

PRESIDENT'S LETTER

When I was a teenager one of the botanical excitements was to go and see the Adder's-tongue Crowfoot (*Ranunculus ophioglossifolius*), one of the rarest plants in England. After the first visit I made regular pilgrimages to the site near Badgeworth in Gloucestershire. I remember being pleased that the wet area where the Crowfoot grew was fenced off, but surprised that the next time that I visited the Crowfoot was flourishing better outside the enclosure. It was in a field where cattle grazed and their action was necessary to plant the seeds and churn over the soil. The plants had become so rare and threatened in its two sites in Gloucestershire that the county Wildlife Trust contacted Kew's Millennium Seed Bank at Wakehurst Place in Sussex in 2012 to ask for help to rescue it and to save seeds for the future if the Crowfoot became extinct. Already seeds of the Crowfoot had been collected in 2007 by Plantlife and donated to the Seed Bank. When 145 of the original seeds were sown at Wakehurst they germinated well and to quote an article by Chris Cokel, the crops Wild Relative Coordinator of the Millennium Seed Bank:

"To our surprise the plants grew so well under glasshouse conditions and produces so many seeds (124,926 to be precise) that tiny seedlings started to appear from the gravel around the seed trays, clearly demonstrating the weedy characteristic that some species of *Ranunculus* are renowned for." (Samara 31:13 2017)

At Inglestone Common, the second site for the Crowfoot, the South Gloucestershire Council commissioned the clearance of the scrub used by grazing cattle. This enabled the cattle to churn up the muddy pools and create the opportunity for the Crowfoot seeds to germinate again. As a result of the stock of plants at Wakehurst and the action of local groups in Gloucestershire in 2016 eighty three clumps of *Ranunculus ophioglossifolius* were reintroduced around the pools in the common. The good news is that in 2017 about 200 hundred young plants were recorded at Inglestone. It has taken the collaboration of cattle, conservationists, local authorities and seed scientists to rescue this rare plant for us to continue to enjoy in England.

GHILLEAN PRANCE



**Copy date for Winter magazine
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EDITORIAL

I was fortunate to spend a few weeks in the Canadian and American Rockies this summer and the carpets of flowers in the alpine meadows was stunning. However, the flora was completely new to me, so even the common species required identification. It was at this point that I realised how lucky we are in the UK to have such comprehensive floras of a manageable size to be taken into the field. Having purchased a copy of *Wildflowers of the Rocky Mountains* (advertised as 'the definitive guide') we soon began to appreciate its limitations. No keys, plants sequenced by flower colour rather than family and the emphasis on the 'prettiest' photographically. So, sadly and frustratingly, many species went

unidentified or were just grouped into 'another Aster' or 'another Indian Paintbrush'. One highlight however was finding carpets of Twinflower (*Linnaea borealis*), reputedly Linnaeus' favourite plant and after whom it is named. My

challenge now is to find it in this country.

Finding new plants is always exciting, especially if you are not expecting to see them. Carol Hawkins expressed that very nicely in her 'A New Plant for Scilly'. Other reports in this issue also highlight the range of botanical finds, from members' record books to early season WFS meetings and the Winter Months and Spring Week Hunts. At this point we must thank Lorna and Derek Holland for all they have done to maintain the Spring Week Hunt records and provide a comprehensive report for the last 17 years. They are now standing down and Pauline and Richard Wilson have kindly agreed to take over the reins.

I am indebted to Mary and Claire Smith for their 'Botanical Moments' and I hope they will start a trend. What are your special 'Botanical Moments'? Please do share them. Tony Marshall has responded to my request for articles about 'A place of botanical interest', with a lovely summary of the highlights of the flora of the Chilterns and what makes the area special. Where are your special botanical areas?

ANNE KELL



Twinflower

Photo: Anne Kell

PRESIDENT'S AWARD

The annual Presidents' Award, chosen by the Presidents of the Botanical Society of Britain and Ireland and the Wild Flower Society, acknowledges the most useful contribution to the

understanding of the flowering plants and ferns of the British Isles through a book, major paper, discovery or outstanding exhibit during a calendar year. The current Presidents, John Faulkner for BSBI and Sir Ghilleán

Prance for WFS agreed that the terms of the Award could be extended to include the software of a database.

The Award for 2016, to Tom Humphrey for his work on the BSBI Distribution Database (DDb), was presented by John Faulkner at BSBI's Welsh AGM held during the Annual Summer Meeting in June 2017 at Holywell, Flintshire.

John said, "Users of the BSBI Distribution Database are greatly

impressed by its capabilities. It is immensely versatile and has scope for yet further development. Its usefulness to botanists makes it an outstanding example of what the Presidents' Award is intended for. Tom Humphrey, as its creator, is a worthy recipient of the Award and deserves the congratulations of all with an interest in wild plants." Sir Ghillean described the DDb as "a most useful contribution to our knowledge of the British flora".

JOHN SWINDELLS



A NEW VISUAL WILD FLOWER KEY

I am currently developing a new electronic flora aimed at enabling the easy identification of many British and Irish wildflowers (including grasses, sedges, trees, shrubs, horsetails and ferns). This is a largely visual flora based on photographs and allows rapid identification from flowers (and from leaves for many plants). Further text information is provided in many places to help in identification and to allow separation of critical species. Whilst this key aims to be usable by beginners, it should also be of value to more experienced botanists as a reference (with direct access from the indexes to specific species or genera). The flora is designed for use in the field on smartphones or tablets without requiring internet access, but as a result requires approaching 3 GB free

storage, as it includes moderately high resolution images. Alternatively, a trial version can now be accessed on the internet at visual-flora.org.uk (though it may be slow to respond on some slow internet connections).

I am looking for some dedicated testers to help improve the overall format, check for errors (both taxonomic and typographical) and to improve the overall usability of the system. Only the top levels of the key on the visual-flora website are available without logging in, but for anyone interested in helping me refine this key I could provide a personal login to the full key if you contact me directly at visual-flora@gmail.com.

HAMLYN JONES (Dundee)

TO COUNT, OR NOT TO COUNT, THAT IS THE QUESTION!

Last August I was enjoying a holiday in the Shetlands, including seeing as many as possible of the endemic Hawkweeds (*Hieracia*). Most of those grow on cliffs inaccessible to sheep. On the way to one I had scrambled down a bank from the road, found a place across the stream at the bottom, negotiated the loose remnants of a stone wall, and climbed up the bank beyond. I could then see some Hawkweeds a dozen or so feet above my head and, if I had been younger, or had had a companion, I would have tried to scramble up to them. But it was a risk too far. I knew what species they were meant to be, but in order to count them I needed to get up close and compare them with the description in the book. So no Record Book entry!

The following month on the way back from the AGM, I stopped at a site known for its Blotch-stemmed Evening-primroses (*Oenothera rubricaulis*). The same likely flowers were still showing at the top tops of the stems. But there was a barbed wire fence backed by several yards of young Blackthorn, which I would have had to cut my way through to get to the plants, and I had run out of time for doing that. I had collected small pieces of what I had thought was the species from another site a year or two ago, only to find that they were not what I expected. So I needed a sample flower and an upper and lower seed pod to check and to count them. I was frustrated again. Last winter I dug out my file on the

Isles of Scilly in preparation for a trip this summer. My file included copies of reports of past WFS meetings there and some notes of what other members have seen there. From it, and from other sources, I made a list of species I would like to see. Then I checked the list against a database. A few species did not feature on the latter, so I wrote to the Vice-County Recorder to ask where they could be seen. She replied most helpfully, but told me that some of them were only in gardens! I wondered who had counted them!

The Spring issue included Peter Jepson's account of his (excellent) detective work on the 'Abergele Sedge'. I was the person on the WFS meeting in 2011 who originally collected it and sent it to the referees, who after some careful deliberation, told me it was the hybrid between Greater Tussock Sedge (*Carex paniculata*) and White Sedge (*Carex canescens*). But, as Peter discovered, it is Small-fruited Prickly Sedge (*Carex muricata* ssp. *pairae*), which I have seen many times – so the hybrid is one off my list (and perhaps a few other members' lists).

So I am writing this note to encourage us to be rigorous in what we count. We need to be able to see that species are indeed what they are meant to be. It is not enough for someone to point out a plant from a moving car and then for me to add it to my list.

EDWARD PRATT

A SITE OF BOTANICAL INTEREST

THE CHILTERN

So What's Special About the Chiltern Flora?

Given that the Chilterns constitute an Area of Outstanding Natural Beauty, separated clearly from surrounding areas as a distinct chalk ridge with a clay-topped dip-slope, it seems legitimate to ask what is special about its plants. Some of the characteristic species that automatically spring to mind, such as Bluebells (*Hyacinthoides non-scripta*) and Beech (*Fagus sylvatica*), just will not do. Bluebells are widely distributed over the country and, although the Chilterns has its share of excellent Bluebell woods, they are actually commoner in wetter areas further west. Most of our Beech trees were planted. As a native it was probably not all that dominant and, in any case, it is commoner further south, the Chilterns more or less representing the northern limit of its natural spread after the last Ice Age.

Many of you may suggest 'orchids'. It is true that the Chilterns contains some great orchid sites (Aston Clinton Ragpits being a prime example) and it contains a high percentage of the British orchid flora. But, species by species, with one possible weak exception, there is no orchid which appears in the Chilterns that is not present elsewhere in the country, or where the Chilterns have the majority of the population. The real centre for orchids in this country, at least those on chalk, is Kent and Sussex. So no, orchids will not do. The exception? For a long time

Ghost Orchid (*Epipogium aphyllum*) had its only site in the Chilterns but it has since disappeared, last being seen in 1986. This would have meant that it was extinct in Britain and so it was officially declared in 2005, except that one was found in Herefordshire in 2008. So we cannot even claim it now as a Chiltern speciality. I saw it once, in the last year it was ever seen in the Chilterns, and took a grainy photograph in very low light (which is where it always grew).

Nevertheless, there are 19 plants that are mainly restricted to the Chilterns or are most common in the Chilterns. Most of them lack the pizzazz of Bluebell or Cowslip and so do not get any fanfares in the tourist literature; most of them are rarely seen. But they are the true Chiltern specialities.

Let's start with one that does at least draw some attention, not least because it is even named after the area, the Chiltern Gentian. Like all the other 18, it is not endemic to Britain. Its Latin name, *Gentianella germanica*, gives that away. But in this country the great majority of its sites are in the Chilterns (it extends rarely through Berkshire into north Hampshire). At many of these sites it is also quite abundant. It is also responsible for another species on our list, its hybrid with Autumn Gentian, *Gentianella x pamplinii*, which occurs regularly where the two grow together. There is even another Gentian on our list, the very rare Fringed Gentian (*Gentianella ciliata*),

which only grows in one place in this country and that is slap-bang in the middle of the Chilterns. Few have seen it. There are few plants (there never have been many as far as we know), it flowers unpredictably and only opens in full sunshine. In the right conditions it is a beautiful flower. Why it occurs only here, why it neither seems to spread or quite die out, no-one knows. I secretly harbour a hope that I shall one day find it at another site. There is probably a better chance than finding another ghost orchid! I always think a plant is so vulnerable when it only grows in one small spot.

The gentians are part of a suite of 11 chalk grassland plants on our list, which shows how special our remaining grasslands are, although many of them are under threat. The commonest of these species is the Clustered Bellflower (*Campanula glomerata*), which occurs on most good grassland sites. It occurs quite widely on chalk and limestone elsewhere but nowhere near as commonly as in the Chilterns. The same applies to another of our special plants - Dark Mullein (*Verbascum nigrum*), which grows in rougher grass, often along roadsides, and can be quite abundant. It is most famous as being the sole host of a rare moth, the Striped Lychnis (*Shargacucullia lychnitis*), which is a National Biodiversity Action Plan species. Its caterpillars, which feed on the seed-pods, and the host plant, are intensively monitored throughout the Chilterns.

The remaining six grassland species are all quite rare. The most exotic, and rightly celebrated, is the Pasque

Flower (*Pulsatilla vulgaris*), a large-flowered purple anemone with bright yellow stamens and showy white feathery fruits, which is very limited in its distribution, and its best sites are along the Chilterns escarpment in Bucks and Herts. In scrubby areas you may be lucky to find a clump of Deadly Nightshade (*Atropa belladonna*) with its rather sinister purple flowers and shiny black berries, every bit as poisonous as its name suggests. The others are quite small, but all are more likely to be found in the Chilterns than anywhere else - the pale pink stars of Squinancywort (*Asperula cynanchica*) (especially on ant-hills), Basil Thyme (*Acinos arvensis*), Chalk Eyebright (*Euphrasia pseudokernerii*) (difficult to tell from Common Eyebright) and Wild Candytuft (*Arabis amara*). Most of them grow in the barer patches amongst the grass and the preservation of such patches, especially by making new 'scrapes' is an important chalk grassland management tool.

The Candytuft also grows in arable land on chalk, in field boundaries out of the range of herbicide sprays, an important habitat for six other species on our list. The rarity of this habitat these days is reflected in the extreme rarity of most of these plants, all of which are annuals, able to seed before harvest and needing disturbance of the soil to germinate the following year. A few farms get assistance through Environmental Stewardship to maintain unsprayed ploughed strips where these can survive. The rarest ones typical of the Chilterns comprise three Fumitories, Dense-flowered (*Fumaria densiflora*), Fine-leaved (*F. parviflora*) and Few-

flowered (*F. vaillantii*), Corn Cleavers (*Galium tricornutum*) and Narrow-fruited Cornsalad (*Valerianella dentata*). The last one, Small Toadflax (*Chaenorhinum minus*), is encountered relatively commonly in the Chilterns (and may also occur in disturbed soil elsewhere, even in built-up areas). All of these plants need a close look to appreciate the beauty of their flowers - they do not flaunt themselves like poppies.

Coralroot



Photo: Tony Marshall

comprise the final two on our list, neither difficult to find. Many of our ancient woods on chalk harbour the tall spikes of Wood Barley (*Hordeum europaeum*), our only special grass, very conspicuous and usually numerous where it occurs. Finally, there is the pink-flowered Coralroot (*Cardamine bulbifera*), whose distribution is quite anomalous. It is confined to quite a restricted area of woodlands on the dip-slope in the central southern Chilterns, centred on the High Wycombe and Beaconsfield areas, but in this area it can be quite abundant. Its only other site outside the Chilterns is the Weald of Kent, but there it is much rarer. It was a late immigrant from the continent just before the land-bridge was inundated by the North Sea and is at its northern limit, in fact rather beyond it, because it is not warm enough long enough in this country for it to set seed. Its only method of propagation is by small bulbils, produced at the base of the leaves, which fall off and produce plants, clones of their parents. This explains why it does not spread beyond its current range, although it must once have grown, when it was rather warmer, all the way from Kent to Bucks and having since died out in-between. Climate change may benefit it but only if we get long hot summers and current indications are that mild wet ones are more likely. Something about the Chilterns is just right for it, however, and it could be considered just as strong a candidate for flower of the Chilterns as the eponymous Gentian.

With all the woodlands we have, it is surprising that few Chiltern specialities grow in them, perhaps because of the intensive management our woods have received over the centuries. They

TONY MARSHALL

A NEW PLANT FOR SCILLY

"It is not a special birthday," grumped my husband. "I am giving my age in Centigrade now and I am barely 27. I do not want a party, not a cruise nor a luxury coach trip." So here we were, in holiday harmony on the Isles of Scilly. Of course, he had bought me that marvellous new Flora of the Isles (see book review on page 42), but we were not really botanising, more on vacation. Plants that had somehow got away were permitted, but we were touring: doing the uninhabited islands, experiencing our own Springwatch and generally slacking about. A glass-bottomed boat deposited us on St. Martin for a couple of hours so we sauntered to Churchdown Farm to send off a few flowers to relatives and pay our respects to that special buttercup (see page 14). It was here that the discovery occurred. Bill found a flush of beautiful pale blue, highly scented members of the clover family with heads about the size of a farthing - one that neither of us could name.

The farm staff did not know it either, nor where it had come from. What would we do without Eric Clement? I sent him a pressed specimen which he recognised immediately as Blue Fenugreek (*Trigonella caerulea*) a plant that is used as a culinary ingredient in Georgia. It was in a field, close to the office, where carnations had been harvested. Obviously not a crop, it may have come in with green manure or simply a seed contaminant that had spread in ideal conditions. Whatever, it was not in the new Flora and we had never seen it before. Our delight was such that we had a bit of a party to celebrate that evening. Next day, departure day, Scilly was stormbound and our aircraft cancelled. Instead we had an exhilarating cruise on the Scillonian to Penzance followed by a luxury coach trip to Exeter. Strange how things turn out sometimes!

CAROL HAWKINS

A WALK IN NOVEMBER

November, season of mists and not much else! The armpit of the year for us Woofs, not likely to add much to the main diary, the Winter Months Hunt not yet started. Oh well, we're here now, might as well get out of the car and get it over with. Hmm, what's that silvery sheen on the ground? Annual Meadow-grass (*Poa annua*)! At least that can be relied on to be in flower somewhere at any time of the year.

We'll take the path through the trees down to the river. The autumn winds have brought down quite a bit of vegetation. Makes it easy to pick up a cone and decide which Larch we're looking at. The cone-scales on this one aren't recurved so it's European Larch (*Larix decidua*). Nearly out of the woods now, but look at all those acorns scattered about. Wait a minute, that one has furry looking cups, must be Turkey Oak (*Quercus cerris*).

What a cheerful flash of red as the hips of the Field Rose (*Rosa arvensis*) straggle along the fence. Keep an eye on the river, we may see a Dipper or a Grey Wagtail. No we can't, there are all sorts of tall, dead stems in the way. Great Willowherb (*Epilobium hirsutum*) is obvious with its long seed capsule and hairy plume. But look, there is something else with long pods as well. Dame's-violet (*Hesperis matronalis*) I do believe! And what about that big, furry mass of dead flowers on the Hemp-agrimony (*Eupatorium cannabinum*)?

We're on the return leg to the car now. More red in the hedgerow, not rosehips this time but the berries of White Bryony (*Bryonia cretica*). What a pity they won't last until Christmas so we could pick them and use them as decorations. And how about those seed-heads on the Rough Chervil (*Chaerophyllum temulum*)? They are so beautiful, looking like little stars.

Well, that wasn't too bad, was it? I'm quite looking forward to next week's walk!

MARY AND CLAIRE SMITH

EARLY SNOWDROPS

Autumn draws to a close and Jack Frost flexes his iron hand. The plants all shut down amid a scuttle of dropped leaves and prepare for the hard days of winter. The flower-lover retires to dream of grassy banks, tinkling streams, coronals of orchids under white-studded hawthorns and heady scents on the evening breeze - waiting for the Snowdrops, but which ones will be first?

Of course, we cannot count the autumn flowering (mid-October) *G. regina-olgae* ssp. *regina-olgae*. It comes up and blossoms directly from the earth (no leaves at flowering) in much the same fashion as a Meadow Saffron (*Colchicum autumnale*) does. For Britain, it is generally New Year before most snowdrops emerge. *Galanthus elwesii* can pop up around Christmas and a special variant of this species is by far the most probable source of anything found much earlier. *G. elwesii* var. *monostictus* can be recognised by its

single, green inner segment marking (a fat V or U) on the apical half. This variety has a cultivar group, *Hiemalis*, whose main virtue is its early flowering. It is nothing like the usually robust *G. elwesii* being of petite stature, proportionally small leaves at flowering, narrow outer segments and small V shaped markings on the inner ones. It could easily be mistaken for *G. nivalis* by the unwary, but a check on the leaf veneration soon discloses their true identity and they really do come into bloom early. Armistice Day is a cultivar that regularly blooms around Nov 11th and most are up in early December. Although the north wind has more than a sniff of winter, if you are a snowdrops fan, it is worth looking out for a first sighting. A triplet of green pencil stains on a snowy sepal gives the promise of spring and warm, sunnier days. Happy hunting!

A GALANTHOPHILE

BOTANICAL MOMENTS

A Blissful Botanical Moment: A first sighting of Yellow Star-of-Bethlehem (*Gagea lutea*) in flower after years of seeing only the leaves.

A Careless Botanical Moment: Sinking up to the knees in a filthy, stinking bog while examining Bog Asphodel (*Narthecium ossifragum*).

A Bad Botanical Moment: Realising that you have left your copy of Field Stace four miles back on the open moor, in the rain, and that the book is now out of print.

An Exciting Botanical Moment: Rediscovering Shepherd's Needle (*Scandix pecten-veneris*) that hasn't been seen in the area for over 50 years.

A Lost for Words Botanical Moment: Apprehending a keen conservationist vigorously pulling up Common Hemp-nettle (*Galeopsis tetrahit*) in the mistaken belief that it is Himalayan Balsam (*Impatiens glandulifera*).

An Underwhelming Botanical Moment: Reaction of the local flora group on being shown the gametophytes of the internationally rare Killarney Fern (*Trichomanes speciosum*) buried deep in a rock fissure – “Is that it?”

A Lightbulb Botanical Moment: Looking at the two plants in flower and realising that Watercress (*Nasturtium officinale*) is a crucifer and Fool's Watercress (*Apium nodiflorum*) is an umbellifer.

A Hotly Debated Botanical Moment: The local flora group on its hands and knees trying to pin down the difference between Autumn Gentian (*Gentianella amarella*) and Field Gentian (*Gentianella campestris*). How wide are the calyx lobes? Are you sure?



Field Gentian
(left)

Autumn Gentian
(right)

Note the
difference in the
width of the
calyx lobes.

Photos:
Peter Llewellyn

MARY AND CLAIRE SMITH



BRANCH Y (2016)

ESSEX, CAMBRIDGESHIRE, NORFOLK, SUFFOLK

ANNUAL	New	Total
Anne Cooper		485
Elaine Law		279

CUMULATIVE		
Elizabeth Day	6	1247
Nicola Dixon	189	1412
Barbara Mathews	8	1496
Pat Toschach	6	1239

Anne Cooper's diary for this year is excellent. Over a hundred new plants for her to discover this year, including a visit to upper Teesdale in County Durham, a gorgeous area to be botanising in. At Widdybank Fell she managed to find Rare Spring-sedge (*Carex ericetorum*). Locally she saw the pretty alien Apple of Peru (*Nicandra physodes*) and a surviving Tomato plant (*Solanum lycopersicon*). She felt that recording did seem a little easier this year, but she still found the Latin naming of plants quite a challenge. Her favourite plant of the whole year was, without doubt, Spring Gentian (*Gentiana verna*), which she had seen before but in horizontal rain and it was past its best. This time it was fully out and the plant was at its peak as the sun was shining down. She says "No camera or artist could possibly capture the brilliance of that blue".

Elaine Law again bemoans the fact that she doesn't find much time to get out and do some botanising except when she goes out with the Rambling Club. But she did discover an unknown reserve close to her which

had a wild flower meadow covered in Southern Marsh Orchids (*Dactylorhiza praetermissa*) and Grass Vetchling (*Lathyrus nissolia*). She went away for one trip to north Lincolnshire but the only one new plant she discovered was Sea Buckthorn (*Hippophae rhamnoides*).

Elizabeth Day adds just six new species to her cumulative list, two of which I am surprised she hasn't seen before, which are Downy Birch (*Betula pubescens*) and Flowering Redcurrant (*Ribes sanguineum*). On two of the walks in our East Anglian area she added Curled Pondweed (*Potamogeton berchtoldii*) and, hiding amongst the shrubbery in the old port area of Colchester, plants of Giant Knotweed (*Fallopia sachalensis*).

Nicola Dixon has submitted another spreadsheet for me this year as she continues to digitise her records. She has been all over the place this year with trips to Dorset, Surrey, Cornwall, Channel Islands and Norfolk, to name but a few. The trip to the Channel Islands revealed the presence of plants to be found in continental Europe, such as Slender

Oat (*Avena barbata*). Pink Shepherd's-purse (*Capsella rubella*) was to be found in pavement cracks at Corfe Castle in Dorset; the beautiful pale pink flowers of Pale Dewplant (*Drosanthemum floribundum*) on Guernsey; the stout plants of Purple Viper's Bugloss (*Echium plantagineum*), now grown as a crop down in Cornwall, but found in pavement cracks again, this time in Coverack.



Purple Viper's Bugloss

Barbara Matthews has added eight species to her cumulative list, a few of which have been confirmed and/or identified by Martin Sanford, the Vice County recorder for Suffolk. Two of these are very unusual. Firstly, Veldt Grass (*Ehrharta erecta*), probably accidentally introduced from Zimbabwe in 1991, but unfortunately

not in Stace. The second is another rare alien, this time from America (and is in Stace), and this is Rough Cocklebur (*Xanthium strumarium*), probably introduced as a seed impurity. One of her records relates to a plant that she first saw in 2004 but it wasn't in Kent's List or in Stace, but now is, and that is Nasturtium (*Nasturtium officinale*). Buttonweed (*Cotula coronopifolia*) is a lovely small daisy-like flower, which she found at Heigham Holmes NT in Norfolk, and Autumn Crocus (*Crocus speciosus*), which she found in her town of Felixstowe.

Pat Toschach admits that it is a meagre number of new plants to add to her total, but she so much loves coming out to the meetings and catching up with friends, old and new. She has Barberry (*Berberis vulgaris*), found at the Hythe in Colchester, along with the same Giant Knotweed (*Fallopia sachalensis*) mentioned above. But a couple do need checking out as they would be new records for Suffolk and these are River Gum (*Eucalyptus viminalis*) and Reticulate Thistle (*Onopordum nervosum*).

STEPHEN CLARKSON

SUBMISSION OF RECORD BOOKS FOR 2017

Please note that Record Books for 2017 should be submitted to current Branch Secretaries as listed in the back of the Winter 2017 issue. Changes, as agreed at the 2017 AGM, will take effect from 2018.

PARNASSUS 1

	New	Total		New	Total
Margaret Burnhill	6	3147	Graeme Kay	8	3010
Marion Chappell	75	2876	Alan Leslie	17	2832
Julie Clarke	33	4119	John Palmer	0	5820
Steve Clarkson	54	2718	Ron Parker	57	2783
Heather Colls	65	2529	Chris Pogson	4	3341
Judith Cox	45	2578	Ted Pratt	105	2787
Paul Harnes	39	2569	Barry Shaw	1	2532
Carol Hawkins	34	3178	Rob Stokes	1	2572
John Hawksford	3	2996	Jesse Tregale	53	3398

Parnassus 1 has, up to now, been quite formal in using titles and initials in the list of names at the top of the Report. This year I have come into line with the other Groups and use forenames and no titles. I hope no-one is offended by this!

Margaret Burnhill tells me that the hybrid Fleabane *Erigeron acer* x *Conyza floribunda* shown to her by Paul Stanley last year has now been named x *Conyzigeron stanleyi* (Mundell, A. R. G. (2016) *New J. Bot.* 6: 16–20), the specific name being highly appropriate. In 2016 in Ventnor Botanical Garden, Margaret found *Lemna valdiviana* (Valdivian duckweed) and *Euphorbia serpens* (Matted Sandmat), both originally from South America but now known as weeds more widely.

Marion Chappell attended a few meetings and also had a holiday in Devon to visit Branton Burrows. Early in the year she saw both *Equisetum hyemale* (Rough Horsetail) by the River Lune and *Cyrtomium fortunei* var. *clivicola* (Japanese Holly Fern) in Silverdale,

not many miles away. The former is native but the latter definitely is not. As so often, how did it get there at the top of a wood, off the footpath and nowhere near a road? From a substantial list Marion picks, as her favourites, *Limonium bellidifolium* (Matted Sea-lavender; a beautiful carpet at Holme Dunes in Norfolk), *Ophrys apifera* var. *chlorantha* (white Bee Orchid) at Loddon and *Dactylorhiza incarnata* var. *ochroleuca* (pale cream Early Marsh Orchid) at Market Weston Fen.

With several others, Julie Clarke saw two newly reported taxa, *Brassica carinata* (Ethiopian kale) at Apperley Railway Station in Bradford and the hybrid between *Helosciadium nodiflorum* (previously known as *Apium nodiflorum*, Fool's-water-cress) and *Berula erecta* (Lesser Water-parsnip) = x *Beruladium procurrens*. The trip to Alan Leslie's meeting in Cambridge provided several new plants including *Rumex conglomeratus* (Clustered Dock) x *R. pulcher* (Fiddle Dock) = *R. x muretii* and *Juglans nigra* (Black Walnut).

Steve Clarkson was unable to send in his entries for last year but has now submitted a very interesting list from the Scilly Isles. The number of *Aeoniums* seems to be growing. Steve found *Aeonium tabuliforme* (Flat-topped Aeonium) on St Martin's and also two more on Tresco, *Aeonium gomerense* (Gomera Aeonium) and *Aeonium percarneum* (even in the Canary Isles where it is endemic, the vernacular name is merely Aeonium!). St. Agnes provided the very attractive *Convolvulus mauritanicus* (Blue Rock Bindweed) but perhaps the most interesting find was *Ranunculus muricatus* (Rough-fruited Buttercup) on St Mary's.



Rough-fruited Buttercup

A warm welcome to Heather Colls who joins us from Parnassus 2. Heather's list takes her well over the line into our group, an impressive list from several meetings and trips. It was good to see that the plants from the Lizard included *Trifolium strictum* (Upright Clover) and *Trifolium bocconei* (Twin-headed Clover), the latter being reported (to me, at any

rate) as increasingly rare, even there. Also on the Lizard at St. Keverne, on open-access heathland, was *Primula prolifera* (a Candelabra Primrose), definitely not a native plant! The AGM included a visit to Chobham Common in Surrey and it is heartening to hear that two aliens remain established there, the pitcher plant *Sarracenia flava* (Trumpets) and *Kalmia augustifolia*. The Kalmia is called Sheep Laurel in North America where it is native, but is also more graphically called Lambkill, which indicates that the sheep had better be careful about it.

Judith Cox had an interesting year starting off in West Cumbria with a double Creeping Buttercup (*Ranunculus repens*) growing on the seaward side of the dunes. She remarks that it will be interesting to see if it has reappeared in 2017; I enjoyed the clear photo in Judith's report. On their own meeting Peter and Judith were able to show other WFS members *Genista hispanica* (Spanish Gorse) growing on Maryport sea banks, which also had the attractive *Orobanche purpurea* (Purple Broomrape), although these were in greatly reduced numbers from the previous year, and all three Sundews growing on Glasson Moss. The Society AGM yielded another visitor on Chobham Common, *Sarracenia purpurea* (Pitcherplant), together with the definitely native but threatened *Gentiana pneumonanthe* (Marsh Gentian).

After a thin year in 2015, Paul Harmes has a much longer list this year. Paul has now resigned, after 26 years, as recorder for East Sussex,

and so we expect a longer list this year as well. A visit to Cambridge gave Paul a goodly number of new taxa, including the x *Beruladium procurrens* in Chippenham Fen, *Levisticum officinale* (Lovage) and *Sedum kamtschaticum* (Orange stonecrop). A trip to Skye yielded *Equisetum x font-queri*, the hybrid between *E. palustre* (Marsh Horsetail) and *E. telmateia* (Giant Horsetail) and *Equisetum x rothmaleri*, the hybrid between *E. arvense* (Field Horsetail) and *E. palustre* (Marsh Horsetail), as well as *Euphorbia griffithii* (Griffith's spurge).

Carol told us last year that she and Bill had booked for Guernsey, so I looked forward to seeing some interesting new finds in her list. I was not disappointed. Carol was most pleased at seeing *Scorzonera humilis* (Viper's-grass) 'blooming magnificently on a L'Ancrese roadside'. She also comments at how common on Guernsey is *Silene dioica* f. *lactea* (Albino Red Champion), which she had not seen in Great Britain.

Not far from home, John Hawksford saw the rare hybrid *Geum macrophyllum* (Large-leaved Avens) x *G. urbanum* (Wood Avens) = *G. x gajewski*, in fruit with both parents, by a disused railway track near Rochdale. He also found the very attractive (but uncommon in the wild) *Geranium psilostemon* (Armenian Crane's-bill) established near Gratton in Staffordshire.

In his varied list, Graeme Kay notes *Carex oederi* ssp. *bergrothii* (a Small-fruited Yellow-sedge), a taxon more associated with Ireland, at Ashton's Flash near Northwich. Spreading on

a verge by Rosehill Station, Marple, Graeme also found the striking adventive *Tanacetum macrophyllum* (Rayed Tansy).

After his hunt for *Diapensia lapponica* (Diapensia) in 2015 in poor weather, this year Alan Leslie climbed Cul Mor in Wester Ross in similar conditions, but succeeded in finding *Artemisia norvegica* (Norwegian Mugwort) in its best known location. He has more fortitude than I, who gave in to the weather on two occasions before eventual success. Not many people will have seen the *Artemisia* one day and then *Atriplex praecox* (Early Orache) the next (near Ullapool)! Closer to Alan's home in Cambridge, four taxa attracted my attention, three *Agrostis* (Bent) hybrids *A. capillaris* x *A. gigantea*, *A. capillaris* x *A. stolonifera* and *A. gigantea* x *A. stolonifera*, and *Sporobolus indicus*, only otherwise reported from a roadside in Jersey. The English name for this is Smut Grass. I think I will stay with the Latin on this occasion! I wonder if this rather nondescript grass will spread further afield.

Ron Parker has been busy reviewing his earlier lists and diary entries and has added quite a few to his 2016 finds. Recently he had a good time in Dorset and the Isle of Wight with plenty to record. He saw *Scorzonera humilis* (Viper's-grass) in its well known location in Dorset as well as *Drosera filiformis* (Thread-leaved Sundew), a species new to me. Ventnor provided the interesting *Ecballium elaterium* (Squirting Cucumber) and *Dicksonia antarctica* (Australian Tree-fern) which thrives better in these more southern latitudes.

Three of my four new records were on a meeting to the Ainsdale area. The one I like best is *Artemisia campestris* ssp. *maritima* (Beach Wormwood) in its only location in England.

From the ridiculous to the sublime, Ted Pratt again has a marvellously long list which was a pleasure to review. Of his 105, 39 were seen on a 12 day holiday in the Shetland Islands. Ted tells me that his greatest joy was finding the beautiful endemic Shetland Mouse-ear (*Cerastium nigrescens* var. *nigrescens*) on the Keen of Hamar in Unst; those who have seen this will appreciate Ted's enthusiasm. Ted remarks also on the small-flowered subspecies of White Water-lily (*Nymphaea alba* ssp. *occidentalis*) beautifying a number of



Gentianella amarella
ssp. *septentrionalis*

lochs and lochans, as well as a subspecies of Autumn Gentian with partly cream-coloured flowers (*Gentianella amarella* ssp. *septentrionalis*). Nearer home in the Cheddar and Avon gorges, he added another

six to his tally of *Sorbus* species and took in a sight of the Tree Medick (*Medicago arborea*) in its only British site at Clevedon.

Barry Shaw travelled to Macedonia and Arctic Norway and saw many things but nothing for Parnassus! His limited botanising in the United Kingdom gave him, *Cyrtomium*

fortunei var. *clivicola* (Japanese Holly Fern), also seen by several others, in Silverdale.

Rob Stokes had an enjoyable trip to the Inner Farne Islands and saw *Amsinckia lycopoides* (Scarce Fiddleneck), a generally rare plant but frequent just there.

Jesse Tregale went on a number of outings with Michael Wilcox and, as a result, has some unusual sightings. One was *Lysichiton x hortensis* (American x Asian Skunk-cabbage), which may be new, growing with both parents at Oak Beck in Harrogate. Again with Michael, a visit to Mickletown Ings in Yorkshire yielded some rather exciting rushes, including *Juncus pallidus* (Great Soft-rush) and *Juncus pallidus x effusus* (Great Soft-rush x Soft-rush) with a couple of other rushes yet to be identified. Back to the native species, Jesse added *Atriplex longipes* (Long-stalked Orache) at Marshside and *Torilis arvensis* (Spreading Hedge-parsley) to his long list.

Thank you to all Parnassians 1 who sent me their lists in very good time; any delays are entirely down to me. I am also grateful to all those websites which provide the information now so easily obtained through the internet. Without this help, I would indeed struggle! As I write it seems as if our summer in the North might be over already but I hope nevertheless that all will have a good time in the field in the second half of this year.

CHRIS POGSON

WINTER MONTHS HUNT 2016-17

Name	County	No. of Species	Dec	Jan	Feb	Total Records
Phyl Abbott	Yorks/Staffs	38	16	24	21	61
Barbara Allen	Lancs/Ches	51	21	24	34	79
Sheila Anderson	Kent	57	28	5	36	69
Sue Buckingham	Kent	138	111	59	28	198
Julie Clarke	Cumbria	58	23	30	33	86
Anne Cooper	Suffolk	84	56	36	44	136
Everald Ellis	S.Yorks	65	42	30	43	115
Rosemary FitzGerald	Somerset	166	126	81	69	276
Carol Giddens	Somerset	98	69	53	57	179
Pat Graham	Co. Durham	42	21	25	30	76
Rita & Anthony Grainger	Yorks	33	17	8	25	50
Anne Haden	Jersey	183	138	78	80	296
Carol & Bill Hawkins	Norfolk	134	105	58	68	231
Lorna & Derek Holland	Kent	62	42	19	41	102
Pippa Hyde	Middx/Surrey	69	52	33	43	128
Sally Maller	Devon	80	67	4	9	80
Barbara Matthews	Norfolk/Suffk	100	71	56	43	170
Daphne Mills & Fred Booth	Kent	144	124	54	53	231
Dawn Nelson	Sussex etc.	226	120	123	118	361
Jill Oakley	Sussex etc.	197	76	109	121	306
Sue Poyser & Doug Grant	Kent	157	127	73	68	268
Janice Reynolds	E.Sussex	77	55	28	43	126
Keith Robson	Co. Durham	47	21	22	27	70
Dorothy Ross	Lancs. etc.	81	60	46	38	144
Mary & Claire Smith	Derbys	101	74	51	53	178
Diana Stroud &	Bucks	86	67	56	57	180
Sue Knightley						
John Swindells	London/Warks	47	29	11	28	68

Total number of species seen: 555

New to the Hunt: 26

Total Records 2016/2017: 4264

Total species found to date: 1073

Everyone saw;

Daisy (*Bellis perennis*)

Shepherd's Purse (*Capsella bursa-pastoris*)

Hazel (*Corylus avellana*)

Snowdrop (*Galanthus nivalis*)

Groundsel (*Senecio vulgaris*)

Common Chickweed (*Stellaria media*)

Dandelion (*Taraxacum officinale* agg.)

Gorse (*Ulex europaeus*)



Gorse in the frost

Photo: Anne Kell

This is my very first report for the WFS Winter Months Hunt and, first of all, I wish to say thank you to all contributing Members who have passed on to me such warm wishes and encouraging messages as I embark upon this rather challenging task.

When I was asked to take over from Doug Grant, who has fulfilled the role of WMH secretary so well for so long, I felt quite honoured but also anxious as I am by no means an accomplished botanist and some e-mail glitches have proved that my IT skills are limited. But, as the lists started to arrive, I began to appreciate how knowledgeable many of the Members are, able to identify hybrids, unfamiliar aliens and garden varieties. I was also astonished at how many different plant species were seen over the winter months as it seems to have been a cold season in the South. However, it was generally milder than usual in the North, with relatively few frosts.

Phyl Abbott tells us that after years of WFS membership this is her first year of joining the Winter Months Hunt. It's never too late! Most of her hunting has been in Bradfield and Lichfield where she has found a good range of plants, including Rock Whitlowgrass (*Draba norvegica*) and Siberian Wallflower (*Erysimum x marshalli*), which are new to the Hunt. A very good first year for Phyl.

Barbara Allen hunted in Lancashire, Cheshire and North Wales and was pleased to find Winter Heliotrope (*Petasites fragrans*) in flower in both December and February near her daughter's home in Wales. She and I both attended Julie Clarke's First

Week Hunt at Crosby and enjoyed the wonderful weather and early dune flora that day.

Although Sheila Anderson felt her total was disappointing, I would always encourage people to join the Hunt, as their findings, no matter how small, provide valuable information about plants' winter flowering habits. As Sheila restricted her hunt to within a 10 mile radius of her home in North Kent, I feel she has done well and she managed to see White Dead-nettle (*Lamium album*) and Common Field-speedwell (*Veronica persica*) in all three months.

Sue Buckingham is an old hand at the Winter Months Hunt and has sent in a beautifully presented list. She was pleased to find Red-hot Poker (*Kniphofia uvaria*) on her local beach in Kent and was the only person to find Rock Samphire (*Crithmum maritimum*), to me very much a late summer plant.

It was lovely to receive Julie Clarke's list, as she has been sent many lists from myself in Branch N3 over the years. She has recorded some 'goodies' including Winter Aconite (*Eranthis hyemalis*), Green Hellebore (*Helleborus viridis*) and Alpine Squill (*Scilla bifolia*) near her Cumbria home, but was disappointed that Yellow Star of Bethlehem (*Gagea lutea*) was not yet in flower.

Anne Cooper has experienced a relatively cold winter in Suffolk and so her records are down, but she has appreciated the opportunity to learn more botanical names in the winter months. Her detailed list includes Hoary Willowherb (*Epilobium parviflorum*) and Pink Water-speedwell (*Veronica catenata*), both

new to the Hunt, as well as some lovely arable 'weeds' such as Bugloss (*Anchusa arvensis*) and Field Pansy (*Viola arvensis*), a particular favourite of mine.

Everald Ellis also found the colder winter in South Yorkshire affected her WMH totals, but has submitted a good list and was pleased to find Mugwort (*Artemisia vulgaris*), Yellow Corydalis (*Pseudofumaria lutea*) and Black Nightshade (*Solanum nigrum*) all locally. She also enjoyed the abundance of Snowdrops at Hodsock Priory.

Like me, Rosemary FitzGerald enjoys plant hunting in winter when few things are growing and she tells me she has done the WMH since 1982! Is this a record? She remembers one of the earliest WMH Secretaries, a Miss Edith Rawlins, who introduced her to botany as a child. Rosemary sent a large and varied list, including three Periwinkles; the lesser known Intermediate Periwinkle (*Vinca difformis*) among them. Rosemary was the only member to see Wild Angelica (*Angelica sylvestris*). Carol Giddens has not done the WMH for some years but decided to give it a go this year. Her productive hunt in the Minehead area has yielded many interesting plants and she was alone in finding Wild Oat (*Avena fatua*) and Sea Mouse-ear (*Cerastium diffusum*). Koromiko (*Hebe salicifolia*) is new to the WMH list.

Although she has not sent a long list, Pat Graham's hunting obviously gave her great pleasure, particularly on seeing her first Primrose and first Violet. With the Hunt, I find it is often in spotting the most familiar plants,

the true harbingers of Spring, that we feel most satisfaction. She found both Dog's Mercury (*Mercurialis perennis*) and Annual Mercury (*M. annua*).

Anthony and Rita Grainger hunted in Leeds and St Ives and were delighted to find Yellow-flowered Strawberry (*Potentilla indica*) for every month. I have only ever seen this plant in Austria, in July, so was impressed by this find (as I have been by so many other Members' finds!). Thank you for such a clear list.

Anne Haden has found many exotic species around her Jersey home, including, of course, the Jersey Lily (*Amaryllis belladonna*), Thorn-apple (*Datura stramonium*) and, the wonderfully named, Red Buffalo Burr (*Solanum sisymbriifolium*), to name but a few. Winter in Jersey seems to yield almost more species than the whole of summer in my native Lancashire!

Carol and Bill Hawkins found all their plants within walking distance of Wymondham in Norfolk, although they found that the late frosts of 2016 reduced the total somewhat. Nevertheless, they saw five species of crocus, including a hybrid (*Crocus vernus* x *tommasinianus*) and three different Snowdrops to herald the Spring.

I was sorry to hear that Derek and Lorna Holland had their hunting limited to their local area as Derek slipped on ice on Boxing Day and fractured a vertebra. Hopefully he has now recovered. Despite everything, they submitted a respectable list and were delighted to find Strawberry Tree (*Arbutus unedo*) near their home. They were one of the few

contributors to find an Orache, namely Spear-leaved Orache (*Atriplex prostrata*).

Pippa Hyde has sent in a lovely clear list. She also hurt herself whilst plant-hunting in Edinburgh but fortunately only sustained minor injuries. She was delighted to find Forked Spleenwort (*Asplenium septentrionale*) at Salisbury Crags but most of her finds were from Surrey and Middlesex. Gallant Soldier (*Galinsoga parviflora*) was found throughout the winter in Hounslow.

Another 'first-timer' to the Winter Months Hunt is Sally Maller, who enjoys plant-hunting whilst walking her dogs. The vast majority of her plants, for example Great Mullein (*Verbascum thapsus*) were found at Wembury Point, Devon, which is obviously a very rich area botanically. Sally's totals for January and February are low only because she did not send a cumulative list.

Barbara Matthews sent a detailed letter with her list, describing how the colder winter in East Anglia affected even the more common plants, but she managed to see Wild Clary (*Salvia verbenaca*) in all three months and embarked upon a long walk to see Snowdrops (*Galanthus* sp.) en masse. A sight never to tire of.

Despite Fred Booth and Daphne Mill's frustration to find that frost had killed off many species, they did submit a very good list, including both Fluellens; Sharp-leaved (*Kickxia elatine*) and Round-leaved (*K. spuria*) - lucky them! They also found Common Vetch (*Vicia sativa*), which is new to the Hunt.

Dawn Nelson mainly hunted in West Sussex and her enormous list includes six species of *Asplenium*, one a subspecies (*Asplenium trichomanes* ssp. *quadrivalens*) and no less than seven Speedwells (*Veronica* spp.). She says that family concerns limited her hunting in February, but she has still managed a botanical marathon!

Jill Oakley joined Dawn Nelson and Sue Denness for some of her winter botanising and she too found that late November frosts in the south have affected her total. Despite this, she has sent in a splendid list, including both subspecies of Summer Snowflake (*Leucojum aestivum* ssp. *aestivum* and *L. aestivum* ssp. *pulchellum*).

I imagine Doug Grant and Sue Poyser have especially enjoyed this year's Hunt as they no longer have to write a report afterwards! They too found that cold weather in Kent in early 2017 killed off a lot of species but managed to come up with an impressive total, including six species of *Senecio*, notably Narrow-leaved Ragwort (*Senecio inaequidens*), which seems to be on the increase in Britain. They must be pleased to have found Slender Sandwort (*Arenaria leptoclados*) as it is new to the Hunt. Well done!

Janice Reynolds has found, like so many of us, that doing the WMH gives us a reason to get out in inclement weather. She has sent in a good list, with all the usual early flowerers, plus some later bloomers like Sharp-leaved Fluellen (*Kickxia elatine*), Bristly Ox-tongue (*Helminthotheca echioides*) and

Tamarisk (*Tamarix gallica*).

Well done to Keith Robson for attempting his first Winter Months Hunt in a cold County Durham, where once again, plant numbers were down. However, he managed to see Tansy, (*Tanacetum vulgare*), Wild Thyme (*Thymus polytrichus*) and Garlic Mustard (*Alliaria petiolata*), so not all doom and gloom.

Mary and Claire Smith say they have relied upon escaped garden plants to boost their total this winter and were delighted to discover a new county record for Argentine Fleabane (*Conyza bonariensis*). They alone saw Hairy Tare (*Vicia hirsuta*) and Bearded Couch (*Elymus caninus*). They too appreciate how plant-hunting enhances walks in winter.

Late frosts affected Sue Kightley and Diana Stroud's WMH total but they still managed a good haul and were pleased with Blue Anemone (*Anemone appenina*), which is new to them. Well done for being the only ones to see Giant Fescue (*Festuca gigantea*).

John Swindell's hunted mainly in London and Coventry and has submitted a decent list. I too enjoy urban botanising, finding car-parks and pavement edges to be particularly productive. Like John, I have found that plants like Pink-headed Knotweed (*Persicaria capitata*) and Shaggy-soldier (*Galinsoga quadriradiata*) seem to enjoy being city-dwellers.

My own Winter Months Hunt was fairly productive, though not one of my best year's totals. My only 'single

find' was Large-flowered Evening Primrose (*Oenothera glazioviana*), found on the dunes at Lytham, a favourite hunting ground of mine.

In summary, many of you have felt that harsh conditions have reduced your totals but nevertheless have all managed lists in double, sometimes treble figures. Well done to everyone, no matter how modest your totals. It would be helpful in future if all could give both English and Latin names for species to avoid any confusion and to indicate the county or counties where the plants were found. My first year of being the Winter Months Hunt secretary has proved quite a demanding task, but nonetheless enjoyable and educative. Many thanks to everyone who contributed and I look forward to receiving next year's WMH lists.

DOROTHY ROSS



Shaggy-soldier

Photo: Ken Southall

Large Bittercress
(*Cardamine amara*)

Photo: David Rich



KEY TO CARDAMINE

Character	Cuckoo Flower (<i>C. pratensis</i>)	Coralroot (<i>C. bulbifera</i>)	Wavy Bittercress (<i>C. flexuosa</i>)	Hairy Bittercress (<i>C. hirsuta</i>)	Large Bittercress (<i>C. amara</i>)	Narrow- leaved Bittercress (<i>C. impatiens</i>)
Flower colour	Pale to dark pink (occ. white)	Pale purple-pink	White	White	White	White
Anther colour	Yellow	Yellow	Yellow	Yellow	Dark violet	Yellow
Stamen number	6	6	6	4	6	6
Petal length	6 - 15 mm	10 – 17 mm	2 - 4 mm	3 - 5 mm	5 - 12 mm	2 – 4 mm
Petal length vs. sepal length	3 x longer	3 x longer	2 x longer	2 x longer	2 x longer	Equal
Mid and upper stem leaves	Pinnate 2 – 7 pairs linear lateral lobes. Terminal lobe similar	Mid leaves ternate Upper leaves simple	Pinnate 2 – 7 pairs ovate lateral lobes. Terminal lobe similar	Pinnate 2 – 6 pairs ovate lateral lobes. Terminal lobe reniform	Pinnate 2 – 5 pairs ovate lateral lobes. Terminal lobe similar	Pinnate 6 – 11 pairs ovate to lanceolate lateral lobes. Terminal lobe similar
Additional features		Bulbils in leaf axils				Stem leaves with sharp-pointed auricles

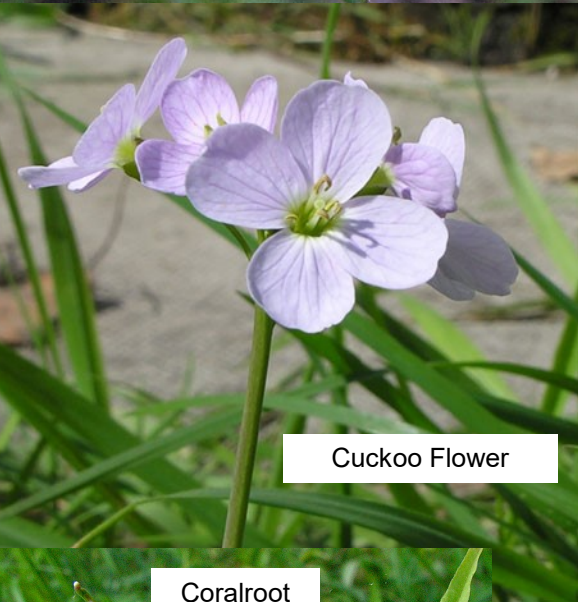
Key features written in bold

ANNE KELL

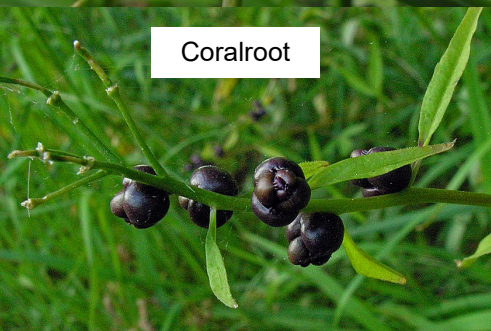
Wavy Bittercress



Hairy Bittercress



Cuckoo Flower



Coralroot



Narrow-leaved bittercress

SPRING WEEK HUNT 2016

		Total
Patricia Dodd	Lancashire	15
Alan Swinscoe	Warwickshire	18
Branch Y (Steve Clarkson)	Colchester, Essex	19
Barbara Allen	Merseyside, Denbighshire	30
Judith Lovelady	Cheshire	31
Julie Clarke & team	Lancashire	32
Sally Maller	Wembury, Devon	35
Pauline and Richard Wilson	Gloucestershire	35
Ian Sapsford	Kent	38
Sarah Beetham	Bristol	39
Anthony and Rita Grainger	Leeds	42
John Swindells	London	42
June Robinson	South Yorkshire & Lancashire	42
Barbara Mathews	Suffolk & Norfolk	45
Pippa Hyde	London, Yorkshire and Lincolnshire	46
Rosemary Roberts	Kent	47
Janice Reynolds	East Sussex	50
Diana Stroud & Sue Kightley	Berkshire	53
Caroline Bateman	Surrey, Isle of Dogs, Greenwich & Bristol	61
Helen Jackson	Midlothian	61
Helen Ayres	Kent	61
Geoffrey and Sarah Kitchener	Kent	61
Anne Haden	Jersey	69
Ro FitzGerald	West Somerset	74
Doug Grant & Sue Poyser	Kent	76

Total recorders: - 25

Total species :- 243, including 100 sole records

New records: - 7

Weld (*Reseda luteola*) - Sue Poyser and Doug Grant

Paper-white Daffodil (*Narcissus papyraceus*) - Ann Haden

Fritallaria (*Fritallaria meilagris*) - Sarah Beetham

Atlantic Ivy (*Hedera hibernica*) - Geoffrey and Sarah Kitchener

Garden Hellebore (*Helleborus x hybridus*) - Geoffrey and Sarah Kitchener

Pink Campion (*Silene x hampeana*) - John Swindells

Lesser Celandine ssp. (*Ficaria verna* ssp. *ficariiformis*) - Janice Reynolds

Those of us that took part in the Winter Months Hunt found that, with the cold weather in February, the usual species we record were in short supply. We wondered how 'our

regulars' for the Spring Week Hunt would fare, especially the groups that meet on one day each year, to produce their list.

Group N3 in Crosby, Lancashire had good weather and 18 members, including two new ones, took part. The weather was kind to them and their list produced two sole records, a Crocus specie and Garden Grape Hyacinth (*Muscari armeniacum*).

In Colchester, Essex, Branch Y had a cold wet start to an overcast day. They managed to stay out all day and said they reached "a measly total of 19", their worst for years. Even so they had one of only two records for Sowbread (*Cyclamen coum*) and Mediterranean Spurge (*Euphorbia characias*). We were so grateful they still sent us their records as our report wouldn't feel complete without them.

Barbara Mathews, also from the East, fared better with the weather although she found her numbers down, mainly she said, "because all verges, hedges, banks and churchyards were cut drastically in late autumn and failed to regrow". In her very comprehensive report she mentions the Wild Clary (*Salvia verbenaca*), growing so prolifically that it is difficult to see the grass.

Our saddest news was that Rachel Rabey and 'The Guernsey team' would no longer be able to take part. They had a tradition of doing the Hunt and picnicking with fish and chips on the beach each year. Rachel tells us that they started their lists in 1988 and have only missed four counts since then. Norma Guppy is now in a Care Home and when Rachel visits her, they spend the time chatting about botany. Wonderful friendships are generated by the WFS. A few years ago Margo Godfrey here in Kent set up a friendly rivalry with Guernsey, about who could record

the most species, ending one Spring with Margo visiting them in Guernsey and doing the Hunt together!

We were delighted to receive lists for the first time, from Sally Maller, Ian Safford, Sarah Beetham and, our own Kent County Recorder, Geoffrey Kitchener with Sarah, his wife - all interesting lists.

Sally had the only records for Rough Chervil (*Chaerophyllum temulentum*), Shining Cranesbill (*Geranium lucidum*), Three-nerved Sandwort (*Moehringia trinervia*), Greater Burnet Saxifrage (*Pimpinella saxifraga*) and Blackberry (*Rubus fruticosus*). Ian produced two sole records for Procumbent Yellow-sorrel (*Oxalis corniculata*) and Wild Cherry, (*Prunus avium*) and Sarah, a new record for Fritallaria (*Fritallaria meleagris*), with two sole records, Hornbeam (*Carpinus betulus*) and Prostrate Broom (*Cytisus scorpiarius* ssp. *maritima*). Geoffrey and Sarah had new records for Atlantic Ivy (*Hedera hibernica*) and Garden Hellebore (*Helleborus x hybridus*) and a sole record for Thrift (*Armeria maritima*).

It was good to hear again from Patricia Dodd in Lancashire and Alan Swinscoe in Warwickshire. Patricia had one of the four records for Flowering Currant (*Ribes sanguinum*). Alan had one of the few records this year for Coltsfoot (*Tussilago farfara*).

Helen Jackson recorded from the furthest north this year (Midlothian) with sole records for Fool's Parsley (*Aethusa cynapium*), Purple Toothwort (*Lathraea clandestina*) and Silky-leaved Osier (*Salix x smithiana*).

Barbara Allen, from Merseyside, chose one day when spring was in the air, to enjoy compiling her list including a sole record for Wild Turnip (*Brassica rapa*).

It was good to hear from Judith Lovelady (an old friend now moved up North). She had the sole record for Hairs-tail Cottongrass (*Eriophorum vaginatum*).

We always look forward to receiving June Robinson's list from Sheffield and as usual she had a good list including sole records for Rape (*Brassica napus*) and Garden Arabis (*Arabis caucasia*).

Anthony and Rita Grainger, from Leeds, sent their usual interesting records which included three species new to their Hunt records, one of which, Wallflower (*Erysimum cheiri*) was new to their local 10K square. The only species not from Leeds was Oil-seed Rape (*Brassica napus* ssp. *oleifera*) recorded in Wirral.

Pauline and Richard Wilson had one of three records for Thale-cress (*Arabidopsis thaliana*) and Field Madder (*Sherardia arvensis*).

Diana Stroud and Sue Kightley from Berkshire had their usual interesting list including sole records for Pineapple Weed (*Matricaria discoidea*), Common Stork's-bill (*Erodium cicutarium*) and Honeysuckle (*Lonicera periclynum*).

It is always good to hear from the West Country and we always look forward to Ro FitzGerald's list from Somerset. Ro was slightly disappointed as her list was shorter than the past three years, due to early frosts and low light levels, which

meant that a lot of species didn't get going again. Ro said her favourite find was Field Woundwort (*Stachys arvensis*). Ro had, incredibly, 18 sole records. Unusually, one of them this year was Wood Avens (*Geum urbanum*).

Janice Reynolds, from East Sussex, had her biggest list ever with six sole records and a new record for the subspecies of Celandine (*Ficaria verna* ssp. *ficariiformis*). Whilst we are talking about Celandines, it seems as if a lot of people are still using their old lists pre 2002, when the botanical name for Lesser Celandine was *Ranunculus ficaria*. The name changed in 2002 to *Ficaria verna* ssp. *fertilis*, for the one without bulbils and *Ficaria verna* ssp. *verna*, for the one with bulbils. The new species for the list which Janice recorded is the larger flowered garden escape, ssp. *ficariiformis*. It would be a good idea to alter your year on year lists NOW so it will be up to date next year!

In London, John Swindells had a new record for Pink Campion (*Silene x hampeana*) and sole records for White Campion (*Silene latifolia* ssp. *alba*) and London Rocket (*Sisymbrium irio*).

Pippa Hyde recording from London, Middlesex, Surrey, Yorkshire and Lincolnshire enjoyed having more time now she hasn't the magazine to edit and it helped to go out to look for plants after the horrid time she has been having recently. She produced her longest list ever and had no fewer than eight sole species on her list, including Common Poppy (*Papaver rhoeas*) and Greater Celandine (*Cheledonium majus*).

It was wonderful to hear from Caroline Bateman again, after several years. She certainly managed to get around in the first week of March, recording from her home area Redhill and Reigate, Box Hill, Greenwich and, finally, Bristol! She included three sole records for Early Forget-me-not (*Myosotis ramosissima*), Water Bent (*Polypogon viridis*) and Rusty Willow (*Salix cineraria* ssp. *oleifolia*).

As usual our patch, Kent, provided lots of records. In addition to the two new lists, we had interesting records from Helen Ayres, Rosemary Roberts and last but not least, Sue Poyser and Doug Grant. Helen contributed six sole records, the Wall Whitlow Grass (*Draba muralis*) that she always records from Canterbury, Opposite-leaved Golden-saxifrage (*Chrysosplenium alternifolium*), Moschatel (*Adoxa moschatellina*) plus three trees (which we all tend to forget). So good to hear from Rosemary that her husband had recovered from his illness last year and she contributed Ground Ivy (*Glechoma hederacea*) and Balkan Anemone (*Anemone blanda*) as sole records. Sue and Doug's magnificent list, continuing the friendly rivalry with Ro in the West Country and Ann in Jersey, contained the only record for Cowslip (*Primula veris*) this year and, amazingly, a Cornflower (*Centaurea cyanus*) plus three other sole records.

Finally, we all wonder what will have been happening in the Channel Islands, now sadly just Jersey, and as ever we were not disappointed. There Ann Haden tells us it was "squalls and sunshine". She had 18

sole records including a new one, Paper-white Daffodil (*Narcissus papyraceus*) and gems like Hutchinsia (*Hornugia petraea*) and Early Sandgrass (*Mibora minima*).

What a wonderful effort everyone has made once again. It is amazing that every year we add more plants to the list (it now contains 738 species!). Over the years, we have received records from as far north as the Shetland Islands and south from Guernsey, Jersey and Alderney. We have so enjoyed the 17 years we have been privileged to do this job, but with Derek's 90th birthday approaching, we realize that we could suddenly have to let everyone down and thought it was the correct thing to hand over 'whilst the going was good!' We have met so many people that eventually we have been able to put faces to names on WFS field trips.

Inevitably there have been lots of ups and downs in the 17 years. The second year we were doing this job was the year of the Foot and Mouth outbreak so no one could leave the road and walk the footpaths, but still several people sent us their lists. When we were handed all the records of the Hunt since the 1920's we realized what a wealth of information it contained and with the permission of the Executive Committee, we shared them with the Phenology Institute, so they are now safely retained for posterity.

Pauline and Richard Wilson are going to take over. We are so very grateful to them and hope they find it as rewarding and enjoyable as we have.

LORNA AND DEREK HOLLAND

BOTANY IN WINTER: A WORKSHOP WITH JOHN POLAND, 7th JANUARY 2017

Over 20 WFS and Lancashire Botany Group members braved the cold and fog to attend John's workshop at the headquarters of the Lancashire Wildlife Trust in Cuerden Valley Country Park.

We started the morning by being initiated into some of the mysteries of winter twigs, learning about some of the key features to look out for. The shape, colour and hairiness of the twigs, as well as the shape and distribution of lenticels (pores) on the twig's surface are all important. Also the colour and shape of the buds, the number and shape of the bud scales and the leaf scars. The presence or absence of latex and its colour are also useful.

At this point we diverted to consider the protective function of latex as in Spurges (*Euphorbia* species) and to try to remember which of Beatrix Potter's rabbits succumbed to the soporific effects of the latex in lettuce. (Further investigation revealed that it was the Flopsy Bunnies!)

John explained that within the leaf scars are vascular bundle scars and the number and size of these varies depending on the complexity of the leaf. Within the scar of a compound leaf like Ash (*Fraxinus excelsior*) there are several prominent vascular bundle scars, whereas with simple leaves the vascular bundle scars are much smaller and fewer. In species which have stipules, these also leave small triangular scars which are situated just adjacent to the leaf scars

but are much fainter and quite difficult to see. An illuminated hand lens was a definite advantage here as we tried to find and compare the shapes of the stipule scars on Lime (*Tilia x europaeus*) and Silver Birch (*Betula pendula*).

After a break for refreshments, we had a session on how to use John's book, *The Vegetative Key to the British Flora*. As we were keying out a piece of Yew (*Taxus baccata*) someone queried the orientation of 'dorso-ventrally' flattened. John's graphic response was, "Think of a squashed hedgehog on the road!" To dispel this unpleasant image, a plaice was suggested as being a preferable illustration.

While discussing the venation of leaves, John explained that a tooth on a leaf is always the terminus of a vein and has a hydathode (a water exuding gland) at its apex. A consequence of this is that grasses never have teeth as they are parallel-veined.



After lunch we ventured out into the cold and damp for a walk around Cuerden Park, stopping to examine the bark, twigs and leaves of the trees and plants along the way, with John pointing out their diagnostic features. As the drizzle became heavier we headed inside for a warming drink and a last look at

some of the twigs we had brought back to recap on what we had learnt. Thanks to John for a most enjoyable and informative day. It certainly aroused my interest in twigs and I look forward to the publication of his book on the subject next year!

SHEILA WYNN

IN PRAISE OF POLAND DAYS

When John Poland wrote his *Vegetative Key to the British Flora*, he had in mind an identification aid based mainly on leaf anatomy and shape for us botanists. The book does this admirably, but has a far more varied use beyond this. For some years now our local branch has run a 'Poland Day' in the dark depths of winter. It has proved a wonderfully therapeutic method of making time to look at plants whilst enjoying a convivial social get-together to dispel the gloom.

We meet at someone's house early in the day and plan future exploits before settling down for the main business. Microscopes are distributed around the table, one of which is connected to a laptop (to enlarge the detail suitably) and the leader sets us off on the educational bit. Things like hydathodes, stomata, vascular bundles and latex can easily be demonstrated in warmth and comfort. Hair and its proximity of shapes is the source of much hilarity. Our guide describes the way the keys are set out and we are off into the specifics. Easy examples, highlighting the above details, ensure that everyone gets on the same wavelength and usually takes up the

hours until lunch. The inner man is fortified amid much chat and hilarity, before a bit of mock harring returns us to the business of the day. Specimens of a more difficult nature are now our lot, indicating a necessity to read the text carefully for accurate identification. Corsican Hellebore (*H. argutifolius*) formed an unusual starter at this year's meet, so too was Asarabacca (*Asarum europaeum*) which followed. We work steadily through an eclectic choice of plant material getting better at using the keys as time goes on. Limits are pushed (naturally!) with an enigmatic fern. Two pinnate was the general initial choice – it led us nowhere. Then we noticed the pinnae were attached by a flange of tissue and were actually adnate to the rachis. This led us to the Polypodies – we had been sneakily fed a much dissected variety, Cornubiense, which no-one had ever heard of. Cheeky, but something new, just the sort of thing such meetings are made for. Eventually, flowered out, we broke up as darkness descended. We had a thoroughly good day as always on these gatherings and another is mooted for next year.

BILL HAWKINS

See WFS Alerts and next year's programme for possible 'Poland Days' this winter.

FIELD MEETINGS 2017

TEESDALE

Wednesday 14th June, Whitesyke Mine, Garrigill and Bell's Grooves, Allenheads:

On a fine morning, by North Pennine standards (not too windy and only a hint of rain), 17 of us met Lizzie Maddison to learn about the plants of this Calaminarian* habitat. Lizzie explained that this is a very special habitat created relatively recently as a direct result of lead-mining in the area. The Whitesyke Mine was once the centre of extensive operations on the Garrigill Beck but the contaminated remains are now being gradually absorbed back into the landscape and colonised by plants of open grassland tolerant of this kind of pollution. Lizzie clearly delighted in these plants, describing them as "tiny diamonds and little gems".

Soon after we entered the site, she was able to point out Alpine Penny-cress (*Noccaea caerulea*), Spring Sandwort (*Minuartia verna*), Fairy Flax (*Linum catharticum*) and Wild Thyme (*Thymus polytrichus*). We also found Thrift (*Armeria maritima*), another of the typical plants, and Sea Plantain (*Plantago maritima*), which has very similar foliage.

We were soon distracted by many other plants such as Northern Marsh-orchid (*Dactyloriza purpurella*) and Heath Spotted-orchid (*D. maculata*), as well as a wide range of ferns often growing on or in the industrial remains: Lady Fern (*Athyrium filix-*

femina), Male Fern (*Dryopteris filix-mas*), Polypody (*Polypodium vulgare*), Soft Shield-fern (*Polystichum setiferum*) and Hart's-tongue (*Asplenium scolopendrium*). Moonwort (*Botrychium lunaria*) was also seen.

A single Willow drew much attention and keying and it was eventually agreed to be a Tea-leaved Willow (*Salix phylicifolia*). Retracing our route along the stream we found Bog Stitchwort (*Stellaria alsine*), Common Butterwort (*Pinguicula vulgaris*) and Pyrenean Scurvygrass (*Cochlearia pyrenaica*). All in all, a very wide range of plants seemed to have found a niche in the old mine area!

We then drove in staggered convoy, to minimise passing problems on extremely narrow roads, the 8 miles to Bell's Grooves, Allenheads, where we had lunch on a grassy bank overlooking an area of very varied topography and potential. First we looked at the Calaminarian* area and saw a number of familiar plants. Then we found Adder's-tongue (*Ophioglossum vulgatum*) present in profusion, but the Frog Orchid (*Coeloglossum viride*) was more elusive and after an extensive hunt, just two non-flowering plants were found by Jackie Hardy.

The limestone outcrops have created more nutrient-rich areas. Swathes of Mountain Pansy (*Viola lutea*) were a very attractive sight, as was Common Valerian (*Valeriana officinalis*). In the stream were large stands of the

hybrid Monkeyflower (*Mimulus x robertsii*). The final search in the heath area was for *Sphagnum riparium*, a rare moss.

As a bonus at the end of the day, we were treated to some lovely patches of Musk (*Mimulus moschatus*) naturalised in the wet grassland. These were two extraordinary and distinctive sites and Lizzie did a wonderful job showing us a very wide range of plants. An excellent day!

DAVID ALBON

* Calaminarian grassland is grassland where the process of seral succession has been halted due to the toxicity of soils containing high levels of toxic metal ions.

The *Mimulus x robertsii* often looks very like *Mimulus luteus* (Blood-drop Emulets) but has the white hairs of *Mimulus guttatus* (Monkeyflower) on the calyx.



Photo: Sheila Wynn

Mimulus x robertsii

Thursday 15th June, Bowlees:

Twenty-two people met Linda Robinson, VC65 NW Yorkshire Recorder, at Bowlees Car Park to spend the day on the River Tees between Low and High Force. Before we set off Linda gave strict health and safety warnings about ticks and staying away from steep edges above the river! At that point we were in VC 66 Co. Durham.

Finding a hybrid Mint, we checked the stem and leaves with "Poland"—it was Sharp-toothed Mint (*Mentha x villosa* *spicata* x *M. longifolia*). Then we walked down a track, finding an abundance of Good-King-Henry (*Chenopodium bonus-henricus*) flourishing by the wall. We crossed over the road and walked

through hay meadows and a squeezey stone stile to Wynch Bridge. This suspension bridge, which dates from 1830, was built for lead miners to get to work. One person at a time goes across!

Now we were in Yorkshire, above Low Force. This NNR is one of the largest in England, 88 square kilometres, rising to 848m (2,782'). It is a leading site for research into climate change. The unique arctic-alpine plants are conserved by traditional farming and moorland management. At the viewpoint above the noisy Low Force we found Globeflower (*Trollius europaeus*), Water Avens (*Geum rivale*), Pignut (*Conopodium majus*), Blue Moor-grass (*Sesleria caerulea*) and

Melancholy Thistle (*Cirsium heterophyllum*).

Walking along the stony path by the river, we saw Chalk Fragrant-orchid (*Gymnadenia conopsea*), Northern Marsh-orchid (*Dactylorhiza purpurella*) and, in the adjacent more acid field, Heath Spotted-orchid (*Dactylorhiza maculata*). The Alpine Bistort (*Persicaria vivipara*) was delightful: the short, slender flower spikes, small whitish flowers above and tiny purple bulbils below, are unique. There were six Lady's Mantles – Pale (*Alchemilla xanthochlora*), Smooth (*A. glabra*), Starry (*A. acutiloba*), Clustered (*A. glomerulans*), Rock (*A. wichurae*) and Hairy (*A. filicaulis* ssp. *vestita*). We saw a Teesdale speciality, Shrubby Cinquefoil (*Potentilla fruticosa*), compared two Horsetails – Shady (*Equisetum pratense*) and Wood (*E. sylvaticum*), saw Flat-sedge (*Blysmus compressus*) and two unusual trees – Downy Birch (*Betula pubescens* ssp. *tortuosa*) and Goat Willow (*Salix caprea* ssp. *sphacelata*). Some people scrambled down the bank to look at Water Sedge (*Carex aquatilis*).

After lunch, eaten near Holwick Head Bridge, we set off for the final steep climb to High Force. Rain threatened as we neared the largest Common Juniper (*Juniperus communis*) wood in England. Sadly the fungus-like pathogen, *Phytophthora austrocedrae*, is killing the trees so at both ends of this section we washed our boots in disinfectant. It was very windy when we reached the view point for High Force with its warnings of sheer drops, slippery rocks and fast flowing water!

We returned along the same path to Bowlees looking again at the colourful flora, grateful that it hadn't rained. A few members continued downstream from Low Force to see the Small-white Orchids (*Pseudorchis albida*) found earlier by David Albon and Steve Little.

Many thanks to Linda for a very special walk.

PRISCILLA NOBBS

Friday 16th June, Cow Green and Widdybank Pasture:

My preparation for the field meeting at this special NNR site included a bit of Wikipedia searching. Comments read included "The local climate is classified scientifically as 'Sub-Arctic' and snow has sometimes lain on the fells into June. Post-glacial Arctic-alpine plants survive here and the area contains the unique Teesdale Violet, the blue Spring Gentian and also Mountain Pansy, Bird's eye Primrose and Butterwort". So we knew what to expect!

As we set off from the car park, woolly hats and gloves were on, the wind was blowing and the temperature was around ten degrees. Summer on the fells! However Teesdale is a top site for botanists and we were rewarded with a great diversity of plants shown to us by our leader Linda Robinson.

At Cow Green we saw numerous sedges, amongst them the rare False Sedge (*Kobresia simpliciuscula*), Teesdale being its only English location, Tawny Sedge (*Carex hostiana*), which is "the sign of a good calcareous flush" according to

Linda, and Hair sedge (*Carex capillaris*) – the favourite sedge of both Nicola Dixon and Linda. Also seen were Moonwort (*Botrychium lunaria*), Scottish Asphodel (*Tofieldia pusilla*), Bird's-eye Primrose (*Primula farinosa*), Alpine Bistort (*Persicaria vivipara*) and numerous Mountain Pansies (*Viola lutea*).

In the afternoon at Widdybank Pasture, Marsh Arrowgrass (*Triglochin palustris*) and Marsh Lousewort (*Pedicularis palustris*), which is characterised by four teeth on the upper lip, were on the menu as well as a fantastic display of Alpine Bartsia (*Bartsia alpina*) and a salmon-pink Early Marsh-orchid (*Dactylorhiza incarnata*).

We didn't see the Teesdale Violet or the Spring Gentian as it was too late in the year for those but we had an amazing day of botanising. Many thanks to Linda Robinson and Judith Cox for organising it.

JANET JOHN

Saturday 17th June, Hannah's Meadow SSSI, Baldersdale. Durham Wildlife Trust reserve:

On our last day the sun and beautiful blue sky were a welcome relief after the previous days' cold and wet weather at Cow Green.

We were met by a trustee of the reserve, Ian Findlay, who was to be our leader for the visit to Hannah's Meadow, one of the most species-rich hay meadows in Durham. This was part of the farm owned by Hannah Hauxwell who, in 1973, was featured in the documentary 'Too Long a Winter', about the harsh

conditions endured by farmers in the High Pennines. Ian knew Hannah and his anecdotes gave us an insight into how hard her life must have been, living here without electricity or piped water.

As we enjoyed our stroll round the meadows, admiring the scenery and profusion of flowers, in what today seemed like idyllic surroundings, Ian explained the traditional management practices that have resulted in this diversity of species. These included Wood Crane's-bill (*Geranium sylvaticum*), Globeflower (*Trollius europaeus*), Ragged Robin (*Silene flos-cuculi*), Pignut (*Conopodium majus*) and Yellow Rattle (*Rhinanthus minor*). Ian told us that farmers used to say that when the seeds rattle, it was time to cut the hay.

Returning to the car park, we thanked Ian for guiding us round the reserve and sharing with us his wealth of knowledge, which had made our visit so enjoyable.

SHEILA WYNN



Photo: Ken Southall

Globeflower

ONE DAY MEETINGS 2017

CROSBY SAND DUNES, SEFTON COAST, 4th MARCH

It was a beautifully sunny morning when eighteen of us gathered to start our exploration of the dunes and nearby streets. Setting off from the car park, we soon noticed some good patches of Whitlowgrass, which on closer examination was all identified as Common Whitlowgrass (*Erophila verna*) rather than Glabrous Whitlow grass (*E. glabrescens*), which has less divided petals and much longer petioles (leaf stalks).

As we moved onto the dunes there were several patches of naturalised Crocus and Narcissus species as well as two species of Snowdrop, (*Galanthus nivalis*) and Greater Snowdrop, (*G. elwesii*), which gave us an opportunity to use the Snowdrop guide from the Winter magazine. Peter Jepson pointed out the difference in the leaf arrangement of the two species, those of *G. elwesii* being much wider and wrapped round each other at the base (convolute) rather than facing each other (applanate) as in *G. nivalis*. The petals had markings at the top and bottom, joining to form a cross, which meant that it was var. *elwesii*, the common garden form.

We enjoyed lunch in a sheltered hollow in the dunes, to the

accompaniment of skylarks and with distant views of Antony Gormley's Iron Men staring out to sea. Moving on, we found more bulbs, including the daffodil (*Narcissus 'Tête-à-Tête'*) and Early Crocus, (*Crocus tommasinianus*), naturalised on the dunes. Gathering to look at a fine patch of Common Field-speedwell (*Veronica persica*), Peter noticed several leaf rosettes of Bee Orchid (*Ophrys apifera*) growing at our feet.

At this point we diverted to see the large patch of Field Wormwood (*Artemisia campestris* ssp. *maritima*) here at one of its two known sites in the UK. Its new leaves were just starting to appear.

As black clouds were starting to gather we made our way back to the car park. Although we had seen only 25 species in flower, it had been an enjoyable day, in ideal weather – a good opportunity to meet up with friends as well as new members and get our botanical brains out of their winter hibernation.

Thank you, Julie, for arranging such a pleasurable meeting.

SHEILA WYNN

WAYLAND WOOD 26th MARCH

There is always a good turnout for Branch Y visits to the delightful Wayland Wood, especially on a sunny spring day such as this. Lesser Celandine (*Ficaria verna*) shone brightly in greeting at the car-park. Early Dog Violet (*Viola reichenbachiana*), in full bloom, lined the path and set off emergent swathes of Bluebell (*Hyacinthoides non-scripta*) and Early Purple Orchid (*Orchis mascula*), still in leaf. Snow-white Barren Strawberry (*Potentilla sterilis*) was a gleaming guide towards the main objective of the day.



Yellow Star-of-Bethlehem

Yellow Star-of-Bethlehem (*Gagea lutea*) is native in this, its sole, Norfolk location. It is a plant of neutral to chalky soil, found in shady habitats like woods, hedgerows and stream sides. It is easily overlooked because

of its slight stature and because it is a shy flowerer. This is especially so in woodland where it can be mistaken for bluebell shoots and is easily crowded out by more rampant growths. Members of the Branch regularly monitor the plant for the site managers and for the BSBI County Recorder. Three locations are known in the wood and today we were delighted to add a fourth. The first spot is by a path on the edge of a recently coppiced block: a delight to the eye and a good twenty plants flowering freely; somewhere to linger, particularly as a good range of butterflies (Comma, Brimstone and Holly Blue) were accompanying our meanderings.

Moving on, it was noticeable that Storm Doris had been effective in blowing down a number of trees. Collapsed woodland is a wonderful habitat if left undisturbed and we can only hope. Some of it will undoubtedly go though. The path to the main *Gagea* colony was blocked by another huge victim of Doris day. Even so we still needed to range though rough territory before finding well over 150 flowering specimens fighting with a gorgeous display of Wood Anemone (*Anemone nemorosa*), much Moschatel (*Adoxa moschatellina*) and umpteen Bluebells. Another fortnight and they would be hard to find.

Trackless woodland is a real rarity in the south. When it is full of glorious flowers it takes forever before one is prepared to move on. An extended luncheon was enlivened by the

sounds of Nuthatch, Warblers, Woodpeckers and various members of the titmouse family. Move on we did however and off to where King Alfred daffodils (dumped years ago) were in full bloom at the wood edge accompanied by sisters Irene Copeland and Avenger. The trees hereabouts were decorated with a jazzy lichen that Sue Grayston, who loves these things, told us all about. She gave it a name that was about as long as that Welsh station – somehow I have contrived to forget what it was! Then it was on to our

supposed last site. At the base of a large tree were a good half dozen *Gagea* in bloom with many non-flowering shoots. This was the most we had ever recorded here, ones and the occasional two being best so far. Our day was dwindling and we ambled back towards the cars, but Nicola Dixon was still on-song. She spotted another plant in an altogether new location, flowering too; an excellent way to finish a rewarding day and still the sun shone.

BILL HAWKINS

THERFIELD HEATH 15th APRIL

Nine members from as far away as Dorset gathered at Therfield Heath, outside Royston. It was cold and blustery so our leader, Stephen Clarkson, was dressed in shorts. We set off to look for the Pasque Flower (*Pulsatilla vulgaris*), but Stephen kept the tension high by delaying at every plant and challenging us to identify it by the leaves and stems only. Thus Cowslip (*Primula veris*) - leaves hairy on both sides, Germander Speedwell (*Veronica chamaedrys*) - two rows of hairs along the stem and Lesser Burdock (*Arctium minus*) - hollow leaf stem – were identified. He was in his element though when he cut open a Lords-and-Ladies (*Arum maculatum*) to explain how the male and female flowers operated. I shall not go into detail about the various vernacular names he gave for this plant, in case my wife or servants are reading this.

But then we came to the *raison d'être* of our day – an escarpment full to the brim with Pasque Flowers (*Pulsatilla*



Pasque Flower

Photo: David Caals

vulgaris). Extra bonuses were a good number of Spring Sedge (*Carex caryophylla*), Hairy Violet (*Viola hirta*) and a Clustered Bellflower (*Campanula glomerata*), expertly found by one keen-eyed member, but the Pasque Flower took all the glory. By happenstance, Vincent, the local warden came along and said there were about 10,000 of them, half in flower, this being a particularly good year. He tarried with us the rest of the day and told us about the trials and tribulations of land management, especially when he had to counter various official bodies who should have been working with him rather than, incompetently, against.

By this stage the weather was sunny and balmy, though not sufficient for one member to remove her vivid orange jacket, unfortunately. Vincent took us to the precise locations where Bastard Toadflax (*Thesium humifusum*), Wild Candytuft (*Iberis amara*), Field Fleawort (*Tephrosia integrifolia*), Lesser Meadow-rue (*Thalictrum minus*) and Perennial Flax (*Linum perenne*) would be in flower later in the year. Hence the great need to return to this botanically rich area. Many thanks to Stephen Clarkson who did a brilliant job as always.

DAVID CAALS

SPRING EPHEMERALS, ALBURY, SURREY 10th MAY

A party of ten gathered on St. Martha's Hill, situated to the south of the North Downs, near Guildford. Here we were met by our leader, Pat Verrall, on a beautiful sunny morning, following days of grey skies. Participants ranged from local members and guests to those who had travelled from as far afield as South Wales. Pat gave an introduction in which she outlined the geology and historical background to the area. She explained that the day would be spent on the Lower Greensand of the Weald.

In the morning we were to descend Colyers Hanger to the Tillingbourne Valley. Colyers is an old name for charcoal, which was burnt in the area for the nearby gunpowder mills. A hanger is a steep-sided slope, which indeed this was. However, before

setting off on the path through the wooded hanger, we took time to examine the roadside verge where there was a fine stand of Meadow Saxifrage (*Saxifrage granulata*). We then got down on hands and knees to explore a patch of acid grassland in which we found many tiny spring flowers, including Birdsfoot (*Ornithopus perpusillus*), Wall Speedwell (*Veronica arvensis*), Little Mouse-ear (*Cerastium semidecandrum*), Early Forget-me-not (*Myosotis ramosissima*), Buck's-horn Plantain (*Plantago coronopus*) and Slender Parsley-piert (*Aphanes australis*).

As we made our way through the wooded hanger Pat explained the differences between Germander (*Veronica chamaedrys*) and Wood Speedwells (*V. montana*), the former

having 2 lines of hairs on opposite sides of the stem and no petiole, whilst the latter has hairs all around and a distinct petiole. As we made our descent we noted many plants typical of woodland in this area, including Bugle (*Ajuga reptans*), Yellow Archangel (*Lamium galeobdolon*), Pignut (*Conopodium majus*) and Dog's Mercury (*Mercurialis perennis*), which is dioecious; we remarked that the female flowers kept to one side of the path and the male plants on the other side. Three-nerved Sandwort (*Moehringia trinervia*) was found conveniently growing alongside Common Chickweed (*Stellaria media*), enabling comparison of these two species. We noted the conspicuous three veins on the leaf of Three-veined Sandwort and single line of hairs the length of the stem on Common Chickweed. Pat pointed out a number of ferns growing on the slope above us including Soft Shield Fern (*Polystichum setiferum*), Male Fern (*Dryopteris filix-mas*) and Broad Buckler Fern (*Dryopteris dilatata*), with its dark stripe in the centre of the scales.

Approaching the damper ground of the Tillingbourne valley we spotted Large Bittercress (*Cardamine amara*), Brooklime (*Veronica beccabunga*) and Opposite-leaved Golden Saxifrage (*Chrysosplenium oppositifolium*). The footpath took us through Daphne Foulsham's garden (one of our party) where we soon found Adder's-tongue (*Ophioglossum vulgatum*), a fern ally, which was established in the grassland. Our path then took us between the River Tillingbourne and a pond, the banks of which included a variety of wetland

species such as Bog Stitchwort (*Stellaria alsine*), Lesser Pond-sedge (*Carex acutiformis*) and Large Bittercress (*Cardamine amara*), this time close to the path where it could be admired and photographed. We then made our way back up the hanger the way we had come. A relaxed lunch was enjoyed on a grassy patch in the sunshine after which we took time to look at Silver Hair-grass (*Aira praecox*) with its upper awns crossed, before setting off on the afternoon walk.

We climbed the sandy hill to St. Martha's church, noting Climbing Corydalis (*Ceratocarpus claviculata*) sprawling beside the track and ironstone lying on the ground, once used in the Wealden iron industry. Pat explained that St. Martha's is thought to be a corruption of Martyr



Photo: David Rich

and that it had been a religious site for over 1000 years. As we reached the summit of the hill we were rewarded with magnificent views of the Weald and Surrey Hills as far as the South Downs.

We entered the churchyard where Smooth Cat's-ear (*Hypochaeris glabra*), Mouse-ear Hawkweed (*Pilosella officinarum*), Common Stork's-bill (*Erodium cicutarium*), Little Mouse-ear (*Cerastium semidecandrum*), Thyme-leaved Sandwort (*Arenaria serpyllifolia*) and Meadow Saxifrage (*Saxifraga granulata*) were just a few of the highlights seen. Pat asked us to look for Spring Vetch (*Vicia lathyroides*) and after a careful search several flowering plants were found on a grave along with an abundance of Shepherd's Cress (*Teesdalia nudicaulis*) growing around a terracotta bowl on the same grave. Descending St. Martha's Hill we

noted Lilly-of-the-Valley (*Convallaria majalis*), presumably originating from a garden but long established at this site. Shepherd's Cress (*T. nudicaulis*) and Bird's-foot (*Ornithopus perpusillus*) were found growing together in a sandpit.

We made our return down Halfpenny Lane, through Tyting Farm to Guildford Lane and the car park, noting various hedgerow and farmland species along the way. Before reaching the cars Pat led us on a short detour through woodland to Toothwort (*Lathraea squamaria*) parasitizing on Hazel (*Corylus avellana*). We were further rewarded along here by finding Woodruff (*Galium odoratum*) in flower. On reaching the carpark Pat was thanked for an extremely informative, varied and interesting day.

SUE COOPER

RAVENSMOOR, NANTWICH 18th MAY

By kind permission of the Landlord of the Farmer's Arms, Ravensmoor, nine members met in their car park to start our day's recording session. Ravensmoor is a quiet hamlet west of Nantwich in rural Cheshire. Our route took us along footpaths to the Llangollen Branch canal. The first plant was Chinese Bramble (*Rubus tricolor*) naturalised along the lane. Lesser Celendine (*Ficaria verna* ssp. *verna*) was in the hedgerow identified by the bulbils in the leaf axils. Be wary as both subspecies have bulbils at the roots. Orange Balsam

(*Impatiens capensis*) and Water Dock (*Rumex hydrolapathum*) were seen by the canal and River Water-crowfoot (*Ranunculus fluitans*) in the canal. Two interesting finds were Three-cornered Leek (*Allium triquetrum*) and Tall Ramping-fumitory (*Fumaria bastardii*). By the end of the meeting we had recorded around 180 plants of which Graeme Kay, Vice County recorder for Cheshire, said 84 were new to the tetrad. Well done WFS!!

JULIE CLARKE



Hoary Stock

BEACHY HEAD 20th MAY

Six intrepid explorers met at Holywell Tearooms to investigate the plants of the nearby chalk cliffs. 'Beachy' comes from the French meaning 'beautiful headland'. The area is owned and managed by Eastbourne Borough Council and is the start of the South Downs Way.

We soon spotted the tall and stately plants of Tree-mallow (*Malva arborea*) in the more sheltered areas along with Silver Ragwort (*Senecio cineraria*). On the shingle were maritime plants such as Sea-kale (*Crambe maritima*), Sea Beet (*Beta vulgaris* ssp. *maritima*) and Sea Radish (*Raphanus raphanistrum* ssp. *maritimus*). Here and there we found plants of Rock Sea-lavender (*Limonium binervosum* ssp. *binervosum*) clinging to the cliffs just above the high tide mark. Higher up were the fragrant flowers of Hoary Stock (*Matthiola incana*), Wallflower (*Erysimum cheiri*) and Viper's-bugloss (*Echium vulgare*) with its red and blue flowers. The colour of the

flowers changes from red to blue due to changes in the acidity of the cell sap rather like litmus paper. Most spectacular however were the sheets of Horseshoe Vetch (*Hippocrepis comosa*) in large quantities sprawling across the higher slopes.

After lunch, sheltered from the wind under the cliffs near the Holy Well, we climbed up the steps and were amazed to discover a very large 'wind-pruned' Pear (*Pyrus communis*). On the downland above we were delighted to see Wild Onion (*Allium vineale*), the pink flowers of Sainfoin (*Onobrychis viciifolia*) and the lovely Burnet Rose (*Rosa spinosissima*). A new species to many was the Italian Lord's-and-Ladies (*Arum italicum* ssp. *italicum*) with its marbled creamy veins.

A very rewarding day was had by all. It was nice to meet old friends and catch up with their news.

GARETH BURSNALL

BOOK REVIEWS

The New Flora of the Isles of Scilly: Rosemary Parslow & Ian Benallick. Parslow Press (2017). 539pp, colour illustrated. ISBN 978-1-5272-0483-6

The Isles of Scilly (NB correct form – only sillies say ‘Scilly Isles’!) are an irresistible botanical destination. Beginners can see lots of uncommon plants almost without having to search and, for WFS members with accumulative lists needing additions, the many well-naturalised aliens are a treasure trove. Seeing plants too tender for much of Britain popping up on field banks, in pavements, in walls, is an exotic experience, with genera such as *Echium* and *Aeonium* looking stunningly stylish as well.

Formerly we have depended on the 1971 flora by J.E. (Ted) Lousley, a great lover of the islands; on a few less formal publications; and on word-of-mouth information from other botanists. Nearly 50 years can alter conditions even in remote places and these islands look likely to feel some of the first extremes of climate change. A new detailed account of their botanical riches is well-timed.

Rosemary Parslow is an honorary islander, connected by family and by her long service as BSBI Vice-County recorder and knows the special plants and their habitats supremely well. Ian Benallick is a mainland, but a true Cornish man and talented botanist, BSBI recorder for East Cornwall. Their combined experience is awe-inspiring and the range of information in the book reflects this. The whole flora, native and naturalised (archaeophyte and neophyte) is given equal attention and plant communities (down to the

detail of the National Vegetation Classification number) are described and evaluated. Almost every species has a photograph and distribution map with a colour key distinguishing pre- or post-2000 records and whether the plant is native or alien. Geology, soils and climate are described and there are some fascinating summaries of historic effects from human occupation, from Neolithic farmers to the flower growers of the last century. I just wish that this information had been available when I was a regular visitor – for instance mysterious plants in the *Solanaceae* family, or the frequent explosions of colour from the daisy-like heads of ‘mesems’ (Dew- or Ice- plants) used to be difficult to work out - now identifications are straightforward. My Valhalla diary would have been transformed!

Any reservations I have are personal. I’m a strong believer in ‘less is more’ and like books to be easy to handle. This is a large, heavy book and the price (around £50) reflects this, making it a serious investment for an occasional botanical holiday. The pages with species accounts are laid out for art as much as for information, with no run-on allowed from page to page - this often leaves a large percentage of unused space filled with ‘wallpaper’ of artistically misted photographs showing an appropriate plant. It’s a clever solution, but I found myself wishing that the layout

had been tighter, enabling a smaller, more affordable book. The style of the species photographs may also have fans and detractors – many are quite extreme close-ups. These are great if you need to see a hair or stamen, but sometimes make familiar plants look unrecognisable at first glance. I do admit though that these

niggles are because of MY taste, MY kind of eyesight. For anyone going to botanise on these truly enchanting islands and wanting proper, comprehensive information on their wonderful range of plants, this book definitely needs to go on the Big Birthday list!

RO FITZGERALD

Whistling Jack (*Gladiolus communis*) on
St. Mary's, Isles of Scilly



Photo: Anne Kell

Evening Primroses (*Oenothera*) of Britain and Ireland. R.J.Murphy. BSBI Handbook No 16 (2016). 96pp, colour and line illustrated. ISBN 978-0-90-115849-9

Violas of Britain and Ireland. Michael Porter and Michael Foley. BSBI Handbook No 17 (2017). 156pp, colour illustrated. ISBN 978-0-90-115850-5

Looking for plants and finding them is one of life's most reliable and precious pleasures, but **identifying** them can be a much more frustrating experience. We all have standard books we depend on, known by abbreviated tags - 'Stace', 'Rose' (or even just 'Francis'), 'Harrap', 'Collins', 'Keble Martin' and so on – but we also all have times when these are not enough, when we need more visual detail, more habitat or distribution information, more HELP

and this is where I am delighted to be able to recommend the two most recent titles in a series which I think outstandingly useful.

Some of us are rather afraid of the Botanical Society of Britain and Ireland (BSBI), with their long and powerfully academic history and august reputation, but their publications are supreme and one of their greatest services to field botany is producing the Handbooks, which

are available to all and transform the amateur botanist's ability to make correct identifications without incurring trauma. I'm very fussy about books, having an Eng.Lit. education (my botany is experiential and mostly field based) and rightness for purpose is my essential criteria. These absolutely exemplify that principle. Handbook No 1, appearing in 1982, was *Sedges of the British Isles* by Clive Jermy, Arthur Chater and Dick David. Now in its third edition, it gives an essential tool for approaching this difficult and often dreaded group. The format remains almost unchanged – a Handbook is just that, a strongly bound soft-back, giving detailed descriptions (often usefully pointing out possible confusions with similar species), excellent diagnostic illustrations, distribution maps and habitat descriptions. Readers can discover where a species is likely to be found in Britain and Ireland and it will be grouped with its near relatives for easy comparison. Most of the titles deal with families we all find difficult at times. No 2 *Umbellifers*, No 3 *Docks and Knotweeds*, No 4 *Willows and Poplars*, No 6 *Crucifers* (update that to *Brassicaceae*!), No 8 *Pondweeds*, while real nerds can consult No 7 *Roses* or No 9 *Dandelions* ... so subjects range from extremely critical groups to those we all have to deal with almost daily. There are also specialities such as No 10, Charles Nelson's delightful *Sea beans and nickar nuts* which will help if you are ever lucky enough to find a tropical drift seed on some western beach! The latest titles have additional prettiness, in the form of some colour photographs (including

the cover of *Violas*), but still give the soundest possible information in proven accessible form.

Rosaline Murphy is already represented in the series as she is the author of No 12 *Fumitories* (an absolute must for anyone keen to become more confident with this sometimes confusing genus). Her style and presentation are famously lucid and, in this case, even clear enough to remove most of the terror I have always felt when faced with any unfamiliar Evening Primrose! Now that we are all paying closer attention to aliens and adventives, this little book gives most timely reassurance and assistance.

Violets are in a sense more respectable native plants, but they can be quite tricky. The influence of garden pansies can cause problems. Dog Violets and the Mountain Pansy can hybridise with near relatives and I often feel insecure working out connections with *Viola tricolor* (Heartsease) because that plant itself seems always missing from my life, but traces of its 'blood' turn up quite frequently. I'm deeply grateful for the clarifications offered in this handbook and for its helpful range of good illustrations.

BSBI Handbooks are available from their booksellers, Summerfield Books, who can advise on new editions and availability. Second-hand copies can be found on line, but it's worth checking to see if there is a new edition. Most titles are well below £20 new, so these sterling helpers can be affordably collected. Please start now!

RO FITZGERALD