Marsh-bedstraw): Christchurch, Wick Meadows, SZ1592; 28 Jul 2013; FAW. New tetrad. Lymington Reedbeds and Warborne, SZ321 978; 27 Jul 2013; MWR. Marsh by Lymington River, SZ 3219 9788. New tetrad. Pilley, SZ3298; 09 Jul 2014; MWR. Marsh by Lymington River, SZ 3202 9829. New tetrad.

** NA *Genista anglica* (Petty whin): Dogwood Bottom, SU220 062; 04 May 2014; DC. 22016 06249. First for tetrad since 1987.

- ** NA *Gentianella amarella* (Autumn Gentian): Chalk pit, Rose Wood, SU747 155; 24 Apr 2014; MR, EJC & GCo. First for tetrad since 1987.
- NN *Geranium endressii* (French Crane's-bill): East of West Meon, SU6524; 07 Aug 2014; AHP & EJC. First for SU62 since 1958.
- NN *Geranium lucidum* (Shining Crane's-bill): Sinah Common, Hayling Island, SZ7099; 16 May 2013; DN. Established. First for SZ79 since 1976.
- NN *Geranium macrorrhizum* (Rock Crane's-bill): YMCA, SU5212; 18 Jun 2014; PAB & GCo. First for SU51.
- * NA *Geranium rotundifolium* (Round-leaved Crane's-bill): North End, Broughton, SU309333; 12 May 2014; MR & GCo; 0: Not recorded. Locally plentiful in verge by road bridge over Wallop Brook. Also nearby in Dixons Lane. First for SU33 since 1935.
- NN *Geranium versicolor* (Pencilled Crane's-bill): Broughton Churchyard, SU309329; 25 Jul 2014; MR & BMd; -5: Introduced. Naturalised in long grass S of church. First for SU33 since ?1970.
- NN *Geranium x oxonianum* (Druce's Crane's-bill): Pugs Hole, Pugs Hole LNR, SZ0792; 21 Sep 2013; FAW. Bournemouth Upper Gardens North,, SZ0692; 18 Jun 2013; FAW. First for SZ09 in VC11.
- ** NA *Glaucium flavum* (Yellow Horned-poppy): Windy Bay, Southampton, SU429 133; 11 Sep 2013; PAB. One plant on railway embankment. First for SU41. Bakers Island, Langstone Harbour, SU6903; 15 Aug 2014; MR, GFa et al. Fine shingle, SU693 036. New tetrad.
- ** NA *Glebionis segetum* (Corn Marigold): East Parley Common, East Parley track, SZ1099; 25 Sep 2013; FAW. New tetrad. Near East End, SZ360967; 13 Jul 2013; MWR. 1 plant on footpath by pea field, SZ 3607 9670. New tetrad.
- * NA *Glyceria notata* (Plicate Sweet-grass): YMCA, SU5212; 18 Jun 2014; PAB & GCo. New tetrad.
- NN *Griselinia littoralis* (New Zealand Broadleaf): St Leonards Hospital South, hospital grounds S, cricket ground, SU1001; 12 Sep 2013; Felicity Woodhead. First for SU10.
- ** NA *Hammarbya paludosa* (Bog Orchid): Ragged Boys Hill, nr Fritham, SU217 125; 04 Aug 2014; RPR. SU 21720 12507 - 1 decent size orchid in the runnel in the centre of the seepage. SU218 126; 04 Aug 2014; RPR. SU 21822 12647 - 1 decent size orchid and 1 dead orchid. SU 21823 12635 - 2 orchids within 1m of each other a little further down the bog. Ragged Boys Hill, nr Fritham, SU216 124; 09 Aug 2014; RPR. SU 21653 12444 - 2 orchids within 50cm. SU217 124; 09 Aug 2014; RPR. SU 21755 12475 - 105 orchids spread over 10x4metre patch. SU 21755 12486 - 11 orchids a little further up on other side of flush axis in thicker vegetation. SU 21737 12496 - 3 orchids further up. SU217 125; 09 Aug 2014; RPR. SU 21719 12514 - 4 orchids near the one found last time. SU218 125; 09 Aug 2014; RPR. 3 orchids well down the bog from the other sites, SU21870 12531. SU218 126; 09 Aug 2014; RPR. SU 21824 12632 - 1 orchid. SU 21823 12634 - 9 orchids within 1 sq metre, 4 orchids within 1 sq metre c.5m up the bog from the first site. New tetrad.
- NN *Hedera hibernica* (Atlantic Ivy): West Meon, SU6423; 16 Sep 2014; AHP det. EJC. First for SU62.
- NA *Hedera hibernica* (Atlantic Ivy): Highcliffe, SZ207 930; 10 Feb 2014; MR. On undercliff in thicket. First for SZ29.
- * NA *Hieracium calcaricola* (Toothed Hawkweed): Matchams View, SU134 021; 07 Jul 2014; MR & GCo. Rare and scattered amongst larger population of *H. trichocaulon*, e.g. SU1347 0213. First for SU10 since 1917.
- NN *Hippophae rhamnoides* (Sea-buckthorn): Lower Buckland, Undershore, Walhampton, SZ3296; 03 May 2014; MWR. Planted in Marsh Lane, SZ 3228 9638. First for SZ39. Halterworth, SU372 210; 31 Aug 2014; PM. Large fruiting bush presumed planted at SU3723 2109. First for SU32. Hursley, east of, SU430 252; 31 Jul 2014; PM. Large bush beside footpath at SU4309 2522. First for SU42.
- * NA *Honckenya peploides* (Sea Sandwort): Calshot Spit, SU488 020; 18 Jun 2013; PM. First for tetrad since 1985.
- ** NN *Hottonia palustris* (Water-violet): Priddy's Hard recr. area, Hardway, SU614 013; 2014; JDe. In several places in moat around old bunker south of Priddy's hard. First for SU60.
- NN *Hyacinthoides hispanica* (Spanish Bluebell): Exton and Corhampton, SU6120; 15 May 2014; AHP & EJC. First for SU62.
- NN *Hypericum calycinum* (Rose-of-Sharon): Pugs Hole, roadsides, railway + bridges, SZ0792; 21 Sep 2013; FAW Glenferness Ave. First for SZ09.
- ** NA *Hypericum elodes* (Marsh St John's-wort): Tetrads: SU10L.
- NN *Hypericum xylosteifolium* (Turkish Tutsan): Hinton Admiral Station, South, Lakewood Road Pond, SZ206 941; 04 Aug 2013; FAW. First for SZ29.
- ** NA *Hypochaeris glabra* (Smooth Cat's-ear): Burbush Hill, SU201 013, SU201 017; 08 Jun 2014; MR & Northumberland Naturalists. Occasional, E verge of Pound Lane at SU2014 0171, SU2011 0136. First for SU20.
- NN *Iberis umbellata* (Garden Candytuft): Rushington, SU359 128; 05 Oct 2014; PM. Purple-flowered plant on verge on north side of Totton bypass. First for SU31.
- ** NN *Illecebrum verticillatum* (Coral-necklace): Long Cross car park, SU251 149; 29 Jul 2013; JFra & GDF. E end near damper, shaded edge, SU25103 14979. New tetrad.
- NN *Impatiens capensis* (Orange Balsam): River Meon near south Soberton, SU6015; 18 Sep 2013; AHP & EJC. First for SU61 since 1985.
- IN *Impatiens glandulifera* (Indian Balsam): Buriton Chalk Pit, SU735 198; 10 Aug 2014; PAB. HBIC QECP BioBlitz. First for SU71 in VC11.
- NN *Inula helenium* (Elecampane): Highbridge, SU469 213; 03 Aug 2013; PM. One beside footpath at SU4693 2138. First for SU42 since 1983.
- NN *Iris sibirica* (Siberian Iris): Longcross Pond, Fritham, SU246 152; 18 Jun 2013; MR & ACla. Blatant dumping with other pond ornamentals at two points on pond margin. One clump removed to adjoining heath. First for SU21.
- NA *Juncus conglomeratus* var. *subuliflorus* (): Sway, SZ274 988; 17 Jun 2013; MWR. Roadside ditch, Brighton Road, SZ 2746 9888. Everton, SZ296 940; 17 Jul 2013; MWR. 1 plant in hedge, SZ 2961 9402. First for SZ29. Great Newbridge Copse, SZ3093; 17 Jul 2013; MWR. Lower Buckland, Undershore, Walhampton, SZ325 964; 26 Aug 2013; MWR. Hedge, Undershore, SZ 3252 9648. (Typical var. elsewhere in SZ 3296.). Bushy Copse and Shotts Copse area, SZ3496; 08 Jul 2013; MWR. Shady roadside ditch, SZ 3481 9668. First for SZ39.
- * NA *Juncus foliosus* (Leafy Rush): Dockens Water, SU225 126; 27 Jul 2014; BSBI (MR). A handful of plants on gravel by stream, SU2257 1261. ID by leaf width and tepal markings. New tetrad. Potters Ford area, SU367 073; 30 Jun 2014; MWR. SU 3673 0731. First for tetrad since 1986.
- * NA *Juncus x kern-reichgeltii* (*J. conglomeratus* x *effusus*): Ebblake, SU109 077; 18 Sep 2013; MR & BGo. Occasional. First for SU10.
- * NA *Lactuca virosa* (Great Lettuce): Crowd Hill, SU4919; 18 Aug 2014; GCo. New tetrad.
- ** NN *Lagurus ovatus* (Hare's-tail): Orchard Road, Havant, SU719 058; 29 Jun 2014; AJW. 2 plants growing on front gravel drive. First for SU70 in VC11.
- * NN *Lapsana communis* subsp. *intermedia* (Nipplewort): Marwell Zoo car park entrance, SU502 213; 26 Jun 2014; GCo. Verge. New tetrad.

NN *Larix kaempferi* (Japanese Larch): YMCA, SU5212; 18 Jun 2014; PAB & GCo. Planted. First for SU51.

** NA *Lathyrus linifolius* (Bitter-vetch): Tetrads: SU10U.

NN *Laurus nobilis* (Bay): Telegraph House, Lockerley, SU282 248; 06 Mar 2014; MR & RCR. Single bush just outside garden boundary. First for SU22.

NN *Lavandula angustifolia* (Garden Lavender): Hinton Admiral Station, South, FP to S of Cranemoor Ave, SZ2094; 04 Aug 2013; FAW. Escape. First for SZ29.

* NA *Lemna gibba* (Fat Duckweed): Moortown, Ringwood, SU148 035; 23 Sep 2013; MR & BGo. New tetrad. On Dockens Water, SU148 071; 10 Sep 2014; MR & GCo. N of Blashford Farm, SU148 074; 10 Sep 2014; MR & GCo; -22: Native. New tetrad. Cross Lanes, Ibsley, SU160093; 28 Sep 2013; HFG (SJP) conf. PG. At SU1601 0934. Moyles Court, Rockford, SU163083; 28 Sep 2013; HFG (MR);. Ditch on S side of lane, SU1631 0836. New tetrad.

** NA *Lepidium campestre* (Field Pepperwort): Throop, Mill Road, SZ1195; 17 Jun 2013; FAW. New tetrad. Burton, Watery Lane North, SZ1894; 29 Jun 2013; FAW. New tetrad.

* NA *Lepidium ruderales* (Narrow-leaved Pepperwort): M27 J5 Bursledon, SU480 135; 2013; PDS. New tetrad.

NN *Leucanthemella serotina* (Autumn Oxeye): Snails Lane, Blashford, SU151 070; 10 Sep 2014; MR & GCo. First for SU10. The Hollow, Broughton, SU315 320; 25 Jul 2014; MR & BMD. Lane bank, single patch. First for SU33.

NN *Leucojum aestivum subsp. pulchellum* (Summer Snowflake): Langstone, Mill Lane, SU7104; 25 Mar 2014; DN. New tetrad.

IN *Leycesteria formosa* (Himalayan Honeysuckle): Eyeworth Pond, SU227 145; 25 Sep 2014; PM. Large bush flowering/fruited west of pond. First for SU21.

* NA *Leymus arenarius* (Lyme-grass): Branksome Dene Chine beach, SZ0664 8972, SZ0686 8986; 30 Aug 2014; JTM. First for SZ08 in VC11.

* NA *Leymus arenarius* (Lyme-grass): Branksome Dene beach, SZ0714 9000; 30 Aug 2014; JTM. First for SZ09 in VC11.

** NA *Limonium vulgare* (Common Sea-lavender): S of Lower Pennington, SZ3192; 26 Jun 2014; MWR. New tetrad. Calshot Spit, SU4802; 18 Jun 2013; PM. New tetrad.

NN *Linaria maroccana* (Annual Toadflax): Romsey East, SU362 211; 31 Aug 2014; PM. Pink-flowered plant flowering/fruited beside pavement at SU3625 2115. First for SU32.

NN *Linum usitatissimum* (Flax): North of West Meon, SU6425; 07 Aug 2014; AHP & EJC. From bird seed mix. S of Old Down Farm, SU673 245; 05 May 2014; MR & GCo. Relic of marginal sowing. First for SU62.

NN *Lobelia erinus* (Garden Lobelia): Ports Down Hill, SU6406; 16 Sep 2014; DN & JOa. W of Carpark by roundabout SU647 066 in disturbed area near new Pylon. First for SU60.

NN *Lobularia maritima* (Sweet Alison): Lyndhurst (NW), SU299 080; 09 Sep 2013; MWR. 2 plants in car park gutter, 1 at SU 2994 0806. First for SU20. Warsash, SU489 062; 07 Jan 2013; PM. One flowering plant at foot of wall beside pavement at SU4892 0623. First for SU40.

NN *Lonicera caprifolium* (Perfoliate Honeysuckle): Whiteley area, SU5309; 18 May 2014; HFG (MR). First for SU50.

NN *Lonicera nitida* (Wilson's Honeysuckle): Fritham South, SU233 138; 24 Apr 2014; PM. Large bush in hedge at SU233138. Cadnam, SU292136; 12 Oct 2014; PM. First for SU21.

NN *Lonicera pileata* (Box-leaved Honeysuckle): Dean Copse, Knowle, SU559 090; 19 Apr 2014; MR & GCo. Single small plant close to E margin of wood. First for SU50.

NN *Lonicera xylosteum* (Fly Honeysuckle): Droxford Beech Walk, SU6105 1816; 05 Jun 2014; GCo conf. MR. New vice-county record.

* NA *Lotus subbiflorus* (Hairy Bird's-foot-trefoil): Mount Pleasant Farm area, SZ3097; 07 Jul 2014; MR. A few plants by grassy footpath, SZ 3024 9703. New tetrad.

* NA *Luzula forsteri* (Southern Wood-rush): Tetrads: SU50W, SU51B.

** NA *Lycopodiella inundata* (Marsh Clubmoss): Rakes Brakes Bottom, SU222 126; 27 Jul 2014; BSBI (MR). 67 fronds counted on surface of waterlogged Sphagnum on an inclined mire, around SU2222 1264. New tetrad. White Moor, nr Burley, SU278 022; 29 Sep 2014; RPR. SU27856 02211 about 1m square on what appears to be a parching wet heath, i.e. parched and dry in summer and wet in winter, as such the heather wasn't dominating but there was bare ground available for germination. New tetrad.

NN *Lysimachia punctata* (Dotted Loosestrife): Butlocks Heath, SU4609; 05 Jun 2013; MWR. Ditch, Grange Road, SU 4654 0997. First for SU40 since 1965.

NA *Malus sylvestris* (Crab Apple): Roeshot Belt, Roeshot Hill bridleway, SZ1994; 07 Aug 2013; FAW. First for SZ19.

NN *Matthiola incana* (Hoary Stock): Barton-on-Sea, SZ237 929; 07 Apr 2013; HFG (MR). Upper part of cliff below Pebble Beach. First for SZ29 since 1985.

NN *Matthiola sinuata* (Sea Stock): Ports Down Hill, SU6406; 16 Sep 2014; DN & JOa. W of Carpark by roundabout SU647 066 in disturbed area near new Pylon. First for SU60.

NN *Meconopsis cambrica* (Welsh Poppy): Lower Buckland, Undershore, Walhampton, SZ3296; 03 May 2014; MWR. 1 plant in 'natural' vegetation by garden, Marsh Lane, SZ 3230 9631. First for SZ39.

NN *Medicago lupulina var. glandulosa* (Tiptoe (W side), SZ2597; 05 Jul 2013; MWR. Woodside, SZ321942; 15 Jun 2013; MWR; 0: Not recorded. Var. glandulosa, sown with alien species, SZ3216 9426. New vice-county records for variety.

** NA *Melampyrum pratense* (Common Cow-wheat): Tetrads: SU42Q.

** NA *Mentha arvensis* (Corn Mint): Tetrads: SU21M, SU31P, SU32V, SU62M, SU72A.

NN *Mentha x villosa* (Apple-mint): Bushy/Becking's Copse, SU521 106; 31 May 2013; JMill. Full GR: SU5210 1063. First for SU51. Old Idsworth Farm, SU747 142; 24 Apr 2014; MR, EJC & GCo. Naturalised into lane verge over c. 50m. First for SU71 in VC11.

** NA *Moenchia erecta* (Upright Chickweed): Bransgore, Burley Rd, Wood and fields, SZ1897; 07 May 2013; FAW. On old boundary bank/hedge line, centre playing field at SZ18505 97568. 20m N of oak, 5mx2m dense patch and a few further on. New tetrad.

NN *Myosotis arvensis var. sylvestris* (Field Forget-me-not): N of Ridge Farm, Ridge, SU340 186; 16 May 2013; MR. First for SU31. Hocombe Plantation, SU426 230; 31 Mar 2014; MR. First for SU42. Petersfield Heath, SU7522; 01 Sep 2013; MR. First for SU72.

** NA *Myosurus minimus* (Mousetail): Downton area, SZ265 927; 04 Jun 2014; MWR. 87 counted at SZ 2650 9276 (also 1 at 2649 9274). New tetrad.

* NA *Myriophyllum alterniflorum* (Alternate Water-milfoil): Dockens Water, SU225 126; 16 Jul 2014; MR & RCR. Locally frequent. First for tetrad since 1975.

** NA *Myriophyllum spicatum* (Spiked Water-milfoil): Fishlake Meadows, SU355 230; 20 Jul 2013; HFG (MR). Locally abundant, N-S ditch, down to SU356 226. First for tetrad since 1975.

NN *Narcissus bicolor* (Two-coloured Daffodil): S of Bryce's Farm, Sheffield English, SU284 234; 06 Mar 2014; MR & RCR. Planted into hedgebank. New vice-county record.

NN *Narcissus minor* (Lesser Daffodil): S of Bryce's Farm, Sheffield English, SU284 234; 06 Mar 2014; MR & RCR. Planted into hedgebank. SW of Curlew's Farm, Lockerley, SU285 256; 06

Mar 2014; MR & RCR. Planted in remote spot by memorial seat. First for SU22.

NN *Narcissus poeticus* (Pheasant's-eye Daffodil): Knaves Ash, SU183 040; 02 May 2014; MR, DHu & BMd. Abundantly naturalised in horse pasture. First for SU10.

NN *Narcissus x boutignyanus* (Boutigny's Daffodil (N. poeticus x moschatus)): Hocombe Plantation, SU426 230; 28 Apr 2013; MR. Clump in woodland margin. First for SU42.

NN *Narcissus x cyclazetta* (Head-to-head Daffodil (N. tazetta x cyclamineus)): Keyhaven, SZ306 914; 16 Mar 2014; MR & RCR; 0: Introduced. In lane verge alongside car park / sailing club. First for SZ39.

NN *Narcissus x cyclazetta* (Head-to-head Daffodil (N. tazetta x cyclamineus)): Galley Hill area, SZ3197; 15 Mar 2014; MWR. 1 clump, roadside, Boldre Lane, SZ 3187 9794. Lower Buckland and Undershore, SZ3296; 16 Mar 2013; MWR. Planted in hedge, Marsh Lane, SZ 3220 9649. First for SZ39.

NN *Narcissus x incomparabilis* (Nonesuch Daffodil Div. II): Pennington Marshes, SZ321 924; 16 Mar 2014; MR & RCR. Raised broad bank across marsh. First for SZ39.

NN *Nectaroscordum siculum subsp. siculum* (Honey Garlic): Lower Buckland, Undershore, Walhampton, SZ3296; 02 May 2014; MWR. 3 plants in hedge by railway, Marsh Lane, SZ 3220 9652. Presumed planted (with *Narcissus* sp.). First for SZ39.

** NA *Neottia nidus-avis* (Bird's-nest Orchid): Bank of tributary of Bartley Water, SU296 101; 05 May 2014; CC. In full flower. A single spike. First for SU21. Lower Ratley, SU326 229; 31 May 2014; PM. Flowering plants at SU3266 2297. New tetrad.

NA *Neottia ovata* (Common Twayblade): Golt's Copse, SU364 109; 02 May 2013; ILR. First for SU31 since 1979.

NN *Nicotiana glauca* (Sweet Tobacco): Ports Down Hill, SU6406; 16 Sep 2014; DN & JOa. W of Carpark by roundabout SU647 066 in disturbed area near new Pylon. First for SU60.

** NA *Oenanthe fistulosa* (Tubular Water-dropwort): Potters Ford area, SU3607; 30 Jun 2014; MWR. 5 plants, marshy ditch, SU 3687 0719. New tetrad.

* NA *Oenanthe pimpinelloides* (Corky-fruited Water-dropwort): Hinton Admiral Station, South, Lakewood Road Pond, SZ206 941; 04 Aug 2013; FAW. First for tetrad since ?1930. Parnholt Wood East, SU3928; 16 Jun 2014; PM. New tetrad.

NN *Oenothera biennis* (Common Evening-primrose): West Meon, SU6423; 16 Sep 2014; AHP det. EJC. (Possibly with some genes of *O. glazioviana*). First for SU62.

* NA *Ophioglossum azoricum* (Small Adder's-tongue): West of South Oakley Inclosure, SU217 041; 21 Jun 2014; CC. Well developed specimens over a 30 x 3m corridor centred on GPS SU217720 04153. Possibly low thousands of plants on broad grassy path across open Forest. New tetrad.

* NA *Oreopteris limbosperma* (Lemon-scented Fern): Downton (W side), SZ2649 33; 27 Aug 2013; MWR. 3 plants, SZ 2641 9332. New tetrad. Deerleap Inclosure, SU3409; 12 Jun 2014; MWR. 2 plants in ditch by woodland ride, SU 3474 0953. New tetrad.

* NA *Orobancha hederaceae* (Ivy Broomrape): Tudor House, Southampton, SU418 112; 2013; PDS. Var. monochroma. New tetrad.

NN *Oxalis exilis* (Least Yellow-sorrel): Hook Park, SU4904; 16 Apr 2014; MWR. Grass verge by garden, SU 4983 0456. First for SU40.

NN *Panicum miliaceum* (Common Millet): Broughton NW, SU285 343; 12 Sep 2014; ARGM & PAM. Sown to attract game birds in arable field corner. First for SU23.

NN *Papaver atlanticum* (Atlas Poppy): East Meon and N and W of East Meon, SU6822; 28 Aug 2014; AHP & EJC. First for SU62.

NN *Papaver pseudoorientale* (Oriental Poppy): Romsey South-west, SU347 208; 08 Jun 2014; PM. Plant with red flowers near Sadler's Mill at SU3478 2085. First for SU31.

* NA *Parentucellia viscosa* (Yellow Bartsia): Wade Hill area, SU332 161; 07 Jul 2014; PM. At least 100 flowering plants in rough, damp field north of Wade Hill Drove (seen from gate at SU3325 1609). First for SU31.

* NA *Paris quadrifolia* (Herb-paris): Widow Knight's Copse, SU723 225; 15 May 2013; JMill. Rare, SU7238 2233. New tetrad. Furzefield Copse, Stroud, SU724 229; 17 May 2013; JMill. Rare, SU7240 2298. New tetrad.

NN *Parthenocissus inserta* (False Virginia-creeper): Chilworth Common, SU409 183; 12 Sep 2014; EAP & DL. N of track, SU40937 18363. First for SU41.

** NA *Pedicularis palustris* (Marsh Lousewort): Vales Moor, SU193 039; 02 May 2014; MR, DHu & BMd. First for SU10. Latchmore Brook, SU190 126; 25 Jun 2014; MMu. in wetland on north side of brook. New tetrad.

** NA *Pedicularis sylvatica* (Lousewort): Ridge Copse, SU532 109; 18 May 2014; HFG (MR). New tetrad.

NN *Petunia x hybrida* (Petunia): Emsworth, SU7405; 20 Aug 2013; DN. Several self sown plants (from planters also there) in the middle of the roundabout at SU74922 05894. First for SU70 in VC11.

NN *Phacelia tanacetifolia* (Phacelia): North of West Meon, SU6425; 07 Aug 2014; AHP & EJC. From bird seed mix. First for SU62.

NN *Phalaris arundinacea var. picta* (Variegated Reed Grass): Blackwell Common, SU4301; 10 Jun 2014; MWR. Patch 1 x 1m by stream, SU 4331 0141. First for SU40 for var.

NN *Phalaris paradoxa* (Awned Canary-grass): Nr Stoke, Hayling, SU717 020; 29 Aug 2013; AD conf. MR. Voucher Hb MR. First for SU70.

NN *Phlomis fruticosa* (Jerusalem Sage): Boscombe Chine, N of high footbridge, SZ1091; 20 Jul 2013; FAW. Southbourne, Overcliff Drive and Coast Rd, SZ1491; 08 Jun 2013; FAW. Escape or planted. First for SZ19.

NN *Phlomis russeliana* (Turkish Sage): East Wellow, SU303 204; 18 Jun 2014; PM. Flowering and spreading to cover a grave in churchyard at SU3034 2043. New vice-county record.

NN *Picea sitchensis* (Sitka Spruce): Highcliffe Castle (coast), SZ2092; 27 Sep 2013; MWR. On cliff. First for SZ29.

** NA *Pilularia globulifera* (Pillwort): Latchmore brook, SU190 126; 25 Jun 2014; MMu. In wetland on north side of brook. New tetrad. Latchmore brook, SU195 127; 14 Sep 2014; MMu. New tetrad.

NN *Pinus nigra subsp. laricio* (Corsican Pine): Hardley (W side), SU4204; 19 Jul 2013; MWR. Planted. Buttsash, SU4205; 24 Sep 2013; MWR. Wood, planted and probably self-sown. Netley (E side), SU4608; 05 Jun 2013; MWR. Planted. First for SU40.

NN *Pinus nigra subsp. nigra* (Austrian Pine): Boscombe Chine, N of high footbridge, SZ1091; 20 Jul 2013; FAW. North Ripley West, Anna Lane, SZ1599; 30 Jun 2013; FAW. First for SZ19. Ringwood Forest, Reservoir Cottage monad, SU1108; 10 Apr 2014; MR & Dhu. Older singleton plantings. First for SU10.

NA *Plantago major subsp. intermedia* (Greater Plantain): Moors Valley Country Park centre car park, SU107 056; 09 Apr 2014; MR & RCR. Damp hollows in gravel. First for SU10.

* NA *Poa bulbosa* (Bulbous Meadow-grass): Mayflower Park, SU416 111; 2013; PDS. W end of landward side of parking, fourth bay from end. First for SU41.

* NA *Polygala calcarea* (Chalk Milkwort): Coulter's Dean, SU748 192; 10 Jul 2014; MR & DMit. A few plants, grassy bank E of bridleway outside reserve, SU7483 1925. New tetrad.

NA *Polygala vulgaris* (Common Milkwort): Haslar RN Cemetery, SZ610 985; 01 Jun 2013; DRA & JAN. SZ 6102 9856, E of

chapel. Rare, but LA in 3 or 4 patches within area c.3x2m. All flowers pale - white, tinged pale lilac. First for SZ69 in VC11.

NN *Polygonatum x hybridum* (Garden Solomon's-seal): Pugs Hole, roadsides, railway + bridges, SZ0792; 21 Sep 2013; FAW. Footpath to heath from Alyth Rd, escape. First for SZ09.

* NA *Polygonum rivivagum* (Cornfield Knotgrass): Palmersford, bridleway E from Trickett's Cross, SU0900; 23 Sep 2013; FAW. Specimen, SU098 008, arable weed field. First for SU00. Roeshot Belt, Roeshot Hill bridleway, arable field, SZ193949; 07 Aug 2013; FAW. Maize fld, 1/2 m ploughed strip (5m set-aside not ploughed, no arable fls) 19384 94942. New tetrad. Hinton Admiral Station, North, arable field, SZ206 948; 04 Aug 2013; FAW. Sev plants, in ploughed edge of maize field E of footpath to triangle, at SZ20658 94867. New tetrad.

* NN *Polypogon monspeliensis* (Annual Beard-grass): Ringwood Forest, SU116080, SU117080, SU119081; 03 Sep 2014; MR. Locally abundant, ride sides especially damp depressions. New tetrad. Efford Bridge area, SZ3094; 15 Jul 2014; MWR. Several plants by footpath, SZ 3063 9406. New tetrad. Otterbourne Hill, SU4522; 12 Jul 2013; BGo & JGo. 4 on N side of bridge over M3 into Cranbury Park, SU4523 2261. First for SU42. East Meon and N and W of East Meon, SU6822; 28 Aug 2014; AHP & EJC. First for SU62.

NA *Polystichum setiferum* (Soft Shield-fern): Southsea, Clarence Parade, SZ6461 9831; 26 Aug 2014; ALe. Rare. First for SZ69.

* NA *Polystichum x bicknellii* (*P. aculeatum x setiferum*): Buriton, SU7463 2028; 23 Aug 2014; ALe. Frequent. New tetrad.

NN *Populus 'Balsam Spire'* (*P. balsamifera x trichocarpa*): S of Old Idsworth Farm, SU747 140; 24 Apr 2014; MR, EJC & GCo. Single tree planted into hedgerow at foot of down. First for SU71.

NN *Populus trichocarpa* (Western Balsam-poplar): Bramdean and south of Bramdean, SU6127; 31 Jul 2014; AHP & EJC. Planted but producing many suckers. 1.5km east of West Meon, SU6523; 16 Sep 2014; AHP det. EJC. Planted but producing suckers. First for SU62.

** NA *Potentilla argentea* (Hoary Cinquefoil): B3347, Sopley, SZ149 979; 12 Sep 2014; DL. 1 E of road, SZ1499 9794. First for tetrad since ?1960s. Kestrel Drive, Christchurch, SZ182 928; 14 Jun 2014; DL. At the end of Kestrel Drive where the field begins (map ref: 18264 92883). There were probably about 30 plants, though some had been squashed by cars. First for tetrad since ?1960s. Blashford Lakes nr pumping station, SU153 082; 12 Jun 2014; DL. Just NW of the pumping station at Blashford Lakes. New tetrad.

* NA *Potentilla x italica* (*P. erecta x reptans*): Ringwood Forest, SU116 080; 03 Sep 2014; MR. Locally frequent. Few to no well-formed achenes. Almost all flowers 4-merous but larger than *P. erecta*. Creeping and with well-developed stolons. Lvs somewhat similar to *x mixta* but lftls narrower. Ashley Heath, SU114 052; 04 Sep 2014; MR, FAW et al. SU1148 0525. Almost no ripe achenes formed. First for SU10.

* NA *Potentilla x suberecta* (*P. anglica x erecta*): Ocknell Plain, SU232 120; 27 Jul 2014; HFG (MR). Locally abundant, extending from here NE to SU235 123. Specimen retained Hb MR. First for SU21.

NA *Primula x polyantha* (False Oxlip (*P. veris x vulgaris*)): Barnsfield Wood, SU123 029; 30 Apr 2013; MR, BGo & DHu. Ine by ride, S edge of wood. First for SU10.

NN *Prunus serotina* (Rum Cherry): St Catherines Hill, Christchurch - woodland near Sandy Lane, SZ145 948; 03 May 2013; PAB. First for SZ19. Sandy Down, SZ3199; 25 May 2014; MWR. Hedge, SZ 3137 9943. First for SZ39. Hatchet Pond, SU3601; 27 Jun 2014; MWR. 1 small tree, East Boldre Road, SU 3694 0133. First for SU30.

NA *Prunus x fruticans* (*P. domestica x spinosa*): N of Ridge Farm, Ridge, SU340 187; 12 Sep 2013; MR & BGo. Stone checked. First for SU31.

NN *Pseudosasa japonica* (Arrow Bamboo): Chewton Bunny (E side), SZ2293; 04 May 2014; MWR. 1 plant in wood, SZ 2212 9369. Breakhill Copse area, SZ2694; 30 Apr 2014; MWR. 1 plant, planted near A337, SZ 2643 9434. First for SZ29.

NN *Pulmonaria officinalis* (Lungwort): Nr Sheiling School, Ashley Heath, SU134 047; 09 May 2013; MR, GCo & DHu. Garden escape on road verge. First for SU10 since 1955. Boundway Hill area, SZ2698; 01 Jul 2014; MWR. 1 plant in roadside ditch, SZ 2684 9816. First for SZ29 since 1950.

NN *Pulmonaria saccharata* (Bethlehem-sage): By Ivy Lane, Blashford Lake, SU156 076; 29 Apr 2014; MR & DHu. By boundary bank of Spinnaker sailing club and naturalising into hedgerow. First for SU10.

NN *Pyracantha coccinea* (Firethorn): Bartley, south-east of, SU314 120; 01 Oct 2014; PM. Large bush fruiting in hedge. First for SU31.

NN *Quercus coccinea* (Scarlet Oak): Awbridge, SU326 239; 27 Aug 2014; PM. Planted. Large tree beside village hall car park. Second vice-county record.

NN *Quercus x rosacea* (*Q. petraea x robur*): Petersfield Heath, SU756 229; 31 Aug 2013; MR. Substantial tree with intermediate leaf and stem characters, SU7568 2293. First for SU72 in VC11.

** NA *Radiola linoides* (Allseed): Ashley Heath, SU113 054; 04 Sep 2014; MR, FAW et al. New tetrad. Ringwood Forest, SU11670813; 03 Sep 2014; MR. 2 plants, damp ride side. New tetrad. Highcliffe, SZ2157 9344; 19 Aug 2013; RMW. Edge of tarmac path and lawn from road name to south. New tetrad.

* NA *Ranunculus omiophyllus* (Round-leaved Crowfoot): Burton Common, SZ1995; 21 May 2013; JAN. New tetrad.

* NA *Ranunculus parviflorus* (Small-flowered Buttercup): Lepe, SZ440 999; 25 Jun 2013; MWR. c 5 plants. W of East Hill Farm, SZ 4403 999. First for tetrad since 1931.

* NA *Ranunculus x novae-forestae* (New Forest Crowfoot): Dockens Water, SU225 126; 27 Jul 2014; BSBI (MR). Characteristic range of intermediate and asymmetric lvs, but no fl/fr to corroborate. New tetrad.

* NA *Raphanus raphanistrum subsp. maritimus* (Sea Radish): Highcliffe, SZ207 930; 03 Oct 2014; MR & RCR. 1 plant. New tetrad. Calshot Spit, SU4802; 18 Jun 2013; PM. New tetrad.

NN *Raphanus sativus* (Garden Radish): W of N Kingston, SU158 027; 07 May 2014; MR, FAW et al. Rare, road verge. First for SU10 since 1955. North of West Meon, SU6425; 07 Aug 2014; AHP & EJC. From bird seed mix. First for SU62.

NN *Rhus typhina* (Stag's-horn Sumach): Pugs Hole, roadsides, railway + bridges, SZ0792; 21 Sep 2013; FAW. Footpath to heath from Alyth Rd. First for SZ09.

NA *Rorippa palustris* (Marsh Yellow-cress): YMCA, SU5212; 18 Jun 2014; PAB & GCo. First for SU51.

NA *Rosa micrantha* (Small-flowered Sweet-briar): St Catherines Hill, north of Christchurch, SZ145 954; 06 Jul 2013; PAB. First for SZ19.

NN *Rosa multiflora* (Many-flowered Rose): West Meon, SU6423; 16 Sep 2014; AHP det. EJC. Garden escape. First for SU62.

* NA *Rosa obtusifolia* (Round-leaved Dog-rose): Oak Tree Park, footpath N across Palmersford to caravan park, SU0901; 23 Sep 2013; FAW. Probably, specimen taken. First for SU00 in VC11.

NA *Rosa rubiginosa* (Sweet-briar): Roger Penny Way, Longcross Plain, SU245 155; 29 Jul 2013; JFra & GDF. Several bushes on bank on NE side of road. Possibly more present farther NW. First for SU21.

IN *Rosa rugosa* (Japanese Rose): Awbridge Hill Wildlife Sanctuary, SU326 236; 31 May 2014; PM. One plant with pink-purple flowers and one plant with white flowers at SU3262 2364 and another plant with white flowers at SU3264 2365. Awbridge Hill Wildlife Sanctuary, SU327239; 31 May 2014; PM. Plants with pink-purple flowers at SU3270 2391. Michelmersh, SU341266;

05 Jun 2014; PM. Flowering in hedge on south side of road at SU3411 2663. First for SU32.

NA *Rosa spinosissima* (Burnet Rose): Near Broadley Inclosure, SZ259 986; 24 May 2013; MWR. Several bushes, SZ 2595 9867. First for tetrad since 1983. Peak Farm, SU665 254; 29 Jul 2014; MR, MPa & GCo. Presumed planting into hedge at back of house grounds. First for SU62.

NN *Rubus tricolor* (Chinese Bramble): Shawford, North of, SU470 256; 24 Jun 2014; PM. Spreading over large area on bank on north side of Place Lane at SU4703 2566. Presumed planted. First for SU42.

* NA *Rumex crispus subsp. littoreus* (Curled Dock): Lepe, SZ454 985; 02 Sep 2013; MWR. Tepals typical. SZ 4547 985. New tetrad. Calshot Spit, SU4887 0211; 13 Aug 2013; PM. First for tetrad since 1913. Bakers Island, Langstone Harbour, SU6903; 15 Aug 2014; MR, GFa et al. Occasional. North Binness Island, SU6904; 15 Aug 2014; MR, GFa et al. Rare. First for SU60.

* NA *Rumex pulcher* (Fiddle Dock): Breamore Marsh, SU155 178; 06 Sep 2014; CC. Track side near Marsh Farm. First for tetrad since 1984. East Wellow churchyard, SU302 203; 11 Sep 2013; MR & RCR. Single plant near church porch, SU3028 2039. New tetrad.

NN *Rumex sanguineus var. sanguineus* (Red Wood Dock): Roydon Woods HWT reserve: compartment N3 Newlands Coppice, SU321 011; 27 Apr 2013; PAB. 3 plants. First for SU30.

* NA *Sagina maritima* (Sea Pearlwort): East Cliff, SZ107 911; 03 Jun 2014; RMW. Rare, Boscombe Chine Gardens, cpt.8. Boscombe Chine Gardens, SZ108912; 03 Jun 2014; RMW. Rare, compartment 9. New tetrad. YMCA River Hamble, SU519 119; 18 Jun 2014; PAB & GCo. First for SU51.

** NA *Sagina subulata* (Heath Pearlwort): W of Fletchers Thorns, Ober Heath, SU277 042; 28 Jul 2013; BSBI (MR). Rare in lawn by restored stream course. New tetrad.

* NA *Sagittaria sagittifolia* (Arrowhead): Romsey Central, SU3579 2162; 10 Sep 2013; PM. Spreading for approximately 40 metres along canal to SU35792159. New tetrad.

* NA *Salicornia dolichostachya* (Long-spiked Glasswort): Long Island, Langstone Harbour, SU7004; 15 Aug 2014; MR, GFa et al. New tetrad.

* NA *Salicornia europaea* (Common Glasswort): South Binness Island, Langstone Harbour, SU6903; 15 Aug 2014; MR, GFa et al. New tetrad.

* NA *Salicornia fragilis* (Yellow Glasswort): South Binness Island, Langstone Harbour, SU6903; 15 Aug 2014; MR, GFa et al. Occasional. New tetrad.

** NA *Salvia verbenaca* (Wild Clary): Speltham Down, Hambleton, SU6414; 01 Jul 2014; AHP. Single small plant, SU64550 14774 +/-5m. Photos taken. First for SU61 since 1930.

* NA *Samolus valerandi* (Brookweed): Ossemsley Ford, SU233 003; 08 Jun 2013; MR. Occasional. First for tetrad since 1930.

* NA *Sanguisorba officinalis* (Great Burnet): Hinton Admiral Park, SZ209 958; 18 May 2014; CC. Slope above Rock Garden. First for tetrad since 1971. Emsworth, SU7507 0613; 06 Jun 2014; BF conf. MR. Brook Meadow, perhaps introduced. New tetrad.

** NA *Sanicula europaea* (Sanicle): Tetrads: SU42B.

NN *Sasa palmata* (Broad-leaved Bamboo): Nr Blashford Farm, SU149070; 10 Sep 2014; MR & GCo. First for SU10. Mayles Lane, SU5610; 23 Apr 2014; GCo. First for SU51.

NN *Saxifraga hypnoides* (Mossy Saxifrage): Romsey Cemetery, SU367 211; 08 Jun 2014; PM. White-flowered garden variety spreading over a grave at SU3675 2118. First for SU32.

NN *Scabiosa atropurpurea* (Sweet Scabious): Winchester, SU485 286; 01 Jul 2014; PM. On east bank of Itchen Navigation, south of Wharf Bridge, at SU4857 2868. One with dark purple flowers and one with pink flowers. First for SU42.

NA *Scutellaria x hybrida* (*S. galericulata* x *minor*): Avon Heath CP North, SU1203; 10 Sep 2013; FAW. Between bridleway and ditch/stream by MOD fence at SU12150315. Specimen retained, First for SU10.

NN *Sedum 'Herbstfreude'* (Autumn Stonecrop (*S. spectabile* x *telephium*)): St Leonards, SU1102; 14 Aug 2014; MR, FAW et al. Garden escape onto several road verges. First for SU10.

NN *Sedum album* (White Stonecrop): Sherfield English, SU284 226; 17 May 2014; PW. First for SU22 in VC11. Ashlett Creek area, SU4703; 14 Jul 2014; MWR. By track, SU 4712 0311. First for SU40.

NA *Sedum anglicum* (English Stonecrop): Wickham Churchyard, SU575 114; 03 Jul 2014; GCo. First for SU51.

NN *Sedum forsterianum* (Rock Stonecrop): Upper Ratley, SU324 234; 31 May 2014; PM. Plants in bud on several graves in churchyard. Romsey Cemetery, SU367 210, SU367 211; 08 Jun 2014; PM. Several plants in bud on graves at SU3674 2108, SU3675 2110. First for SU32 since 1876.

NN *Sedum kamtschaticum* (Kamchatka Stonecrop): Timsbury, SU346 254; 14 Jul 2014; PM. Flowering on waste ground on east side of road at SU3461 2545. First for SU32.

NN *Sedum rupestre* (Reflexed Stonecrop): Bickerley, Ringwood, SU146 048; 13 Jun 2014; MR & GCo. Garden escape by roadside. First for SU10 since ?1970.

NN *Sedum spectabile* (Butterfly Stonecrop): Cadnam, SU293 135; 12 Oct 2014; PM. Flowering at SU2931 1358. First for SU21.

NN *Sedum spurium* (Caucasian-stonecrop): Sowley Brooms area, SZ3696; 13 Jul 2013; MWR. In dense roadside vegetation near East End Arms, SZ 3620 9687, 3627 9696. First for SZ39.

** NA *Senecio aquaticus* (Marsh Ragwort): Tetrads: SU211.

NN *Sequoia sempervirens* (Coastal Redwood): Burton Common, bridleways north, SZ1995; 23 Apr 2013; FAW. First for SZ19.

NN *Setaria pumila* (Yellow Bristle-grass): Boscombe Pier, Boscombe Overcliff, Rotary Garden, SZ1191; 18 Sep 2013; FAW. East Parley Common, East Parley track, SZ1099; 25 Sep 2013; FAW. First for SZ19.

NN *Setaria verticillata* (Rough Bristle-grass): Ringwood (S side), SU150 048; 01 Sep 2013; MWR. 1 plant at house / pavement junction, SU 1507 0487. First for SU10.

NN *Silybum marianum* (Milk Thistle): QECP Queen Elizabeth Forest/Holt Down, SU7219; 09 Aug 2014; JLM. HBIC QECP BioBlitz. First for SU71.

NN *Sisyrinchium striatum* (Pale Yellow-eyed-grass): Halterworth, SU378 217; 08 Jun 2014; PM. On verge of south side of Highwood Lane at SU3784 2178. First for SU32.

NN *Soleirolia soleirolii* (Mind-your-own-business): North Exton and Manor Farm area, SU6121; 15 May 2014; AHP & EJC. First for SU62.

* NN *Sorbus torminalis* (Wild Service-tree): QECP Old A3 West, SU717 187; 10 Aug 2013; TSpe. HBIC 2013. Queen Elizabeth Country Park BioBlitz. First for SU71.

NA *Sparganium emersum* (Unbranched Bur-reed): Palmersford, footpath N over bridges (from Tricketts Cross brdlwy), SU0900; 23 Sep 2013; FAW. Footpath to N over bridges. First for SU00 in VC11 since 1980.

NA *Sparganium erectum subsp. neglectum* (Branched Bur-reed): E of Newlands Plantation, SU173 090; 28 Sep 2013; HFG (MWR). SU1730 0900. First for SU10 for subspecies since 1955.

* NA *Spartina x townsendii* (*S. alterniflora* x *maritima*): Round Nap, SU702035; 15 Aug 2014; MR, GFa et al. Rare. New tetrad.

** NA *Spergularia arvensis* (Corn Spurrey): Lyndhurst NE monad, SU3008; 17 Apr 2014; MR, GCo & BGo. New tetrad.

NN *Spiraea x billardii* (Billiard's Bridewort): Ringwood Road, St Leonards, SU111 029; 14 Aug 2014; MR, FAW et al. Determined on panicle shape and leaf tooting. First for SU10.

NN *Spiraea x billardii* (Billiard's Bridewort): Hinton Admiral Station, South, Smugglers Lane N, SZ200 944; 04 Aug 2013; FAW. First for SZ29.

NN *Spiraea x pseudosalicifolia* (Confused Bridewort): Pithouse Farm, Pithouse Cottages, Farm and track NW of farm, SZ1398; 18 Sep 2013; FAW. Escape or planted. First for SZ19. Hythe (Frostlane), SU4306; 18 Aug 2014; MWR. Planted on roadside by level crossing, with *Symphoricarpos albus*, SU 4320 0697. First for SU40.

** NA *Spiranthes spiralis* (Autumn Lady's-tresses): Wilverley Plain, SU2501; 13 Sep 2014; CC & AJB. AJB and I estimated the population at between one and two million. First for tetrad since 1984. Also at tetrads: SZ19B, SZ19M (1965), SZ29T, SZ29W, SU10B (1985), SU21B (1985), SU30R, SU32K;

NN *Stachys byzantina* (Lamb's-ear): Avon Heath CP N, SU120 028; 07 Jul 2014; MR & GCo. Established from planting in car park. Kingsburys Lane, Ringwood, SU147 050; 13 Jun 2014; MR & GCo. Garden escape. First for SU10.

NA *Stachys palustris* (Marsh Woundwort): Bournemouth West, Upper Gardens, SZ0791; 18 Jun 2013; FAW. First for SZ09 in VC11 since ?1969.

NN *Stranvaesia davidiana* (Stranvaesia): St Leonards, SU112 020; 14 Aug 2014; MR, FAW et al. One in lane verge, perhaps planted. First for SU10.

NN *Symphytum x hidcotense* 'Hidcote Blue' (Hidcote Comfrey): Applemore, SU396 078; 29 Mar 2013; MWR. Patch c 5 x 4m by A326, SU 3960 0788. First for SU30. East Wellow, SU306 200; 13 Apr 2014; PM. Recorded as *Symphytum* 'Hidcote Pink'. Well established in corner of field next to minor road at SU3065 2004. Flowering over an area of 1.5 square metres. First for SU32.

NN *Syringa vulgaris* (Lilac): Stoney Cross Plain, SU259 118; 21 Jul 2014; PM. Fruiting bush at SU2590 1189. First for SU21.

NA *Taraxacum lacistophyllum* (Cut-leaved Dandelion): Woodfidley Passage, SU347 051; 10 Jun 2014; AJR. First for SU30.

NN *Tellima grandiflora* (Fringecups): Upper Ratley, SU321 235; 31 May 2014; PM. Flowering on south side of Church Lane at SU3217 2352. First for SU31.

NN *Thalictrum aquilegifolium* (French Meadow-rue): Wickham Square, SU5711; 05 Jun 2014; GCo conf. MR. First for SU51.

NN *Tilia x euchlora* (Caucasian Lime (*T.cordata* x *dasystyla*)): Blashford Lakes, SU1508; 29 Jun 2014; MWR. Planted, Ellingham Drive, SU 1597 0844. First for SU10.

* NA *Torilis nodosa* (Knotted Hedge-parsley): Throop West, Chesilbourne Grove, playing field, Mill Lane, SZ1095; 17 Jun 2013; FAW. New tetrad. Near Naish Holiday Village, SZ226 938; 04 May 2014; MWR. Abundant over c 2 x 1m on grassy roadside, SZ 2269 9388. New tetrad. Emsworth, SU7488 0668; 19 May 2014; BF. Christopher Way. Emsworth, SU75310715; 19 May 2014; BF. Westbourne Avenue. New tetrad.

** NA *Trifolium fragiferum* (Strawberry Clover): Tetrads: SZ29B, SZ29M, SU21L, SU51A, SU61D.

* NA *Trifolium glomeratum* (Clustered Clover): Mayflower Park, Southampton, SU416 111; 2013; PDS. 4 plants, W end of landward side of parking. New tetrad.

* NA *Trifolium scabrum* (Rough Clover): East Cliff, SZ108 911; 03 Jun 2014; RMW. Boscombe Chine Gardens, cpt.12. New tetrad.

* NA *Trifolium suffocatum* (Suffocated Clover): Iford Bridge, SZ1393; 08 Jun 2013; FAW. New tetrad.

** NA *Triglochin palustris* (Marsh Arrowgrass): Tetrads: SZ19L.

NN *Tulipa gesneriana* (Garden Tulip): Romsey South-west, SU346 206; 30 Mar 2014; PM. Small group with 2 flowering stems in bud on waste ground on north side of A27 at SU3468 2063. First for SU32.

NN *Tulipa sylvestris* (Wild Tulip): Colden Common North-east, SU482 222; 27 Mar 2014; PM conf. MR. Two flowering plants and five non-flowering plants on verge on east side of Main Road, a short distance south of Boyes Lane at SU4821 2228. First for SU42.

NN *Ulmus x hollandica* (Dutch Elm (*U. glabra* x *minor* x *plotii*)): Milford (church area), SZ291 924; 12 Aug 2013; MWR conf. MCole. Small trees at field edge, just E of Lymington Road (B3058), SZ 2914 9242. First for SZ29 since 1976.

* NA *Umbilicus rupestris* (Navelwort): Rushington, Eling, SU3513; 15 May 2013; DLG. Rare, growing by fallen tree in sunny position. First for tetrad since 1984.

** NA *Valeriana dioica* (Marsh Valerian): Tetrads: SU32L.

** NA *Valeriana officinalis* (Common Valerian): Tetrads: SU21V, SU50J.

NN *Verbascum blattaria* (Moth Mullein): Casbrook Common, SU356 248, SU357 247; 14 Jul 2014; PM. Yellow-flowered plants at SU3568 2485, SU3575 2474. First for SU32. East Meon and N and W of East Meon, SU6822; 28 Aug 2014; AHP & EJC. First for SU62.

NN *Verbascum phlomoides* (Orange Mullein): Lymington (Buckland), SZ317 962; 24 Aug 2013; MWR. c 17 plants, corner of Southampton Road and Paddock Gardens, SZ 3170 9629. Present for some years. First for SZ39 since 1966.

* NA *Verbascum x semialbum* (*V. thapsus* x *nigrum*): West of Mayles Lane, SU556 100; 19 Sep 2014; GCo conf. VAJ. First for SU51.

NN *Verbena bonariensis* (Argentinian Vervain): North Baddesley East, SU396 199; 28 Sep 2014; PM. Small plants flowering beside pavement at SU3960 1997, self-sown from large plants in nearby raised beds. First for SU31.

NA *Verbena officinalis* (Vervain): Bournemouth Airport NE, track to Merritown Heath, SZ1198; 17 Aug 2013; FAW. First for SZ19.

* NA *Veronica catenata* (Pink Water-speedwell): Fort Brockhurst, SU595 020; 01 Aug 2013; JMill. SU5950 0203. New tetrad.

** NA *Veronica officinalis* (Heath Speedwell): Tetrads: SZ19A, SZ19J, SU10M, SU33B.

** NA *Veronica scutellata* (Marsh Speedwell): Tetrads: SZ19D, SU21K, SU51G.

NN *Veronica x franciscana* (Hedge Veronica (*V. elliptica* x *speciosa*)): Bournemouth East Cliff, seafront, SZ0990; 01 Jan 2013; FAW. First for SZ09.

NN *Viburnum rhytidophyllum* (Wrinkled Viburnum): Holly Hill Woodland Park, SU4907; 01 May 2013; MWR. Large bush by lake, Holly Hill Woodland park, SU 4977 0781; presumed planted. First for SU40.

** NA *Viola lactea* (Pale Dog-violet): West of South Oakley Inclosure, SU217 041; 21 Jun 2014; CC. Occasional on broad grassy path across open Forest. First for tetrad since 1966.

NN *Viola odorata* var. *subcarnea* (Sweet Violet colour form): Stockbridge, South of, SU356 346, SU357 346; 13 Mar 2014; PM. Two small patches on east side of Test Way at SU3571 3469 and one small patch on west side of Test Way at SU3569 3466. First for SU33.

NA *Viola reichenbachiana* (Early Dog-violet): Bournemouth Airport NE, track to Merritown Heath, SZ1198; 17 Aug 2013; FAW. Boscombe Overcliff, SZ122 917; 03 Apr 2014; CWW. First for SZ19.

NN *Viola x wittrockiana* (Garden Pansy): East Meon, SU6822; 28 Aug 2014; AHP det. EJC. Garden escape. One plant. First for SU62.

NN *Weigela florida* (Weigelia): Sway, SZ2798; 11 May 2014; MWR. Planted in roadside hedge round grass field, SZ 2762 9873. New vice-county record.

NN X *Cuprocyparis leylandii* (Leyland Cypress): Holbury Purlieu, SU4203; 03 May 2013; MWR. 1 tree planted at edge of field, Park Lane, SU 4270 6347. Blackfield (N side), SU444 029; 21 Sep 2013; MWR. Planted in grass field, SU 4445 0292. First for SU40.

NN *Zantedeschia aethiopica* (Altar-lily): West of Waterlooville: Billy's Pond, SU6711; 24 Jun 2014; AHP. SU673111, growing on steep edge of the pit containing the pond. First for SU61.

VC12 Records

Compiled by Tony Mundell (24 November 2014)

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 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. As usual I have omitted the 'SU' from grid references to save space.

Thanks to survey work on farms by Cath Shellswell, John Moon and others this list has a good number of records for the rarest arable wildflowers, including *Adonis annua*, *Ajuga chamaepitys*, *Legousia hybrida*, *Papaver argemone*, *Petroselinum segetum* and *Scandix pecten-veneris*. In fact I have omitted many other records of arable wildflowers such as *Anchusa arvensis*, *Bromus secalinus*, *Chaenorhinum minus*, *Chenopodium ficifolium*, *Euphorbia exigua*, *Fumaria densiflora*, *Geranium columbinum*, *Kickxia elatine*, *K. spuria*, *Valerianella dentata* and *Veronica polita*. However, all those extra records are of course now included on my MapMate database.

Farmers are now introducing a growing number of unusual plants, usually in seed mixtures to feed game birds or sometimes to encourage insects through 'pollen and nectar' seed mixes. Some examples of this in the list below are the records for *Camelina sativa*, *Chenopodium giganteum*, *Echinochloa esculenta* and *Phalaris aquatica*, but in 2014 I have also received plenty of records of sown aliens such as *Chenopodium quinoa*, *Panicum miliaceum*, *Setaria pumila* and *Setaria viridis* that I have not included below. This widespread practice of sowing seed to encourage pollinating insects, or to attract game birds, leads to a problem regarding the status of rare arable plants. Certainly the natural distributions of species like Corncockle *Agrostemma githago* and Cornflower *Centaurea cyanus* have been totally obscured by relatively recent sowings.

One delightful record was the apparent discovery of an uncommon subspecies of Marsh Violet *Viola palustris* subsp. *juressi*. This is distinguished by its hairy petioles and the fact that the bracteoles are positioned above the middle of the pedicel. The plants examined in a bog during the HFG meeting at Silchester Common seemed to fit the bill, but I will try to get expert confirmation. If confirmed it is new to Hampshire and other sites for *V. palustris* nearby will need checking.

Acorus calamus (Sweet-flag) In very overgrown village pond at Well 7620 4661, Tony Mundell, Ginnie Copsey & Mary Parker 14 Jul 2014.

Adonis annua (Pheasant's-eye) After two years of not finding this at Fob Down, I was rewarded on 12 July 2014. Much less evidence of rabbit activity by the copse and a total count of 26 plants, all in fruit. The biggest concentrations were at 5738 3303 and again nearer the copse margin at 5739 3304, with a few in between in 5739 3303 and a straggler or two further along at 5749 3304, Fred Rumsey 12 Jul 2014.

Agrimonia procera (Fragrant Agrimony) 22 plants on trackside, Long Bottom 8406 4973, Chris Hall 28 Jul 2014. One plant beside track Long Bottom 8435 4987 and two at 8401 4970, Chris Hall 6 Sep 2014. In Portway Lane, Cholderton Estate 2441, and at west end of Portway Lane 2440, John Moon 4 Aug 2014. Locally frequent along margins of woodland and rank grasslands at Chilbolton 385389 and 386389, Geoff Farwell 9 Aug 2014.

Agrostis curtisii (Bristle Bent) Aldershot Common, 11 tufts on heath on low hill 8402 4987, c.60 tufts on heath, north side of Horse Pond 8415 4990 and two tufts 8415 4996, Chris Hall 6 Sep 2014.

Ailanthus altissima (Tree-of-Heaven) Many suckers on verge outside house, Cow Lane, Kimpton 2747, John Moon 18 Aug 2014.

Ajuga chamaepitys (Ground-pine) Found on a track on the Roundwood Estate at 5087 4383 during HBIC Arable Plants Training Day, Phil Wilson 15 Jul 2014. After much searching I only located one plant in seed south of Freefolk Wood at 50378 43913, Brian Laney 5 Aug 2014.

Alnus rubra (Red Alder) Three planted roadside trees of forma *pinnatisecta* at Middle Wallop 2913 3789 and several more at 2906 3792 beside the A343 by the village hall. *A. rubra* is distinguished by the decurved leaf margins so these trees are not the rather similar *Alnus incana* 'Laciniata' or *A. glutinosa* 'Laciniata', Tony Mundell 8 Aug 2014. Voucher specimen retained.

Althaea officinalis (Marsh-mallow) One flowering plant on north verge of A3010, Churchill Way, Basingstoke c.6296 5231 at junction with Sinclair Drive, Tony Mundell 8 Aug 2014. There were major road-works here a few years ago, so presumably seed was brought in with imported soil.

Anacamptis pyramidalis (Pyramidal Orchid) There was a bumper crop of 26 records in 2014 so I have only selected a few here:- 19 spikes at Andover Ambulance Station 354466, and 43 on nearby waste ground, Mike Wildish 16 Jun 2014. Around 100+ plants in corner of field, SE of Newton Valence 722324, Steve Povey 17 Jun 2014. Kingsclere 5258, hundreds in wildflower meadow, over 10 in churchyard, Sarah Ball 17 Jun 2014. Scattered throughout Tidworth Golf Course, but particularly around 217476, John Moon 17 Jun 2014. Andover, A303/A3057 junction 364441, 1,950 plants plus two of var. *alba*, Mervyn Grist 18 Jun 2014. Andover A303/A3093 junction 386445, 960 plants, Mervyn Grist 20 Jun 2014. Var. *emarginata* at Noar Hill 74160 31970, Nigel Johnson 28 Jun 2014.

Anagallis arvensis subsp. *arvensis* f. *carnea* (Scarlet Pimpernel – pink form) Alton 7253 3884 in north corner of small field, Helen Boyce 4 Sep 2014. In field corner, NE of Well 778470, Tony Mundell, Ginnie Copsey & Mary Parker 14 Jul 2014. Cole Henley 4635 5143 on road verge by gate, Tony Mundell, Peter Billingham & Graeme Down, 8 Sep 2014.

Anagallis arvensis subsp. *arvensis* f. *lilacina* (Scarlet Pimpernel – purple form) Seven plants of a deep purple form amongst normal red ones at Upton 3535 5514, Tony Mundell & Peter Billingham 13 Aug 2014. Where footpath enters arable field from Doles Wood 3708 5221, John Moon 9 Aug 2014. (See photo on next page.)

Anagallis tenella (Bog Pimpernel) Locally plentiful at Silchester Common 6233 6228 in bog, Hants Flora Group 10 Aug 2014.



Pink form of Scarlet Pimpernel *Anagallis arvensis* subsp. *arvensis* f. *lilacina* (Tony Mundell)

Hazeley Heath 7643 5763 on flushed scrape and 7637 5802 in bog, Hants Flora Group 17 Aug 2014.

Anisantha madritensis (Compact Brome) East Anton, Augusta Park housing development 376475, alongside recently realigned road in disturbed soil, Mike Wildish 8 Jun 2014.

Anthemis austriaca (Austrian Chamomile) Thrupton Down 2644, several hundred in field of Oil-seed Rape, along with *Centaurea cyanus*, so presumably relic of sown cornfield mix, John Moon 8 Jun 2014. Sown in cornfield flower plot corner at Abbotts Ann 311420, John Moon 15 Jun 2014. Malshanger, Sheardown field 566529, sown by the farmer. Grid ref. is for centre of field, Cath Shellswell 4 Jul 2014.

Arabis hirsuta (Hairy Rock-cress) Three plants at Noar Hill 7418 3197, Judyth Swift 23 Jun 2014.

Arrhenatherum elatius var. *bulbosum* (False Oat-Grass) On field edge S of Laverstoke 4799 4591, with bulbils, Simon Melville & Tony Mundell 9 Jul 2014.

Arum italicum subsp. *neglectum* (Italian Lords-and-Ladies) Four small plants in the bottom of Bordean chalk-pit at 7021 2401. An unexpected place to find this subspecies, though it has been recorded in this area, Steve Povey 6 Nov 2014.

Asplenium ceterach (Rustyback) On south brick buttress of wall of Roars Cottage, Crondall 7936 4836, Jonty Denton 14 Jul 2014. Numerous fronds on north-facing buttresses of Bishop's Sutton Church 606320, Geoff Farwell 26 Jul 2014.

Barbarea intermedia (Medium-flowered Winter-cress) Single plant on field edge S of Laverstoke 4821 4543 Simon Melville & Tony Mundell 9 Jul 2014. E of Well on road verge at 7693 4619 and several plants in field corner by Gravelly Wood at 7736 4637, Tony Mundell, Ginnie Copsey & Mary Parker 14 Jul 2014.

Bassia scoparia (Summer-cypress) Pyestock Hill, Farnborough 833540 on disturbed soil of new roundabout and nearby verges, several scattered plants, Tony Mundell 31 Aug 2014 (Very unusual away from motorways or major dual carriageways).

Berberis vulgaris (Barberry) Itchen Stoke Down in hedgerow beside Oxdrove Way. On south side at 5491 3475. On both sides at 5494 3474. On north side at 5497 3474. On both sides at 5499 3472. On north side at 5501 3472. All Steve Povey 30 Aug 2014.

Bromopsis inermis (Hungarian Brome) Many plants for about 6 metres along east side of Hogmoor Road at 7862 3471, Steve Povey 15 Aug 2014.

Bromus racemosus (Smooth Brome) NE of Privett, in field corner 685272, Andrew Powling & Eric Clement 25 Sep 2014

Camelina sativa (Gold-of-pleasure) Berry Court Farm 303356, weed in failing arable strip, Martin Rand, Ginnie Copsey & Barry

Goater 11 Jul 2014. Crux Easton in large area from 4251 5675 to 4260 5662 sown with 'wildflower mix', also sown amongst Maize at 4244 555 and in sown area for 'wildflowers' at 4238 5618, Tony Mundell & Peter Billingham 30 Jul 2014.

Campanula glomerata (Clustered Bellflower) Perham Ranges, Old Rectory Chalk 238469, particularly on south side of site, John Moon 10 Jun 2014. W of Appleshaw on road verge at 2930 4845, Julia Nethercott 13 Jul 2014. On south slope of Walbury Hill 371613, c.15 spikes, Peter Billingham 2 Sep 2014.

Campanula rotundifolia (Harebell) St Mary Bourne 4129 5059 in a tiny remnant of former chalk grassland, now just a small clearing in a sea of dense scrub Tony Mundell & Peter Billingham 10 Sep 2014.

Carex arenaria (Sand Sedge) Many plants on almost bare sandy ground at Woolmer Pond 7891 3126, Steve Povey 7 Aug 2014.

Carex diandra (Lesser Tussock-sedge) Greywell Moors 7207 5115 and 77201 5097, Hants Flora Group 13 Jul 2014.

Carex disticha (Brown Sedge) Axmansford 564616, in meadow adjacent to Ashford Hill meadows, Sarah Ball & Sarah White 21 Jul 2014.

Carex echinata (Star Sedge) Silchester Common 6234 6228 in bog, Hants Flora Group 10 Aug 2014. Hazeley Heath in flushed scrape 764575 and single plant in bog at 7640 5804, Hants Flora Group 17 Aug 2014.

Carex pulicaris (Flea Sedge) Several plants noted in Flea Sedge Pit, Noar Hill 742318, Judyth Swift 23 Jun 2014.

Carex strigosa (Thin-spiked Wood-sedge) Ecchinswell, remarkably abundant on wet road verges and roadside ditch at 4904 5961, abundant on wet track at 4956 5985 and 4948 5983 and in wet wood at 4968 5982, also small patch in sunken lane at 4983 5981, more at 4979 5981, all Tony Mundell & Peter Billingham 4 Aug 2014. Axmansford 5702 6084, many plants massed on wood-bank and in track, Sarah Ball & Sarah White 12 Aug 2014.

Carex vesicaria (Bladder Sedge) Ashford Hill Meadows 5599 6197, Sarah Ball & Sarah White 25 Jun 2014.

Carthamus tinctorius (Safflower) S of Greatham 7720 2943 beside the roundabout where the A3 intersects the B3006, Alistair Walton 27 Jul 2014. Photos of this and *Nicandra physalodes* etc identified by Martin Rand, presumably from deliberately sown seed.

Centaureum pulchellum (Lesser Centaury) Stockbridge Down, East 383346, track sides, Martin Rand, Barry Goater & Ginnie Copsey 11 Jul 2014. A few plants alongside footpath on Ashford Hanger at 7374 2665 and many plants scattered on short turf on the Shoulder of Mutton 739267, Steve Povey 25 Jul 2014. Woolmer in short turf on firing range 789314, Steve Povey 22 Sep 2014.

Cephalanthera damasonium (White Helleborine) Perham Ranges, Old Rectory Chalk 238469, along east edge of site, John Moon 10 Jun 2014. Shorth Heath Common, single plant in flower on corner of extreme west end of the main pond, right next to the path 775367, Jonty Denton 12 Jun 2014. Nine plants at Andover A303/A3093 junction 386445, Mervyn Grist 20 Jun 2014. Three plants at Upton Grey 686496 under Beech, Geoff Farwell 5 Jul 2014. Cholderton Estate, single plant in woodland strip alongside Portway Lane, NE of field entrance around 2456 4109, John Moon 4 Aug 2014.

Chenopodium giganteum (Tree Spinach) Crux Easton 4238 5618 in area of sown 'wildflowers', Tony Mundell & Peter Billingham 30 Jul 2014.

Chenopodium hybridum (Maple-leaved Goosefoot) Fairly young plant in stubble in field at west end of Cholderton Lane, Quarley 2523 4243, John Moon 5 Oct 2014.

Cicerbita macrophylla (Common Blue-sow-thistle) Two large patches by footpath at Bushy Leaze Wood 6857 3826 Tony Mundell 17 Jul 2014. NW of Kimpton in Cow Lane 2747, John Moon 18 Aug 2014.

Cirsium dissectum (Meadow Thistle) Hazeley Heath 7651 5801 beside footpath and 7638 5806 in bog, Hants Flora Group 17 Aug 2014.

Cirsium eriophorum (Woolly Thistle) Tidworth Golf Course, sparse, but around 212480, John Moon 17 Jun 2014. Perham Ranges, Warren Hill North 2548 on A range, half way up, John Moon 10 Aug 2014. W of Upton, c.20 plants scattered along field edge at 3487 5521, Tony Mundell & Peter Billinghamurst 13 Aug 2014.

Claytonia sibirica (Pink Purslane) Rake, NW of (VC12 part) a few plants beside a deep shady lane 803287, Steve Povey 30 Sep 2014.

Clinopodium acinos (Basil Thyme) MOD Barton Stacey on edge of old parade ground 446426, John Moon 16 Jun 2014. Perham Ranges, several growing at top of steep 4WD track at 2374 4622, John Moon 8 Aug 2014. Perham Ranges, 50 plants on face of old B-Range butt at 25474808, John Moon 10 Aug 2014.

Crataegus laevigata (Midland Hawthorn) Kingsclere 525589, streamside wood strip, probably planted. Fruits have two seeds, Sarah Ball & Sarah White 10 Sep 2014.

Crocus nudiflorus (Autumn Crocus) Established on bank at Harrow Inn, Steep 7525, Steve Povey 5 Sep 2014.

Cyperus longus (Galingale) Upton Grey 699483, introduction in village pond, Geoff Farwell 5 Jul 2014.

Dipsacus pilosus (Small Teasel) Axmansford 5654 6161 two or three plants and lots at 566616 in woods above meadow adjacent to Ashford Hill Meadows, Sarah Ball & Sarah White 21 Jul 2014. Silchester 638620, on south Roman wall, not a complete survey but 6 plants noted, Andrew Davidson 24 Sep 2014.

Drosera intermedia (Oblong-leaved Sundew) Hazeley Heath 7645 5760 on flushed scrape, growing with *Drosera rotundifolia*, Hants Flora Group 17 Aug 2014.

Echinochloa esculenta (White Millet) S of Odiham 756484, sown with other species to attract game birds, Tony Mundell 30 Sep 2014.

Epilobium palustre (Marsh Willowherb) Silchester Common 6234 6228 in bog, Hants Flora Group 10 Aug 2014. Hazeley Heath, only a few plants, mainly at 7650 5806 in the ditch/stream beside a board-walk, Hants Flora Group 17 Aug 2014. Shortheath Pond, several plants on pond margin at 7752 3678 and beside stream at 7753 3675 Tony Mundell & Steve Povey 21 Aug 2014.

Epipactis purpurata (Violet Helleborine) Four Marks, Blackberry Lane on verge at 6751 3522, cut down by the resident's husband last September and threatened by a planning application which would necessitate complete destruction of this verge for access, Diana Tennyson 30 Jun 2014. Hattingley 642373, five spikes on steep roadside bank below Beech and Sycamore trees Geoff Farwell 2 Aug 2014. Froxfield, Soalwood Lane on verge at 7177 2613, Theresa Waterworth 12 Aug 2014, photos initially sent to Diana Tennyson who visited the site and confirmed the record. ENE of Privett 6989 2738, three fruiting stems in cluster on bank beside road Andrew Powling & Eric Clement 25 Sep 2014.

Euonymus japonicus (Evergreen Spindle) NW of Kimpton 2747, on road verge near houses, John Moon 18 Aug 2014.

Euonymus latifolius (Large-leaved Spindle) St Mary Bourne 4135 5066, beside footpath in wood, fruiting well, Tony Mundell & Peter Billinghamurst 10 Sep 2014.

Euphorbia maculata (Spotted Spurge) Many plants growing in brick-paving at Field House, Empshott, (private) at 7398 3083. Not planted! Steve Povey 18 Aug 2014.

Euphrasia pseudokernerii (An Eyebright) On field edge at Upton 3541 5510, with large white flowers and very aristate bracts. Also several plants of a deep pink-flowered form with very aristate bracts in a pit at Upton 3539 5511 near field edge, both Tony Mundell & Peter Billinghamurst 13 Aug 2014. Micheldever Spoil Heaps, there was a lot of what I (Fred Rumsey) can only



Spotted Spurge *Euphorbia maculata* (Steve Povey)

call *E. pseudokernerii* (although flowering rather early and with unusually small flowers) scattered all across the open spoil heap parts of the site in 519444 extending down into 519443. Chris Metherell (who with me is working on the BSBI Euphrasia handbook) concluded the same. Other than flower size there was no indication of any other species but they may be showing evidence of introgression to *E. nemorosa* (particularly in the parking glade at 5206 4450). Some plants were more typical *E. pseudokernerii* - slightly larger flowered and with very short capsules and long aristate teeth to the bracts, Fred Rumsey 13 Jul 2014. Cole Henley 461514, locally plentiful beside footpath, bracts very aristate and capsules significantly shorter than calyx, Tony Mundell & Peter Billinghamurst 8 Sep 2014.

Fumaria muralis (Common Ramping Fumitory) NW of Rake (VC12 part) single clump at 8026 2855, Steve Povey 30 Sep 2014.

Fumaria parviflora (Fine-leaved Fumitory) Cholderton Home Farm, Victoria Romsey Road Field 245430, grid ref. is for centre of field, Cath Shellswell 11 Jun 2014. Field at west end of Cholderton Lane, Quarley, on south side of track, in barley stubble, at 2527 4242. An historic site for this species, John Moon 5 Oct 2014.

Fumaria reuteri (Martin's Ramping-fumitory) Cholderton Home Farm, Victoria Romsey Road Field 245430, present across the 'bird plot' (where Lapwings are encouraged to breed). Also Cholderton Home Farm, Grateley Lodge Field 236418, in the field margin close to the gate on the north side of the field, both Cath Shellswell 11 Jun 2014.

Galeopsis angustifolia (Red Hemp-nettle) Kentsboro, field west of A343, 15 plants between 30834027 and 30854027, 2 plants at 30754028. All growing in margin between fallow southern section of field and stubble from previous crop (barley) i.e. some in the stubble and some just outside, John Moon 28 Sep 2014. Field at west end of Cholderton Lane, Quarley, plants in stubble NE of centre of field at 2506 4244, John Moon 29 Sep 2014.

Galium x pomeranicum (G. verum x album) Three patches in damp meadow at Vernham Dean 3368 5670 which are probably introgressed *G. x pomeranicum* as the flowers on at least one patch seemed just slightly yellowish. It is not the usual pale primrose yellow so not an F1 hybrid. This meadow has abundant *G. verum*, but no pure *G. album* seen nearby, Tony Mundell & Peter Billinghamurst 25 Jun 2014. Stockbridge Down 3764 3490, 3772 3495 and 3793 3530, Peter Billinghamurst 29 Jun 2014.

Genista anglica (Petty Whin) Ancell's Farm HWT reserve, on 17 Sep 2014 Tony Mundell confirmed a record by John Ayres (on 7 Sep 2014). It is a quite large patch 1m across at 82566 55689, probably (but difficult to decide this) of two intertwined plants. *Gnaphalium sylvaticum* (Heath Cudweed) Ten plants at Blackbushe Airfield 8059 5917 growing with *Spiranthes spiralis*, just north of active airfield boundary, Tony Mundell & Peter Scott 27 Aug 2014.

Groenlandia densa (Opposite-leaved Pondweed) Still in good quantity at the outlet end of Lutcombe Pond 735264, dominant in a patch c.8m x 4m, Steve Povey 28 Aug 2014.

Hedera colchica (Persian Ivy) Crondall Churchyard, large patch over ground in shady corner of churchyard at 7946 4844, Tony Mundell 18 Jul 2014, specimen identified by Alison Rutherford, BSBI Hedera Referee on 22 July 2014.

Hypericum elodes (Marsh St John's-wort) Silchester Common 6233 6228 in bog, Hants Flora Group 10 Aug 2014. Hazeley Heath 7637 5818 beside a boardwalk, Hants Flora Group 17 Aug 2014. Shortheath Pond, confined to the pond margin but in many places, e.g. 7749 3685, 7748 3684, 7756 3680, 7748 3681, 7753 3691, 7760 3687 and 7752 3678, Tony Mundell & Steve Povey 21 Aug 2014.

Hypericum humifusum (Trailing St John's-wort) Plastow Green 5471 6001 field edge of *Angelica* crop, Sarah Ball & Sarah White 4 Jun 2014. Doles Wood where footpath enters arable field from wood at 3708 5221, John Moon 9 Aug 2014. Aldershot Common, one plant on bank, 8408 4984, Chris Hall 6 Sep 2014.

Illecebrum verticillatum (Coral-necklace) Broxhead Common, now in flower in puddles in the path between 8008 3729 to 8010 3733 and has extended its range along a path at 8016 3739 where the plants are especially pink, not just off-white, Bill & Chris Wain 10 Jul 2014. Liss Forest 7829, plants can now be counted in many tens of thousands covering the majority of all open, damp, sandy areas, both large and small, that are waterlogged at some point through the season. There must now surely be as many plants of this species in this part of East Hampshire than any other part of the country, and numbers continue to increase Steve Povey 1 Sep 2014.

Impatiens parviflora (Small Balsam) NW of Rake (VC12 part) several plants scattered alongside lanes at 8026 2855, 8053 2875 and other nearby places, Steve Povey 30 Sep 2014.

Isolepis setacea (Bristle Club-rush) Frith Common 546596 near edge of *Mentha* crop, Sarah Ball & Sarah White 4 Jun 2014. Hazeley Heath, a few plants in a ditch and beside a board-walk at 7650 5806, more in ditch beside board walk at 7654 5792, Hants Flora Group 17 Aug 2014. Four beside track Long Bottom 8408 4984, Chris Hall 6 Sep 2014.

Juncus foliosus (Leafy Rush) Hazeley Heath, still in four separate muddy puddles along path at 7503 5838, 7502 5838, 7501 5840 and 7500 5843, Hants Flora Group 17 Aug 2014.

Juniperus communis (Juniper) Tidworth Golf Course 2111 4845 and 2146 4800, plus two around 2163 4761 in light scrub, John Moon 17 Jun 2014. Perham Ranges, Bedlam, single bush at 2428 4648, John Moon 8 Aug 2014. Three seedlings germinated inside rabbit-proof cage (installed by Plantlife) at Stockbridge Down 3842 3476 and another two in separate cage at 3840 3476, Catherine Hadler 11 Jul 2014. Andover A303/A3093 roundabout 385446, several young plants apparently relatively recently planted, Tony Mundell 4 Aug 2014. At Porton Down during late October and early November quite a number of tiny Juniper seedlings were found beneath female bushes by Anne Appleyard, Pat Woodruffe and Ailsa McKee at 25012 38139, 25019 38157, 25032 38225 and 25018 38237. All are in very short turf and it remains to be seen whether they can escape being eaten by rabbits.

Lathyrus linifolius (Bitter-vetch) Ibworth 5602 5489 on lane-side bank beside woods, Sarah Ball & Sarah White 14 Jul 2014. On

lane-side bank at Well 7637 4642, Tony Mundell, Ginnie Copsey & Mary Parker 14 Jul 2014.

Lathyrus nissolia (Grass Vetchling) MOD Barton Stacey 449428, several in grassland, John Moon 16 Jun 2014.

Legousia hybrida (Venus's-looking-glass) Cholderton Home Farm, Quarley Big Field 246417, Cath Shellswell 11 Jun 2014. Preston Candover 603429, 50+ plants on chalky substrate along field margin Geoff Farwell 28 Jun 2014. Malshanger, Garden Piece Field 567534 and Beestings Field 573536, Cath Shellswell 4 Jul 2014. In edge of wheat field at Thrupton Circuit West 273458 and on northern (wheat) field edge around 272460, John Moon 6 Jul 2014. Westover Farm, Dipden Bottom Field 345401, occasional on SE edge of Oil-seed Rape crop, John Moon 10 Jul 2014. Sparsely distributed along field edges and corner Snoddington Road 268459, John Moon 18 Jul 2014. Westover Farm, Folly Field 353413, spread thinly along NE field margin, John Moon 29 Jul 2014. Portway West, field edge around 2493 4070, John Moon 4 Aug 2014.

Legousia speculum-veneris (Large Venus's-looking-glass) This is doing well in 2014 with an estimated high hundreds of plants. The first plants found were at 5725 5387 and it continued in some abundance throughout the headland and just into the crop margin at least to the top corner of the field at 5738 5393, Fred Rumsey 13 Jul 2014.

Lithospermum arvense (Field Gromwell) One beside track at Kimpton Down Farm 2609 4767, John Moon 16 Jun 2014. Field at west end of Cholderton Lane, Quarley on south side of track, in barley stubble, at 2527 4242. An historic site for this species, John Moon 5 Oct 2014.

Littorella uniflora (Shoreweed) Long Bottom, south margin of Horse Pond 8423 4986, a patch c. 40 x 25 cm, Chris Hall 6 Sep 2014.

Luzula forsteri (Southern Wood-rush) E of Well, in Gravelly Wood at 7737 4630 beside footpath, Tony Mundell, Ginnie Copsey & Mary Parker 14 Jul 2014.

Mentha x smithiana (Tall Mint, *M. aquatica* x *arvensis* x *spicata*) In ditch at Kimpton 2828 4650 and nearby, John Moon 15 Sep 2014.

Narthecium ossifragum (Bog Asphodel) Hazeley Heath 7637 5802 in bog, and large patch at 7645 5762 beside a scrape, Hants Flora Group 17 Aug 2014.

Neotinea ustulata (Burnt Orchid) Ladle Hill 478567, could only find one tiny plant. At extreme SW face of fort bank, Jonty Denton 12 Jul 2014. (I believe Natural England requested grazing at its flowering time – ARGM).

Neottia nidus-avis (Bird's-nest Orchid) Under Beech tree in woods at Tangley 3381 5229, John Moon 5 Jun 2014.

Oenanthe pimpinelloides (Corky-fruited Water-dropwort) Hurst Farm, single plant in grass on edge of artificial pond. Possibly the seed arrived with earth etc for building the bank of the pond, Andrew Powling & Eric Clement 25 Sep 2014.

Oenothera stricta (Fragrant Evening-primrose) 12 plants, some flowering, in former car park beside Aldershot Road (now closed off), Gelvert Bottom 8328 5292. Other aliens present. It was there in 2013 but flowering not seen, Chris Hall 24 Jun 2014.

Ophrys apifera var. *belgarum* (Bee Orchid variety) Winchester, A31/B3404 roundabout, nine plants flowering at 5203 2933 and 5203 2934 plus three normal *O. apifera*. This was a very quick stop and I have no doubt had I spent longer I would have seen more, Fred Rumsey 25 Jun 2014.

Orobanchae hederaceae (Ivy Broomrape) Sadly the roadside verge where the purple coloured form of Ivy Broomrape used to be plentiful has had all vegetation removed by the adjacent home owner. A plastic sheet has been put over the site to eliminate all vegetation and this has been topped with a deep layer of bark chippings. Just one flower spike of the *Orobanchae* survives at

one edge of the sheet at 6165 6216, but no Ivy is now visible, Hants Flora Group 10 Aug 2014.

Osmunda regalis (Royal Fern) Six crowns in a group on north edge of the mire at Bourley c.8295 5017 (where reported recently by Elliott Fairs), most fronds a metre or more, so they have been there for years, but are well-hidden and difficult to locate, Chris Hall 11 Jun 2014. Hazeley Heath, a large clump at 7503 5839, just off the path and several plants in a patch at 7555 5804, Hants Flora Group 17 Aug 2014.

Papaver argemone (Prickly Poppy) Warren Hill Stone Curlew Plot 258475, John Moon 23 Jul 2014. Cholderton Home Farm, Quarley Pond Field 249419, Cath Shellswell 11 Jun 2014. Malshanger, Beestings Field 573536, Cath Shellswell 4 Jul 2014.

Petroselinum segetum (Corn Parsley) Gundleton 612332, four plants in corner of arable field beside footpath Geoff Farwell 26 Jul 2014. Medstead 643368, 14 plants on accumulated soil in the middle of tarmac track, Geoff Farwell 2 Aug 2014.

Phalaris aquatica (Bulbous Canary-grass) Sown in a strip stretching hundreds of metres NE from Ashmansworth 4096 5734, presumably to attract game birds. Very tall, at least 1.5m high, with a bulbous base to culms. Voucher specimen retained, Tony Mundell & Peter Billingham 15 Sep 2014.

Phalaris paradoxa (Awned Canary-grass) S of Laverstoke, several on field edge at 4895 4523 and on field edge at 481458, many plants along field edge at 4921 4525, Tony Mundell & Simon Melville 9 Jul 2014. NE of Well in field corner at 7702 4751, Tony Mundell Ginnie Copsey & Mary Parker 14 Jul 2014. About 30 flowering heads in grass margin of arable field corner at 6263 5647, just south of Morgaston Wood. Communicated to Nick Montegriffo who visited site and identified them, Helen Boyce 29 Aug 2014.

Phuopsis stylosa (Caucasian Crosswort) NW of Kimpton 2747 on verge outside garden, John Moon 18 Aug 2014.

Phyteuma orbiculare (Round-headed Rampion) Stockbridge Down 377349, E of shrubby knoll, Martin Rand, Barry Goater & Ginnie Copsey 11 Jul 2014.

Pilularia globulifera (Pillwort) On the seasonally inundated scrape at Pondtail Heath 8282 5358 in an area c. 6 x 3m, and 8290 5358 in an area 140 x 70cm, not continuous, but a number of small and larger patches, Chris Hall 2 Sep 2014.

Polygonum rurivagum (Cornfield Knotgrass) West margin of field adjoining Augurs Hill Copse (Demolition Field) 385428, John Moon & Cath Shellswell 21 Aug 2014. Kentsboro, field west of A343 307403 on southern edge of stubble, John Moon 28 Sep 2014.

Potamogeton crispus (Curled Pondweed) Kingsclere 5242 5864, Sarah Ball & Sarah White 10 Sep 2014.

Puccinellia distans (Reflexed Saltmarsh-grass) Roadside of B3349, S of Riseley 722627, Tony Mundell & Peter Scott 23 Jul 2014.

Radiola linoides (Allseed) N of Liss Forest, plants numbering in the low thousands covering an area of 25m x 10m on bare turf at 7860 2973, Steve Povey 1 Sep 2014.

Rosa tomentosa (Harsh Downy-rose) Single bush, W side of lane to Danebury estate 315359. One further bush looked like a hybrid of this but was indeterminate, Martin Rand, Barry Goater & Ginnie Copsey 11 Jul 2014.

Rubus phoenicolasius (Japanese Wineberry) Two bushes covered in red fruit at Middle Wallop 2904 3765 beside footpath, near disused farm buildings. One is a small bush and the other is huge, c.4m x 3m x 3m, Tony Mundell 8 Aug 2014.

Sambucus ebulus (Dwarf Elder) Cottonworth 379396, several well-grown plants in road verge, Andrew Powling 8 Jun 2014.

Scandix pecten-veneris (Shepherd's-needle) Malshanger, Waitings Field, one plant at 54672 51125, Cath Shellswell 4

Jul 2014. Nether Wallop, in pea field N of Berry Court Farm, 3002 3577 and 3001 3580, Martin Rand, Barry Goater & Ginnie Copsey 11 Jul 2014. S of Crondall, total of eight plants, seven in full seed, all on west side of footpath at c.7912 4785 and c.7914 4779 on arable field edge, Jonty Denton 14 Jul 2014.

Scleranthus annuus (Annual Knawel) Malshanger, Stoney Deane Field, still a large population at 55502 51995 at top end of grass strip where first found in 2013, Cath Shellswell 4 Jul 2014.

Silene noctiflora (Night-flowering Catchfly) Westover Farm, Gypsy Lane Field 347405, thinly spread along western edge of north-south track, John Moon 10 Jul 2014. One on field edge Snoddington Road 268459, John Moon 18 Jul 2014.

Spiranthes spiralis (Autumn Lady's-tresses) Six spikes at Blackbushe Airfield 8059 5916 growing with *Gnaphalium sylvaticum*, just north of active airfield boundary, Tony Mundell & Peter Scott 27 Aug 2014.

Stachys arvensis (Field Woundwort) Single plant on field margin, Upton Grey 688495, Geoff Farwell 5 Jul 2014. N of Laverstoke, over 40 plants along field edge, centered on 4948 5137, Tony Mundell & Peter Billingham 15 Aug 2014. Harewood Forest, several plants in SE corner of field by Hassock Copse 395422, Mike Wildish 8 Sep 2014. NE of Privett, 6865 2713, 6855 2705 (large colony), Andrew Powling & Eric Clement 25 Sep 2014. Kentsboro, field west of A343, 27 plants in western edge of stubble (barley) between 30714056 and 30714060, John Moon 28 Sep 2014.

Tephrosia integrifolia subsp. *integrifolia* (Field Fleawort) Tidworth Golf Course, single plant on apron beside 7th fairway at 2108 4844, John Moon 17 Jun 2014.

Tetragonolobus maritimus (Dragon's-teeth) Noar Hill 7444 3188, Judyth Swift 23 Jun 2014.

Thelypteris palustris (Marsh Fern) Greywell Moors, three patches each 2m across in woods at 7190 5084, 7190 5085 and 7190 5086, locally abundant in marsh at 7202 5107, Hants Flora Group 13 Jul 2014.

Trifolium ornithopodioides (Bird's-foot Clover) Hazeley Heath 7648 5753 on edge of puddle in main track, Hants Flora Group 17 Aug 2014.

Urtica dioica subsp. *galeopsifolia* (Stingless Nettle) Plastow Green 529615, stingless with long narrow leaves, Sarah Ball & Sarah White 25 Jun 2014.

Vaccinium oxycoccos (Cranberry) Shortheath Pond, in large numbers in the superb patch of bog centered at 7748 3677 only a few metres south of the main pond with a few plants reaching less than a metre from the pond edge at 7750 3678 Tony Mundell & Steve Povey 21 Aug 2014.

Veronica catenata (Pink Water-speedwell) Micheldever 5129 3953 in muddy, wet area, pink flowers, Tony Mundell & Loraine Martin 18 Aug 2014.

Vicia villosa (Fodder Vetch) Four Marks, Blackberry Lane 6754 3535, Jonty Denton 14 Jul 2014, identified by Tony Mundell from photo.

Viola palustris subsp. *juressi* (Bog Violet) Silchester Common, plentiful in bog from 6233 6228 to 6233 6224, Hants Flora Group 10 Aug 2014. Voucher specimen collected.

Wahlenbergia hederacea (Ivy-leaved Bellflower) Bourley, 30 or so young plants in at least six locations along the ditch from 8250 5012 to 8273 5021, with most currently towards the eastern end, Chris Hall 11 Jun 2014.

X Dactyloдения heinziana (*Gymnadenia conopsea* x *Dactylorhiza fuchsii*) Noar Hill, with hybrid vigour at 74019 31905, Nigel Johnson 28 Jun 2014. (Also reported by Jonty Denton on 14 Jul 2014).

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.

If you would like to send in your plant records, please see the Hants Plants website:

<http://www.hantsplants.org.uk> for information, including downloadable forms,

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We are always keen to receive your suggestions for Flora Group events or activities. Please raise them at the AGM or pass your ideas to any of the Committee members: Sarah Ball (Chairman), Catherine Chatters, Clive Chatters, Ginnie Copsey, Gareth Knass, Tony Mundell, John Norton, Martin Rand, Vicky Russell or Neil Sanderson.



The *Radiola* Appreciation Society, Fritham Plain 27 July 2014 – see p. 5 (Martin Rand)

If you would like to join the 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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