PRESIDENT'S LETTER

I have been confined to base for the past month because of serious illness that laid me low, sepsis. I am glad to say I have recovered well, but recuperation takes a while. This means I have not been out and about much for the last six weeks. However, here in the Southwest, the climate has been relatively mild. Walking around my garden on the first of January I found 37 species in flower. Many were garden plants but it included a few wild flowers in the more undeveloped part. I thought that you would be doing well with your winter counting of flowers this year.

One flower that was flourishing was Red Campion (*Silene dioica*) in considerable number. The Latin word *dioica* means that this plant has male and female flowers on separate plants. Some of the species in flower this January were holdovers from last summer, such as the Red Campions, and others were early spring flowers, such as Primroses (*Primula vulgaris*) and Golden-saxifrage (*Chrysosplenium* spp.). The photo of Red Campion was taken in the first week of January when you don't expect to see it flourishing like this. A short message this time but I am looking forward to getting out and about this spring and I wish you all good plant hunting.

Photo: Ghillean Prance

Red Campion

GHILLEAN PRANCE

EDITORIAL

Hopefully, by the time you read this, Sir Ghillean will be well on the road to recovery. I'm sure you will all join me in sending our very best wishes from the Wild Flower Society.

Many thanks for all the kind comments I have received for my first issue. One of the differences you will notice in this issue is the change in emphasis between English and Latin names for plants, with the latter now appearing in brackets. I should be grateful if future contributors could adhere to this format. This is not intended to devalue the use of Latin

but to aid the flow of the text to the reader less conversant with Latin names. Ro Fitzgerald in her piece 'What's in a name?' rightly encourages us all not to be frightened by the Latin and to try and make a point of learning these names. A sentiment that I would support.

I should like to introduce a wider range of articles to the magazine. So my thanks must go to Tim Harrison for producing the first in, what I hope will be a series, of plant portraits. He provides a fascinating insight into the ecology of Wood Barley (*Hordelymus europaeus*). If you have a favourite plant that you would like to share with us, please do not be shy in coming forward.

In the Spring 2016 issue of the magazine, Hazel Metherell wrote a lovely article about Mnemonics and came up with some quirky ways of identifying and remembering the names of plants. My favourite is 'sixy, sexy, flexy' for Wavy Bittercress (*Cardamine flexuosa*) with six stamens – to distinguish it from Hairy Bittercres (*C. hirsuta*), which only has four. Nicola Dixon, in her two field reports, shares a couple of other examples with us. If you have any aide-memoire that you use, which you would be happy to share with others, please do let me know.

Are you suffering from Botanophilia? One fellow sufferer has written a wonderfully witty caricature of us botanists. Where do you think you fit in? I'm still in the 'starter' category, delighting in the sheer beauty of the plants around us and desperately grappling with keys.

Peter Jepson gives us a timely reminder not to believe everything we hear or read and that we need to constantly ask questions. How many of us have been all too ready to unquestioningly take the word of 'the expert'? I know I am guilty of this.

This issue contains the reports of field meetings from the latter half of last season, showing the diversity of sites visited and the wide range of plants discovered. In addition, the WFS has given a number of grants over the past year and there are three reports giving a flavour of how these monies were put to good use.

Any magazine is only ever going to be as good as the content that is received so do please keep those reports coming in. Any pictures will also be gratefully received. If you have any material that would benefit from an illustration, you will see in this issue that we are now very fortunate to have the talents of two excellent botanical illustrators.

I will endeavour to respond to every e-mail I receive, so if you do not hear from me, please chase me and check I have received your e-mail. Many branch secretaries have the same rule, so do follow up unanswered e-mails. ANNE KELL

E-MAIL ALERTS

To receive monthly updates relating to our programme:
The correct e-mail address is:- WFSAlerts@outlook.com

AMALGAMATION OF BRANCHES O AND O2

At the end of 2016 Sean Karley retired as Secretary of Branch O2.We would like to thank him for all he has done for members of the society during his time in that role. Branches O and O2 have been combined to form a larger Branch O and Roger Heath-Brown has agreed to be Secretary of the new combined branch.

BRANCH M

To contact Gareth Burstall please use Priscilla Nobbs' e-mail address of p.nobbs17@btinternet.com

WHAT'S IN A NAME?

Discussions about the use of Latin and English names for plants come into every botanist's life and individual preferences are usually based on where and how you first learned wild flowers, but most botanists do end up relying on Latin names simply because they are unarguable. They do seem alien at first – I'm often told "Oh, I'll never manage to learn the Latin names." – but don't be put off, there really IS a good reason!

When you meet someone for the first time you learn their surname, whether they have a title like 'Doctor', whether they like to be addressed as Mrs, Miss or Ms. I know modern manners are dismissive of formality, but such labels are important to identity, and appear on passports and electoral registers. Given names are more personal, and can be altered by family or friends to nicknames. In plants, the surname (definite, official) would be Latin, the given or pet name English. The English names can have many local variations, and this can cause real muddles!

For instance 'Golden Rod'. In gardens and in the wild is usually a species or cultivar in the genus *Solidago* and Goldenrod (*Solidago virgaurea*) is a widespread plant of heathy areas. However, in Devon and Somerset, Great Mullein (*Verbascum thapsus*) can be called Golden Rod; in Dorset, the name can relate to Agrimony (*Agrimonia eupatoria*); in Devon and Somerset again it could mean a St John's-wort (*Hypericum* species). So if you want to be SURE which plant is being discussed the Latin name is essential.

I do appreciate the effort needed to learn Latin names, but botany is about correct identifications as well as loving plants. Nearly all flower books use Latin in the index, so life's much easier if it feels familiar. An excellent way to learn is in every WFS member's grasp – just use a Field Botanist's Record Book for a year! You may have to page-turn searching for English names at first (or use the index in the back), but repeated use will give you the gift and Latin names of common plants will become as familiar as your own. Believe me, they're worth it!

RO FITZGERALD

BOTANOPHILIA

You find the WFS a super bunch. Friendly camaraderie, a group in which you can learn at your own pace, meetings all round the Country and access to information that is uncomplicated. The BSBI are fine but more for the boffin. You had a look through the New Journal of Botany once and were left in wonder. A view of the professional popped irresistibly into mind: "Observe! A scientist am I, aloft here in my tower I devour and turn to clades the DNA of some pressed flower." This is probably defamatory, but not at all your sort of thing. Outdoors, seeing flowers in bloom, is more your style. Of course, you welcomed the experts' help, once you grasped the nettle and became at home with keys. (You hoped you could cut the mustard but were still bamboozled occasionally). Your workmates are a bit bemused by your hobby and declare you have a bad attack of Botanophilia when you describe wild daffodil. They really cannot feel the thrill and when they boast, as boast they will, of holidays in Estoril. You say that you are happy still. They think you somewhat eccentric but still invite you to parties: A little out of kilter maybe, but underneath, all right. Perhaps your WFS colleagues are like that too, you decide to look a little further.

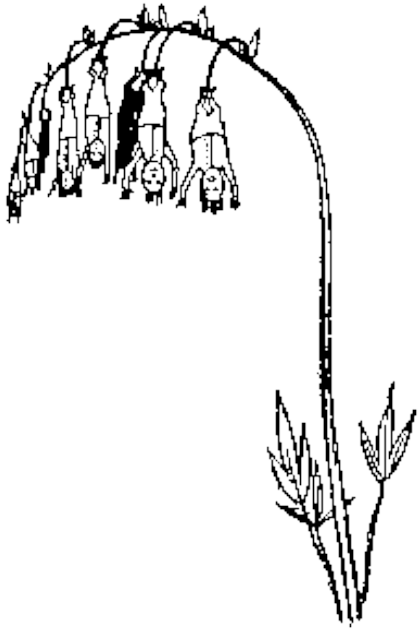
STARTER

You are an enthusiastic attendee at all your local Branch meetings and this time your leader introduces a new lady into the mix. Everyone says, "Hello and welcome," before the group moves off to see what the day will bring. As you go along, you greet the newcomer and while getting acquainted she asks "What are these terms you botanists use, lunate or laciniate, retrorse or retuse, are there not others one could choose, those words are really quite obtuse?" You have a smile and tell her that being a Brit, it is quite natural for her not to speak strange languages. She should not worry too much, the leader will always help out with explanations as one goes along. She seems to be joining in quite well and delights in looking at the nectaries of water-crowfoot through a borrowed lens. You recall doing much the same yourself. You have a fine day and as you leave she tells you how much she has enjoyed things. People are so nice and most helpful with all her queries and what beautiful plants she had been shown, some she never knew existed. No doubt about it you deduce, she too has caught Botanophilia, the state of being on a perpetual wild flower chase.

FERNATIC

You rarely see him in the field before the back end of the year. That is if he is not taking a vacation in the west of Ireland seeking rare members of the Pteridophyta. The ferny brake brings him awake, *Asplenium* delights. From *Polypody* near the beach to *Cryptogramma* on the heights, he just lives for ferns. He has an extensive garden at home all given over to his passion. It is sculptured to give a range of microclimates so that things like *Pteris* and *Davalliana* can flourish outside. How he manages to keep Parsley Fern alive is anybody's guess. You have been along to

several of his meetings (he is more than happy to share his knowledge with the Society) and learned a lot on the way. His latest rave is the Scaly Male-fern agg. Fascinating, he asserts, so many differing forms even among the three associated species up and down the country. It is all brought about because they are apogamous, self fertile, he explains. Surely you mean apomictic you query? Not a bit of it you are told, that is for flowering plants, the ferns reproduce by spores not by seed. Scaly Male-ferns apogamous, plants like Dandelions and Hawkweeds apomictic. He knows that such flowers have their followers too. Each to his own of course, but he just can't see the point at all, not when you can have ferns.



Manypeeplia Upsidownia
From Edward Lear's Nonsense Botany 1871

FLIBBERTIGIBBET

You call him The Scamp. His wanderings are widespread. From Kerry to East Anglia, Channel Islands to Shetland, by chance upon a mountainside, perhaps along a valley, on some farmer's set-aside or very urban alley. Anywhere your fancies go among the woods and copses ho! He applies for all the main meetings, goes to all his branch ones and a good number of those from other branches. He simply loves being out with the group and delights in what is shown. Care mad to see a man so happy! By now he ought to be in the upper reaches of Valhalla, but no, he is still in his local beginners' group, does the Record Book because that is what the WFS is about. Records things like Opium Popper, Water Sedge, Ladies Bed-sore, Teasewort. His branch sec. despairs, diagnoses floral dyslexia: gives many, prolonged, practical suggestions - pleads. The Scamp treats all this with a debonair insouciance. The flowers are a pleasure whatever their names are, and the company of his friends, that is important too; what does it matter beyond that? You concede he has a point, obviously it does not take too much expertise to develop Botanophilia.

FOODIE

You can find them almost anywhere: gathering winter-cress in the January Midlands; reeking of wild garlic in the Cornish spring, collecting beech mast in the Chilterns during autumn. See them in the summertime, culling

marjoram and thyme, gathering some watercress, a rural banquet to impress. A husband and wife team, they are dedicated vegans. Of course they grow their own but prefer to forage – get the food as nature intended. You meet them in a Norfolk saltmarsh late in the year. They have a whole bundle of goodies that they are carefully washing out in some seawater. Do not want to consume any beasties by accident they aver. It is difficult to be completely self-sufficient they tell you, but Alfred at Osiris Organics is so meticulous with his sources and we can get supplies from Ben, the artisan baker next door, of the most divine spelt. Not that they approve of cooking if it can be avoided, stresses the food too much, far better to eat as you harvest. So preferable! They settle down to dine and you open your lunchbox. You have potato and tomato, aubergine and red peppers in a salad that you are eagerly looking forward to. They recoil in horror – it's all *Solanaceae* apparently, Nightshade family you know, quite poisonous.

MAGPIE

The west coast of Scotland can be a delight around the late May bank holiday and the good weather has drawn you north. A fancy to see the sunrise sees you off on the easy climb to the summit cairn of Sgurr an Utha where you sit in eager anticipation. A mist river flows through the lower glens, but the moon is reflected from Loch Beoraid, red-shaded through the veil. The light increases gradually until a burst of fire ignites the sky, wonderful! The morning is warming up nicely, the magnificent view into Knoydart has you rapt. "Excuse me," comes a voice from nowhere and you make a passable attempt at the British sitting high jump record. "Sorry if I startled you, do you perhaps know *Diapensia*?" A slight, wiry, awfully intense looking individual is speaking. You gather your scattered wits, nod, and lead him across the col towards Froach Beinn. On the way he tells you he has had a blast on Lawers, missed out on the Mountain Bladder Fern, but a trip up Ben Lui proved a fruitful back-up. He is really off to Skye for another attempt at Alpine Rockcress, but could not resist a quick foray to Acharacle to see Water Tillaea and then up here to try for Diapensia. You ask him if he enjoyed the views in Breadalbane - he is not quite sure what you mean, "Hunting new plants you know!" You show him the flower of his desire. He checks in Stace, takes few measurements and a picture with his i-pad. He makes a note of the date alongside a GPS reference, thanks you and is off like a whippet. He did not comment on the plant nor its stunning location. You feel a bit sad and wonder if, "A primose on the river's brim, a yellow primrose is to him." In another life he was probably into trainspotting.

ENCHANTMENT

She certainly knows her flowers and everyone is delighted when she arrives at a meeting. There will be no mistakes today! Not only does she know the plants' names, on demand she can recount their governance and virtues. Get her going on the Doctrine of Correspondences and she could talk for England. She probably knows Culpeper off by heart; uses it all the time. Homeopathy is just one of the strings

in her bow. You reflect that the witchcraft business has had a thorough makeover, been re-branded and moved distinctly upmarket in recent years. Putting curses on people was hived off early on to the newspaper industry and certain Reality TV programmes. Casting out demons is now the province of the NHS. Walking widdershins is not contentious but riding broomsticks is right out. The Chelsea tractor is vehicle of choice – far more comfortable. Of course, she would not call herself a witch: aromatherapist, hydrotherapist, life coach, alternative healer perhaps, anyway she does not cast spells does she? You are not so sure though. You have been to her salon where incense and candles burn with a subdued, all pervading, delicately judged ambience. You have seen her healing crystals displayed in esoteric design and atmospheric soft light. She has more potions than Severus Snape! She may recommend a salve, or more expensively, an unguent – to anoint you with obviously. She is doing very well, so everyone is delighted when she attends a meeting. Best to stay on her good side.

INSPIRATION

You looked around, just as you said, perchance to find a common thread. Ambling round the countryside, finding where the flowers hide. There to sit in reverie exactly where you want to be and careless of life's passing hours, enjoy the beauty of those flowers. That is Botanophilia.

A FELLOW SUFFERER

Photo: Ken Southall

So, which category does this botanist fall into?

A RARE SIGHTING

The ripple of information reached us. Starfruit (*Damasonium alisma*) had been seen in Black Park Country Park, Slough. At the first opportunity we hot-footed it to the pond. Would we find it? Would there be a flower? Would we see the star-shaped fruits? We had been looking for this plant for years. A native of Gerrards Cross Common - but last seen there in the early 1990s - seed had been planted in a managed pond in Black Park. However, the plant is notoriously particular and 2011 was the last time it had put in an appearance.
Usually an annual, sometimes a biennial and occasionally a perennial, when conditions are ideal, the plant is amphibious, needing to be on mud when it produces seed but in water to disperse and germinate the seeds. Starfruit require high water quality, low nutrient levels, a fluctuating water level, a sunny pond with no overhanging trees and no choking vegetation. To quote Peter Marren in his book, *Britain's Rare Flowers*, "Warm water, hot mud, sunshine and livestock are the keys for a successful Starfruit." No wonder then that it is struggling to survive. You will not be surprised to learn we do not see drovers along the A40 these days taking their cattle to market! Five plants found in the pond! Exciting. Fantastic. Amazing. Wow. A moment to treasure and share. We sent a quick text to WFS friends who were in the neighbourhood and Anne and Dennis Kell zoomed over to enjoy the excitement with us. The seed capsules are six-pointed stars - we saw lots. The flowers have three white petals, shiny yellow at the base - we saw three flowers.

PondNet are conducting a Rare Plant Survey (just look on the Internet if you would like to take part) and we are now the registered recorders for Starfruit on Gerrards Cross Common. To help the seeds to germinate I think some targeted trampling in wellingtons around the pond margin may be in order!

JANET AND GWYNDAF JOHN

Starfruit
Black Park
August 2016

(Pity about the Pigmyweed! - Ed.)

Photo: Dennis Kell

A PLANT PORTRAIT

WOOD BARLEY
A "NEARLY ALWAYS" PLANT IN THE CHILTERNS

Any WFS members who live in or near the Oxfordshire (VC23) or Buckinghamshire (VC24) Chilterns, or who have botanised there, will be familiar with Wood Barley (*Hordelymus europaeus*, (L.) Jess. ex Harz). This graceful woodland grass has its UK heartland in hectads SU78, SU79, SU88 and SU89, very close to High Wycombe where I live. Indeed, in SU79 and SU89 I have recorded it for the BSBI in nearly every tetrad. Wood Barley is a Chiltern speciality and is VC24's commonest scarce plant. Elsewhere in the U.K. it genuinely does appear to be a scarce or rare plant, with recent records concentrated in the Gloucestershire Cotswolds, around Dorking, and to the SE of Sheffield.

Wood Barley is a tufted, short-lived perennial, growing to between 50 and 75cm, although happy plants will grow to well over 1m. It remains largely winter-green, but much of its foliage will die back. Flowering spikes are produced from mid to late summer and fruits persist until Autumn. After fruit has been shed, the pale buff-coloured spikelets remain. Late Autumn is the best time of year to look for the grass because it is so prominent and spikelets can be seen from over 50m away. Maybe the plant is under-recorded elsewhere because most botanists aren't very busy at this time of year?

The grass is thought of as typical of high-canopy Chiltern Beech woods on Chalk, but this is not so. True, we have plenty of Beech woods in The Chilterns, but Wood Barley is not always found there. Nearly always, though, but as we will see there are enough exceptions to cause some head-scratching.

Wood Barley Autumn spike X3

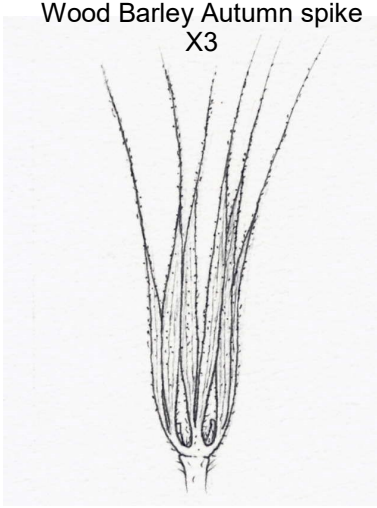


Illustration: Christine Grey-Wilson

Geographically, The Chilterns are an eastwards-dipping, deeply dissected Chalk plateau with a 150m high west-facing scarp face and long, steep-sided valleys draining eastwards. A 1-5m thick covering of clay-with-flints, often sandy, covers much of the plateau. There are two types of Beech wood in The Chilterns. Hanger woods grow on the scarp and are directly rooted on Chalk. They are floristically very diverse, and similar woods grow on sides of the valleys. Dip-slope Beech woods grow on the clay-with-flints. This is quite an acidic environment, and most of our woods are found

here. These woods are quite species-poor and dominated by Beech, often resulting from a monoculture for the furniture industry.

Field experience shows that the Wood Barley grows directly on Chalk at only five of the 119 sites where I have seen it. However, it is nearly always found around the break of slope where a thin veneer of sandy clay-with-flints overlies the Chalk. The aspect and steepness of the slope don't appear to matter. The biggest populations, sometimes comprising tens of thousands of plants, are found on the plateau where the clay-with-flints is maybe only one or two metres in thickness. A key observation is that drainage is always very good.

Beech woods are shady places, and Wood Barley nearly always avoids deep shade or completely open situations. Open woods with a high canopy and a density of mature trees around one per 15 or 20 metres are typical sites, but sometimes you can find the grass on the upper edges of green lanes passing through or at the edges of woods. Woodland management style and practice may have dictated the grass's distribution in the past, and it remains to be seen whether any changes in planting fashion after the Great Storm of 1987 will have an effect. However, one splendid colony is being encouraged by a gamekeeper to provide bird cover as well as food.

Wood Barley is considered to be an indicator of ancient woodland. Wycombe District has an area of 32,457 hectares, of which 2,746 hectares are defined as Ancient

Photos: Tim Harrison

Semi-Natural Woodland in their 2012 inventory. I have mapped its occurrence against the inventory of ancient woodland, and there is always a positive correlation. However, in a number of ancient woodlands it is not seen. Some of these woods have a long history of

management, but then again so do most of the sites where the grass can be found plentifully. A key observation is that sites where the grass is found nearly always have a rich ground flora, and this is the second clue which allows us to predict where to find Wood Barley. In some areas, Yellow Archangel (*Lamiastrum galeobdolon* ssp. *galeobdolon*) is an indicator plant; in some areas it is Giant Fescue (*Schedonorus giganteus*); in some areas it is a combination of Wood Millet (*Milium effusum*) and Bearded Couch (*Elymus caninus*), but never just these two species on their own; in some areas it is a combination of all or some of these, but occasionally none at all! Neither Wood Melick (*Melica uniflora*) nor Wood Meadow-grass (*Poa nemoralis*) are indicator species. Not only that, Wood Barley isn't always associated with Beech. True, we have a lot of Beech woods in The Chilterns, but the grass can be equally at home under Oak or Hazel. The biggest population of all is in a Larch plantation!

When I visit a site looking for Wood Barley it's usually easy to determine if it will be present or not. Firstly, is the wood generally flat-lying? If so, it's nearly always absent. Conversely, if the wood has any sustained breaks of slope, the grass may be present, but not always. Secondly, is the wood poorly-drained? If so, then is nearly always absent. Thirdly, are the woods dominated by Ash? If so, it's nearly always absent, and this becomes a near certainty when the woods are directly on chalk, especially if the ground flora is dominated by Dog's Mercury (*Mercurialis perennis*). Fourthly, is there a poor ground flora? If so, then it's nearly always absent. Despite these infuriating inconsistencies, once you get your eye in, it's easy to predict where to find the grass, and it's always a joy to come across a large colony. The best places to see the grass are in the wooded hills to the NW of Hambleden, particularly along the public footpaths near Barn Wood (SU772876) and Great Wood (SU765877), Ibstone Common (SU749938) where it grows under Oak, and most of the Beech woods NW of Stokenchurch, particularly Hawing Wood (SU759969) and Munces Wood near Marlow (SU846893). If you visit Fawley Church (SU753867) you can even see it growing under Yew in the graveyard!

The quirks of geography and geology I have discussed may help explain why the grass has such a restricted distribution in the U.K. Do come and visit The Chilterns in Autumn, not only for the colour in the leaves but also to see Wood Barley.

TIM HARRISON

Wood Barley, High Wycombe

"*MISTAKES ARE THE GROWING PAINS OF WISDOM*": A CASE OF MIS-IDENTIFICATION

How many of us are prepared to admit a degree of over-enthusiasm when attempting to identify an atypical plant in trying to make it something unusual or rare? Or perhaps, without question, entered a plant in our diaries just because that is what the leader said it was. If honesty prevails then I suspect most of us. Certainly for me this year it was an extremely softly velvet haired variant of Hedge Woundwort (*Stachys sylvatica*), which had clearly not read any edition of Stace or CTW, as the specimen collected keyed out convincingly to Limestone Woundwort (*S. alpina*); thankfully age and wisdom meant that logic prevailed.

Determination can be difficult, a persistence and healthy regard to good scientific doubt is often needed; hence the renaming of a hybrid horsetail on Anglesey from *Equisetum* x *trachyodon* (Mackay's Horsetail) to *Equisetum* x *meridionale* (no accepted common name yet), followed by the realisation that the same was true for all populations of that hybrid on the Wirral (Jepson *et al.* 2013). In this respect I support the notion of the name Wirral Horsetail for the hybrid as the peninsula overall holds by far the largest known population in the UK.

So back to the point. In 2011 Peter Llewellyn lead a Wild Flower Society field meeting in North Wales, finishing off at Pensarn Beach at Abergele, Denbighshire vice-county 50, (Cox, 2011). Although not reported in the meeting report, at the end of the day one of the group spotted a densely tussock forming sedge on the sea embankment adjacent to the car park. No one was able to offer an identification, its flowering spikes appeared sterile, with undeveloped utricles.

A specimen was collected by the finder, subsequent events are not known to me other than the specimen was determined and confirmed as the rare hybrid *Carex* x *ludibunda* J.Gray = *C. paniculata* L. x *C. canescens* L. The record was published in Stace, Preston & Pearman (2015) where it states, 'The latest record is from an anomalous habitat, the rear of the dry, sloping sea-wall at Abergele, Denbighshire, in 2011'. The hybrid is described in Jermy *et al.* (2007) as having a tussocky habit and differing from both parents in its often shrivelled and empty utricles. As happens the word got out and the plant was visited and diary entries made.

Fig 1. Abergele Sedge

In June 2013 whilst passing through Abergele with Peter Llewellyn, I was shown the sedge. At the time the plant comprised a dense tussock approximately 20cm diameter at its base, with poorly developed flowering spikes within the dense mass of leaves. In all other respects the plant looked healthy and a putative parentage involving *Carex paniculata* appeared obvious. (Fig 1)

However, for me as an Ecologist, a hybrid involving two wetland species, usually associated with different mire communities, occurring on a dry, south facing, artificial sea defence embankment was something of a contradiction. I found it difficult to comprehend how these two species had managed to hybridise and their progeny reach such a seemingly unlikely habitat.

On the 2nd June 2015 Peter Llewellyn and I lead a WFS meeting that involved a further visit to Pensarn Beach at Abergele. At this time I took the opportunity to collect a shoot with a small piece of rhizome for cultivation. This took readily in John Innes compost and grew well. By late summer it had produced further flower spikes, which by autumn had developed mature and full utricles. This immediately caused doubt over the accepted determination. The spikes appeared to have a close affinity with the *Carex divulsa* group and material was sent to Mike Porter for his opinion.

It was agreed that the late season growth may be atypical and it was decided to wait to make a further determination from the following year's growth. By late June 2016 the correct determination was becoming obvious, (Fig 2) this being confirmed by Mike Porter on the 26th July as *Carex muricata* subsp. *pairae* .


Fig. 2 Abergele Sedge

It is apparent that the plant's failure at Abergele (*in situ*) to develop mature fruit, giving the appearance of a hybrid with empty utricles, led to the initial determination. It is postulated that the dry salty environment coupled with free draining sand in which it grows, are the cause of the false impression of infertility.

If we need to draw a conclusion, surely it is that most of us are too hasty to accept a new rarity, rather let wisdom prevail and pose the question, are we really certain?

PETER JEPSON

References

Cox, J.2011.Field Meeting 2011.North Wales, Great Orme and Anglesey: June 8th-9th, *Wild Flower Magazine*, 482:34-37.

Jepson, p., Lubienski, M., Llewellyn, P. & Viane, R. (2013) Hybrids within *Equisetum* subgenus *Hippochaete* in England and Wales. *New J. Bot*. 3: 47-58.

Jermy, A.C., Simpson, D.A., Foley,M.J.Y. and Porter, M.S.2007. *Sedges of the British Isles*. BSBI Handbook 1, Edition 3. Botanical Society of the British Isles.

Stace, C.A., Preston, C.D. and Pearman, D.A. 2015.*Hybrid Flora of the British Isles*.Botanical Society of Britain and Ireland.

RECORDING FOR ATLAS 2020: THE OUTER ISLES OF ORKNEY

For a second season I travelled to the outer northern isles of Orkney from my base at the southern extremity of Orkney, in South Ronaldsay, to record for BSBI's Atlas 2020. This year I had one or two local botanists as companions and we targeted the islands of Westray and Eday. We spent two days on each island and managed to record in total five tetrads (2 x 2km^2) and some other bits and pieces.

Westray is about 16km roughly north-south by 2-4km east-west. It is an island of two halves, divided by a ridge of low hills dominated by the summits of Fitty, Gallo and Knucker Hills, which have some steep ground and rocky bluffs. The west is completely exposed to the Atlantic Ocean and here is a great expanse of maritime heath and grassland, most of it designated SSSI, bounded by high sea cliffs, culminating to the north at the towering Noup Head, an RSPB bird reserve. The more sheltered east is mainly productive farmland, with frequent small lochs and wetlands, patches of dune grassland and a varied coastline of low sea cliffs, rocky shores and sheltered sandy bays. The Old Red Sandstone that underlies the whole island is of a calcareous type.

On the maritime grassland dominated by Sea Plantain (*Plantago maritima*) and Thrift (*Armeria maritima*), Foula Eyebright (*Euphrasia foulaensis*) and Spring Squill (*Scilla verna*) were very frequent; Field Gentian (*Gentianella campestris*) was more of a surprise in the habitat. We looked hopefully, but in vain, for Marshall's Eyebright (*Euphrasia marshallii*), but it must have been somewhere because later we found E. *foulaensis x E. marshallii* (determined from specimens by Chris Metherell). Inland from the extreme coastal edge, hill slopes support wet heath with frequent flushes; Grass-of-Parnassus (*Parnassia palustris*) was patchily common, Few-flowered Spike-rush (*Eleocharis quinqueflora*), and Alpine Meadow-rue (*Thalictrum alpinum*) occasional in the flushes. On the drier grassland above, Field Gentian made a second appearance, along with Alpine Bistort (*Persicaria vivipara*), Arctic Eyebright (*Euphrasia arctica*) and Confused Eyebright (*E. confusa*). Among the rocks were Sea Spleenwort (*Asplenium marinum*),

Yellow Bartsia

Photo: Sue Grayston

Black Spleenwort (*A. adiantum-nigrum*) and Limestone Bedstraw (*Galium sterneri*).

Our second Westray tetrad had less land area but a greater variety of habitats. Again the west coast is extremely exposed, and with lower cliffs sea spray sweeps further inland, creating brackish pools and saltmarsh as much as 400 m from the shore, with species including Saltmarsh Rush (*Juncus gerardii*), Sea Milkwort (*Glaux maritima*) and Saltmarsh Flat-sedge (*Blysmus rufus*). Frog Rush (*Juncus ranarius*) was a good find here. A loch yielded six species of Pondweed (*Potamogeton*) and a new Orkney record in Rigid Hornwort (*Ceratophyllum demersum*). A cultivated field with sandy soil was good for weeds of cultivation, including Long-headed Poppy (*Papaver dubium*), Northern Dead-nettle (*Lamium confertum*) and Purple Ramping-fumitory (*Fumaria purpurea*).

In all, 232 taxa were recorded in the Westray tetrads, of which 24 were new.

Eday is a little to the south of Westray and is a bit smaller and more sheltered, but more importantly from the point of view of the flora, it is formed of a more acidic sandstone. Much of the island has a cover of heathland and bog, with farmland situated around the coasts. Our first tetrad was floristically quite dull, yielding only 118 taxa; Yellow Bartsia (*Parentucellia viscosa*), a rarity in the north, was the only highlight. The northern tetrads were richer, reflecting a greater variety of habitats, including sand dunes and dune heath. More notable species included locally abundant Allseed (*Radiola linoides*), Autumn Gentian (*Gentianella amarella* ssp. *septentrionalis*), Northern Yellow-cress (*Rorippa islandica*) and another new Orkney record in Narrow Male-fern (*Dryopteris cambrensis* ssp. *cambrensis)*.


Photo: Ken Southall

Sea Milkwort

In all, 207 taxa were recorded in the Eday tetrads, of which 45 were new. These were very worthwhile recording trips for Atlas 2020, and most enjoyable too. I am grateful to the Wild Flower Society for providing financial assistance to help with the expense of ferry travel. The outer isles are fairly well covered now, except for North Ronaldsay and some more difficult-to-access uninhabited ones. Westray needs some more attention still. If any WFS members are in Orkney in 2017 they would be most welcome to join in any recording trips. My contact details are on the BSBI website.

USEFUL RESOURCES

IDENTIFYING WILD FLOWER FAMILIES

The late Miles Kington pictured would-be wild flower enthusiasts as, "Wandering through the British countryside, a book in their left hand, a flower in their right hand, and a look of unhappy baffled terror on their faces". When I was a beginner, I experienced little such suffering, thanks to McClintock and Fitter's *Collins Pocket Guide to Wild Flowers.* This was ideal for my purposes, largely because all the illustrations were grouped by colour and because it covers so much more than other guides that have attempted to do the same. Though long out of print and with quite a few out-of-date Latin names, I would still recommend it for beginners. It is available second hand through Abe Books for less than £3, including postage.

Nowadays, most identification books arrange flowers by family. This presents difficulties for beginners, who will not know what family a plant belongs to and may, therefore, have to look through most of the book to find a helpful illustration. Some authors offer guidance on how to identify families, but not all. My own *Botany for Naturalists* (from Amazon) does it for the larger families, but is not comprehensive.

Faith Anstey's newly published *Pocket Guide to Wildflower Families* gives much wider coverage, including 50 families. It does this through an easy-to-use key, with description of the botanical knowledge needed to use it and definition of the botanical terms involved. It does all this in 37 pages approximately 14.5 x 10.5 cm (A6) in size. All pages are printed on card for hard wear and laminated to make them weatherproof, yet the thickness of the booklet is less than a centimetre, so it slips easily into a pocket. It is perfectly designed to take out into the field, where it is an invaluable aid to identification. It is available from www.wildflowerstudy.co.uk for £6.99, post free.

JOHN PRESLAND

WILD FLOWER SOCIETY WEBSITE

Peter Llewellyn has, over the years, developed a wonderful website for the Wild Flower Society. Here you will find details of our annual programme and, perhaps more importantly, updates to those meetings; lists of contacts; results of the photo competition and the images submitted; a list of all the British plants in a downloadable form – invaluable if you want to keep an electronic plant record; links to other botanical organisations and much more besides. Peter is very open to suggestions for items that you would like to see included on the website, so please do get in touch, his details are on the inside of the back cover. Our thanks go to Peter for all the time he devotes to maintaining this site.

ANNE KELL

ENGLISH SOLWAY COAST 1ST TO 3RD JULY

Friday, late afternoon, 1st July, Allonby:
Most of the group attending the two day Cumbria meeting gathered together at Judith and Peter's holiday chalet on Friday afternoon. We enjoyed tea and biscuits while waiting for a heavy shower to pass. Peter handed us maps and plant lists. The maps included some historical ones, which were particularly interesting as we were botanising some former industrial areas during the weekend and it was fascinating to see exactly what was on the land before they became the green areas they are now.

Once the rain moved off we set out for a walk along the sand dunes and the beck area. A very nice stand of Flowering Rush (*Butomus umbellatus*) was in the beck, and we found an interesting range of plants in the dunes including Isle of Man Cabbage (*Coincya monensis* ssp. *monensis*), Sea Radish (*Raphanus raphanistrum* ssp. *maritimus*), Sea Holly (*Eryngium maritimum*) and Prickly Saltwort (*Salsola kali*). Hoary Mugwort (*Artemisia stelleriana*) was a new plant for many of us and we finished the walk with the attractive pink and white flowered Sea Bindweed (*Calystegia soldanella*). We finished the evening with a delicious supper provided by Judith and Peter, much appreciated by us all.

PAULINE GRIMSHAW

Saturday 2nd July. Oldside, Maryport and Mawbray:
We drove to Oldside, near Workington, which is a former industrial area. There were slag banks projecting into the sea, remnants from the former steel works. The shingle area was rich in botanical finds including the beautiful Sea Holly (*Eryngium maritimum*) just coming into flower, the white form of Japanese Rose (*Rosa rugosa*), Sea Spurge (*Euphorbia paralias*) and clumps of Sea Kale (*Crambe maritima*) by now showing their globular green fruits. We were fortunate in seeing the unusual Sea Carrot (*Daucus carota* ssp. *gummifer*) with the succulent stems and saucer-shaped fruit umbels. It was exciting to find Silverberry (*Elaeagnus commutata*) with the silvery green scales on the berries.

We drove on to Maryport sea banks to see Yarrow Broomrape (*Orobanche purpurea*) with the bright bluish-purple flowers, a new plant for several of us. We walked along a disused railway track and the banks were jewelled with crimson Pyramidal Orchid (*Anacamptis pyramidalis*). We discovered two Pear trees almost joined at the hip, one being Wild Pear (*Pyrus pyraster*) and the other being Cultivated Pear (*Pyrus communis*); an unusual sight. We saw a bush of Spanish Gorse (*Genista hispanica* ssp *occidentalis*) with the appressed hairs on the leaves.

Our final destination was the Mawbray Bank Nature reserve, a heathland area lit up by vivid dark Cambridge blue Sheep's-bit (*Jasione montana*). Much discussion took place as to whether we found the rare Sand Leek (*Allium scorodoprasum*) as, in its fruit stage, it does resemble quite closely Crow Garlic (*Allium*

vineale). We were delighted to find Peruvian Lily (*Alstroemeria aurea*), unfortunately still in bud. Nearby were large leaves of a Montbretia (a *Crocosmia* species). Many thanks to Judith and Peter for organising a brilliant day.

JAN ARMISHAW

Sunday 3rd July. Glasson Moss and Finglandrigg Wood:
Glasson is the best intact mire in the UK at 600 acres. The ex-Warden, Frank, led us round giving the history of the Moss. Between 1948 and 1954 it was used for peat digging and has been gradually restored. Archaeologists think that the pools were used for retting hemp. There was a serious fire in 1976 but by 1985 it had recovered. Health and safety instructions were strict – follow in single file. We certainly needed our wellies!

We walked through areas of White Beak-sedge (*Rhynchospora alba*), Common Cottongrass (*Eriophorum angustifolium*) and Bog-myrtle (*Myrica gale*), once used to flavour beer, to reach the very wet area where Frank had marked out a route with yellow poles. We found all three Sundew (*Drosera*) species: Round-leaved Sundew (*D. rotundifolia*), Oblong-leaved Sundew (*D. intermedia*) and Great Sundew (*D. anglica*). The small, white flowers contrasted with the densely glandular, reddish leaves fringed with sticky hairs. The flower stalk of Oblong-leaved Sundew arose beneath the rosette of leaves whilst that of Round-leaved Sundew rose from the centre of the rosette. (See key on central pages.) I was pleased to see the distinctive foliage of the rare Bog-rosemary (*Andromeda polifolia*), whilst Bog Asphodel (*Narthecium ossifragum*) gave a carpet of yellow flowers (apparently, if over grazed, animals will develop brittle bones). We were shown Hybrid Deergrass (*Trichophorum* x *foersteri*) – the hybrid between Northern Deergrass (*T. cespitosum*) and Deergrass (*T. germanicum*). We were very grateful to Frank and his wife for showing us round and also to have dry weather for such a boggy and exposed area!

We drove to Finglandrigg Wood for lunch under the trees. This is a National Nature Reserve – a mosaic of woodland, peat bog, heathland and rough pasture. As we entered the wood we spotted an unusual Honeysuckle (*Lonicera periclymenum* var. *hirsuta*), with no red markings and little smell. Here we could compare three ferns: Lady-fern (*Athyrium filix-femina*), with its indusium shaped like a comma, Soft Shield-fern (*Polystichum setiferum*), with spiny tips on the pinnule teeth and Broad Buckler-fern (*Dryopteris dilatata*), with a dark chocolate stripe on its two toned scales at the base of the leaf. Our main aim was to find the three species of Gorse (*Ulex*). We soon came across Gorse (*U. europaeus*), with its distinctive bracteoles (illustrated in “Rose” p.269 and “Harrap” p.364). We could identify Dwarf Gorse (*U. minor*), with its much smaller growth, but we could not find Western Gorse (*U. gallii*). We enjoyed fields of Common Spotted-orchid (*Dactylorhiza fuchsii*) whilst we walked back in the rain to the car park. Many thanks to Judith with Peter for arranging to visit such stimulating habitats.

PRISCILLA NOBBS

KEY TO SUNDEWS

Round-leaved Sundew

Oblong-leaved Sundew

Sundews are unusual insect-eating plants, which usually grow in wet, acid, peaty places with little shade. Their leaves form a basal rosette and are an attractive reddish colour and covered in sticky hairs, which trap insects. Their flowers are small and white, with 5-8 sepals, petals and stamens. They open one at a time on simple leafless stems. There are three species of Sundew found in the UK and two hybrids.

Round-leaved Sundew (*Drosera rotundifolia*) is the most common and is found on the margins of peat bogs and sides of *Sphagnum* hummocks.

Oblong-leaved Sundew (*Drosera intermedia*) prefers drier habitats such as peaty banks and bare exposed peaty mud on lake margins.

Great Sundew (*Drosera anglica*) is much rarer. It likes wetter more nutrient-rich sites, including base-rich fens and is more vulnerable to drainage. It grows in rosettes but is stouter and taller than the other two Sundew species.

Great Sundew

Photos: Peter Cox

	leaf shape	leaf size	leaf stalk	flower stalk	Petal length	flowering period
Round-leaved Sundew (***Drosera rotundifolia***)	usually broader than long, orbicular	<1 cm long, flattened against ground or raised up to 30^0 to horizontal	flattened +/- hairy < 4 cm	slender, longer than leaves and arises centrally 10-25 cm	5 mm	June-August
Oblong-leaved Sundew (***Drosera intermedia***)	+/- 3 times longer than wide, spathulate	<5 cm long, held erect	elliptical +/- hair-less < 3.5 cm	thick, +/- 2 times leaf length, arises from below and to side of rosette and curves up 5-10 cm	4-5 mm	June-August
Great Sundew (***Drosera anglica***)	+/- 6 times longer than wide, oblong	usually >3 cm long, raised up 40-90 degrees	flattened hairless 1-7 cm	slender, +/- 5 times leaf length and arises centrally 18-30 cm	6 mm	July-August

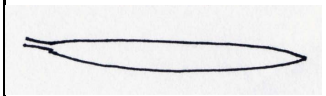
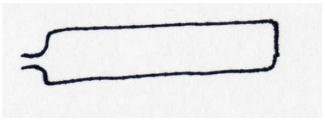
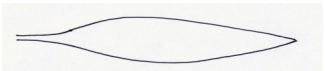
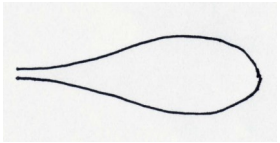
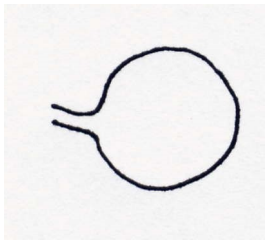
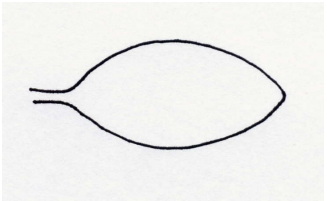
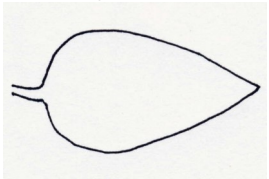
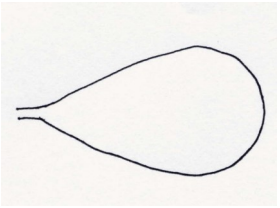
Drosera rotundifolia x *D. anglica* = *D.* x *obovata* has leaves similar to *D. intermedia* but has a straight, centrally arising flower stem and is sterile. It can show hybrid vigour. It is rare but scattered over much of western Britain and Ireland especially north-west Scotland and east Norfolk.

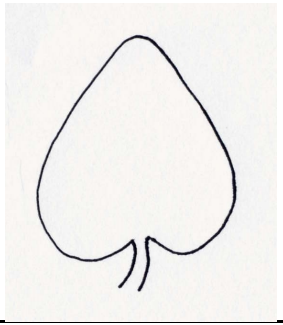
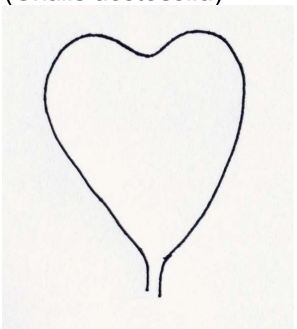
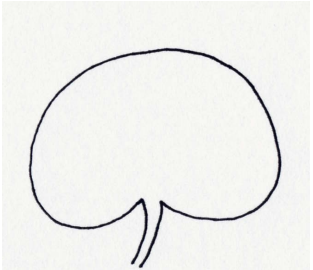
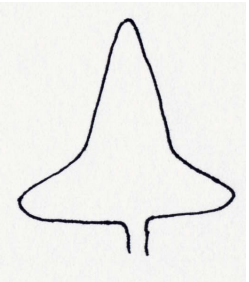
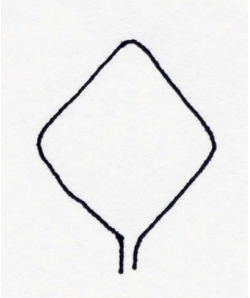
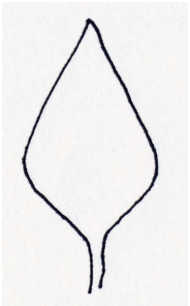
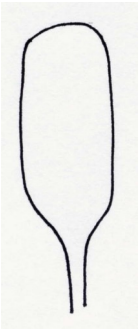
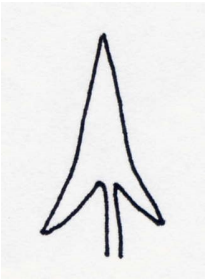
Drosera rotundifolia x *D. intermedia* = *D.* x *belezeana* has a leaf shape close to *D. rotundifolia* but it has curved lateral flower stems and is sterile. It tends to be more vigorous than its parents. The leaves are densely packed and held at an angle of 60º-80º from the ground. It is found in south Hampshire and on Godlingston Heath, west of Agglestone in Dorset.

JUDITH COX

SIMPLE LEAF SHAPES

The terms below refer to the outline leaf shape of simple leaves or a single leaflet of a compound leaf. They take no account of particularities of the shape at the tip and base of a leaf. This is not an exact science and even the authors of most flora hedge their bets by using combinations like 'ovate-cordate' and 'oblong-lanceolate'.

Linear – very narrow, much longer than wide, with parallel margins e.g. Rosemary (*Rosmarinus officinalis*) 	**Oblong** – 2-3 x longer than wide, with parallel margins (at least in central part) e.g. leaflets of Hairy Tare (*Vicia hirsuta*) 	**Lanceolate** – narrower than ovate, at least 6 x as long as broad, widest below the middle, gradually tapering to a point at the apex e.g. Ribwort Plantain (*Plantago lanceolata*) 	**Oblanceolate** – narrowly obovate, widest above the middle and tapering to the base e.g. leaflet of Horse- Chestnut (*Aesculus hippocastanum*) 
Orbicular – circular in outline e.g. Navelwort (*Umbilicus rupestris*) 	**Elliptic** – widest in the middle and rounded at the two ends e.g. Beech (*Fagus sylvatica*) 	**Ovate** – egg-shaped, about 1.5 - 3 x as long as broad, widest below the middle e.g. Enchanter's-nightshade (*Circaea lutetiana*) 	**Obovate** – egg-shaped but with widest part above the middle e.g. Great Lettuce (*Lactuca virosa*) 

Cordate – heart-shaped; ovate with a notched base and pointed apex e.g. Sweet Violet (*Viola odorata*) 	**Obcordate** – heart-shaped, obovate with a notched apex and pointed base e.g. Wood Sorrel (*Oxalis acetosella*) 	**Reniform** – kidney-shaped e.g. Marsh Marigold (*Caltha palustris*) 	**Hastate** – triangular shape, like a spear head, with two triangular lobes pointing outwards e.g. Field Bindweed (*Convolvulus arvensis*) 
Rhombic – diamond shape with the petiole from one of the acute points e.g. Fat-hen (*Chenopodium album*) 	**Trullate** – shaped like a bricklayer's trowel, widest near the base and angled e.g. Frosted orache (*Atriplex laciniata*) 	**Spathulate/Spatulate** – shaped like a spatula, oblong with an extended base e.g. Daisy (*Bellis perennis*) 	**Sagittate** – triangular shape, like an arrow, with two acute lobes pointing downwards e.g. Arrowhead (*Sagittaria sagittifolia*) 

NORFOLK MEETING 12th – 13th JULY

DAY 1 - BEESTON REGIS AND SHERINGHAM COMMONS, BEESTON BUMP

A party of twenty was met by Sheila Wynn (WFS General Secretary), Bob Ellis (VC 27 Recorder) and Francis Farrow (Honorary Warden of the Reserve) at the entrance to the Commons. We were soon enjoying the delights of plants such as Marsh Fragrant-orchid (*Gymnadenia densiflora*), Marsh Lousewort (*Pedicularis palustris*) and Fen Bedstraw (*Galium uliginosum*), as well as a host of rushes. Bob then pulled out some greenery from a pond and showed us the distinctive fruits of Horned Pondweed (*Zannichellia palustris*). Meadow Thistle (*Cirsium dissectum*) and two species of Sundew (*Drosera*), among many other species, made a fitting prelude to the highlight of the morning, Crested Buckler-fern (*Dryopteris cristata*). This was thriving alongside its congener Narrow Buckler-fern (*D. carthusiana*), and we were also shown the hybrid between the two, *D.* x *uliginosa*.

Lunch was taken at a high point of the Reserve, offering fine views of Beeston Bump and beyond towards Sheringham Shoal. On the way back to the cars we saw some Dodder (*Cuscuta epithymum*) growing on gorse above head height, some of the party remarking that they had never seen higher Dodder.

On the lower slopes of Beeston Bump, Francis found, what was for me, the highlight of the afternoon, Purple Broomrape (*Orobanche purpurea*) and near the summit there were fine specimens of Knapweed Broomrape (*Orobanche elatior*) and also Sand Catchfly (*Silene conica*). There had been much scratching of heads over the identity of an alien blue flower seen on the way up, but on the way down Marion Chappell immediately recognised it as Triplet Lily (*Triteleia laxa*), which she has in her garden.

As we drove away, the heavens opened to show us how lucky we had been with the weather. Many thanks to Sheila, Bob and Francis for all their help and guidance on a superb day's botanising.

ADRIAN MYLWARD

DAY 2 - UPTON FEN

Under threat of heavy showers and with Bob Ellis as our leader we set off down paths between reed-fringed dykes passing clumps of Great Fen-sedge (*Cladium mariscus*), with its fiercely serrate edges and Greater Tussock-sedge (*Carex paniculata*) forming very large tussocks.
Growing tall among the reeds we found Yellow Oxeye (*Telekia speciosa*) probably escaped from the only nearby garden.
Marsh Fern (*Thelypteris palustris*) grew everywhere and Purple Small-reed (*Calamagrostis canescens*) showed green among the reeds with its hairy upper-side overturned and pale green under-side on top.
Brown Sedge (*Carex disticha*), Common Sedge (*C. nigra*), Fibrous Tussock-sedge (*C. appropinquata*), Common Yellow-sedge (*C. demissa*) and Flea Sedge (*C. pulicaris*) were all present along with plenty of orchids.

Early Marsh-orchid (*Dactylorhiza incarnata*) and Southern Marsh-orchid (*Dactylorhiza praetermissa*) were still flowering. Bristle Club-rush (*Isolepis setacea*) grew on the paths and we were able to examine the tiny fruits with longitudinal ridges to compare them with the fruits of Slender Club-rush (*Isolepis cernua*) that we had seen the previous day which were matt without ridges.

As we came to an open cleared area to each side of the path we found several stems of the fruiting Fen Orchid (*Liparis loeselii*), kindly marked with white canes. As we were leaving this area Kerry Harrison spotted one small flowering Fen Orchid, not marked by a cane, which was a real bonus for those of the group for whom this was a first.
We continued along the reed-fringed paths and crossed the narrow plank over the dyke for lunch with only one person missing their footing and, as we sat down on well-arranged planks for lunch, the binoculars came out for the Marsh Harrier flying around. For some people there was even the blue flash of a Kingfisher.
After lunch, we continued alongside the ditch, with a distant view, from a raised platform, of the open water of Upton Broad and found many wetland plants, including Water Dock (*Rumex hydrolapathum*), Skullcap (*Scutellaria galericulata*), Milk-parsley (*Thyselium palustre*). From the ditch itself, Bob fished out Fat Duckweed (*Lemna gibba*) and the new invader, Red Duckweed (*Lemna turionifera*). Then, as one of the “possible heavy downpours” burst upon us with a vengeance, we made our way through the alder carr woodlands in the direction of the car park. We kept to the path, because some areas of the quaking marsh can be treacherous, as one member found to her cost when she stepped on an innocuous bare patch and disappeared up to her knees in the fen below. It took two people holding on and one grabbing her wellington boot to pull her out, which goes to illustrate just how careful one must be.

There is always a certain magic about the silence of the fens and it was a truly enjoyable day.
Thank you, Bob.

MARION CHAPPELL

After the storm
Upton Fen

Photo: Dennis Kell

ONE DAY MEETINGS 2016

FOREST OF DEAN, GLOUCESTERSHIRE 19TH JULY

This was a joint meeting with Herefordshire Botanical Society and nine of us gathered at New Fancy former colliery where, climbing up an old spoil heap to the view point, we were rewarded with Lesser Centaury (*Centaurium pulchellum*), Large Thyme (*Thymus pulegioides*) and Lesser Calamint (*Clinopodium calamintha*).

We then visited an adjacent spoil heap where Bishop Pine (*Pinus muricata*) grows and noted Knotted Clover (*Trifolium striatum*) growing in the flat grassland on the way. We continued to the steam railway station at Norchard to look at Fragrant Agrimony (*Agrimonia procera*) and Upright or Tintern Spurge (*Euphorbia stricta*).

The final stop was at Cannop Ponds, where the only known stand of Wood Horsetail (*Equisetum sylvaticum*) in the forest was admired, along with Lemon-scented Fern (*Oreopteris limbosperma*).

CLARE AND MARK KITCHEN

ALDER CARR FARM, NEEDHAM MARKET, SUFFOLK. 24th JULY

In 1981, WFS member Joan Hardingham and husband Nick bought part of a derelict mixed dairy and pig farm in the Gipping Valley to raise their family and grow fruit and vegetables alongside grazing animals for the local market. Since then, the family have grown up and now help run the business, which still supplies local produce through the farm shop, grazes Suffolk Red Poll cattle and houses various craft outlets.

Having opened their farm for us to visit, Joan and Nick had just left for an exciting adventure with VSO to develop a farm in Uganda, but daughter and Ice Cream Supremo, Stephany, made us very welcome, guiding us around the arable fields near the river and up onto the chalky ground before lunch, spent seated beside three curious Tamworth hogs. During the afternoon, and having sampled a diverse range of ice creams, we explored the nature trail past the pond, across pasture and through the wet, alder carr woodland, after which the farm is named.

Some of the highlights included Sharp-leaved Fluellen (*Kickxia elatine*) and Pyramidal Orchid (*Anacamptis pyramidalis*), on the chalky arable fields. Japanese Lantern (*Physalis alkekengi*) was discovered hiding in a hedgerow between fields and although it was in flower, it had yet to develop its bright red lanterns. Amongst the grazing fields, Common Cudweed (*Filago*

vulgaris) grew almost as a carpet. Although nationally declining and classed as Near Threatened, this is a relatively frequent species in Suffolk. With one notable exception, our group comprised eleven intermediate botanists who were all keen to learn. This meant that books were open all along and frequent reference was made to the keys. In fact, this made the day extremely useful for all involved as we learned to confirm the identity of plants found and took nothing for granted. Confidence in the use of keys grew as the day wore on. Our thanks to Stella Taylor for her patient guidance.

The temperature also grew as the day wore on, reaching the upper twenties and boasting ten hours of sunshine. It was not only the plants that were wilting, but interesting tales and useful mnemonics kept us on our toes. It is thought, for example, that Gypsywort (*Lycopus europaeus*) may have acquired its name as the Romany people used it to stain their skin, maintaining the "swarthy complexion" for which they were renowned. Apart from studying its staminodes, Water Figwort (*Scrophularia auriculata*) can sometimes be recognised from its cousin Common Figwort (*S. nodosa*) by having two leaflets attached to its lower leaves – "Water Figwort has Water Wings." Many people, of a certain age, recognised the smell of "Germolene" from the crushed stems of Meadowsweet (*Filipendula ulmaria*). Apparently, it was one of the first plants from which a pain-reducing substance was extracted in 1834 by a Swiss pharmacist; a precursor to Aspirin.

In total, we recorded 201 species, which we considered a good haul. Our thanks to Alder Carr Farm for making us so welcome and to all members, who travelled to join us, for a very enjoyable and informative field meeting.

DENNIS KELL

BRADWELL-ON-SEA: SHELL BEACH 27th AUGUST

As I drove with my cousin, Melvin, to this remote corner of Essex I wondered if any WFS people would come. Well, Dennis and Anne Kell did – by BOAT! Is this the first for a WFS meeting? They sailed from Ipswich to Bradwell Waterside. Graham, from Chelmsford also came, plus Ken Adams (joint leader) and Tim, from Essex Field Club. John, who regularly checks on wild flowers at the Othona Centre (a Christian Community started after WW2 to encourage reconciliation between Britain and Germany) completed the party. Othona was one of the Roman Forts of the Saxon Shore.

We walked from the car park to St. Peter's-on-the-Wall, a Saxon Chapel built on the western wall of the Roman fort. Tim pointed out a rare lichen, *Ramalina canariensis*, at its only Essex site, growing on the wall. We dropped down on to the marshes of the Nature Reserve. The tide was

out. There was lots of Common Sea-Lavender (*Limonium vulgare*). Ken asked us to look out for Lax-flowered Sea-Lavender (*L. humile*), with its flowers spaced further apart on the stem. This is becoming rare now that the sea walls are being raised. There was a wealth of saltmarsh plants including Common Cord-grass (*Spartina anglica*), the wonderful yellow flowers of Golden-samphire (*Inula crithmoides*), Sea-purslane (*Atriplex portulacoides*), Common Glasswort (*Salicornia europaea*), and Perennial Glasswort (*Sarcocornia perennis*), a speciality of the Essex marshes. Annual Sea-blite (*Suaeda maritima*) together with the rarer Shrubby Sea-blite (*Suaeda vera*), and the late-flowering Sea Aster (*Aster tripolium*) were also found.

We sat on a shell ridge for lunch – Tim was puzzled by the plants we hadn't found. They all turned up later as we made our way north from shingle to sandy areas – Sea Rocket (*Crambe maritima*), Prickly Saltwort (*Salsoli kali*), Sea Sandwort (*Honckenya peploides*), Rock Samphire (*Crithmum maritimum*) and Sea-holly (*Eryngium* maritimum). Sea Spurge (*Euphorbia paralias*) was an unexpected find for Essex. John suddenly noticed one Lax-flowered Sea-Lavender (*Limonium humile*) growing behind the sea wall. We also found Sea Clover (*Trifolium squamosum*) and Sea Wormwood (*Artemisia maritima*).

Dennis and Anne continued along the sea wall to reach their boat whilst we returned to Othona for tea. John showed us the Pennyroyal (*Mentha pulegium*) which appeared in the late 1990's – we think the American form.

I am very grateful to Ken Adams for helping me out with this walk, the rain stayed away, and we all enjoyed the day.

PRISCILLA NOBBS

The group on Shell Beach

Photo: Anne Kell

BRANCH N3 MEETINGS

The Branch received eleven new members during the year. They included one person who saw our Waitby Greenrigg meeting advertised on the web site and turned up unannounced. She thoroughly enjoyed the meeting remarking how friendly we all were and consequently joined the Society.

Eleven members came on the Spring Hunt at Pennington Flash. This site is a relic of coal mine workings and is now an excellent Country Park. The morning started with rain which cleared, enabling us to eat our lunch in the dry. The reliable Snowdrop *(Galanthus nivalis)* and Lesser Celendine *(Ficaria verna)* were found. We also managed to locate Chokeberry (*Aronia melanocarpa)*, a member of the Rosaceae family; found originally in 1996 for Atlas 2000. However, the plant was in fruit. I understand this is popular with birds.

Seven members attended our meeting in May, which started at Halton Station, east of Lancaster. We then walked along the old railway line to the Crook o' Lune and back by the River Lune. The highlights on this meeting were Moschatel or Townhall Clock (*Adoxa moschatellina*), Wood Millet *(Milium effusum)* and Dutch Rush (*Equisetum hyemale).*

Our June get together was in the form of a recording meeting. 14 members met at Whitegate Station, Winsford. After a short walk along the railway we soon spotted the hybrid Campion (*Silene latifolia* x *S.dioica* = *S*. x *hampeana*). and Wood Forget-me-not (*Myosotis sylvatica*). Graeme Kay pointed out an identification feature of the latter, this being the sub-marginal veins on the mature leaves which do not occur on Field Forget-me-not (*Myosotis arvense*). The highlight of the day was to find Round-leaved Wintergreen (*Pyrolia rotundifolia* ssp. *rotundifolia*) this was a first for Cheshire.

Waitby Greenrigg is well known for its many Orchids and this was the venue for our July meeting. Immediately we entered the Reserve seven members started searching the banking of this disused railway for the many limestone-loving plants growing there. One puzzled us until we realised it was Sea Plantain *(Plantago maritima).* Before we knew, over an hour had elapsed, so we decided to have lunch soaking up the sun. Other plants found were Marsh Fragrant-orchid (*Gymnadenia densiflora*), Common Spotted-orchid (*Dactylorhiza fuchsii*) and Hoary Plantain (*Plantago media*). Pat Lockwood's keen eyes soon spotted Pepper Saxifrage *(Silaum silaus)*, an umbellifer with yellowish petals.

The year ended with our Autumn Hunt to Crosby Dunes, Merseyside. Another rainy start but the eleven members were not disheartened. Our first plant was Sea Couch (*Elytrigia atherica*), quite rare in these parts now, as the hybrid has taken over. We found a good stand of French Lavender *(Lavandula stoechas)* on the Dunes for Parnassus members. Sweet Alison *(Lobularia maritima)* was frequent and the Isle of Man Cabbage *(Coincya monensis* ssp. *monensis)* was performing well.

JULIE CLARKE

CAMBRIDGE SEPTEMBER 17TH

Meeting at the Newmarket Road Park and Ride on the eastern edge of the town, twenty members had come to see a selection of the rich alien flora that this city has to offer and they were not to be disappointed.

We began our botanising in an exposed location next to the airport where Bermuda-grass *(Cynodon dactylon*) was just managing to stay upright. Moving on along Newmarket Road we were shown Chinese Barberry *(Berberis julianae)* bird-sown in a hedge and Musk Stork's-bill *(Erodium moschatum)* on the adjoining road verge. In the Newmarket Road cemetery, Manna Ash *(Fraxinus ornus)* and the hybrid Ragwort *Senecio cineraria* x *Senecio jacobaea* = *Senecio x albescens* were then duly scrutinised with hand lenses. The adjoining pavements and waste ground revealed a diverse assemblage of alien grasses which included Rescue Brome (*Ceratochloa cathartica),* Cockspur (*Echinochloa crus-galli*), Yellow Bristle-grass *(Setaria pumila*) and the distinctive Hairy Finger-grass (*Digitaria sanguinalis*).

Continuing towards Coldham's Common we encountered Vilmorin's Cotoneaster *(Cotoneaster vilmorinianus)*, bird-sown around some tennis courts and the twin-headed Shetland Mouse-ear-hawkweed (*Pilosella flagellaris* ssp. *flagellaris*) flowering in the mown front lawns of several properties further along the road. On the Common, the identification of the hybrid dock *Rumex conglomeratus* x *Rumex pulcher* = *Rumex* x *muretii* was much debated and Common Purslane *(Portulaca oleracea)* was found growing along the edge of a surfaced area. Although no longer in flower by mid-September, it was displaying very characteristic black seed pods.

Emerging onto Cambridge streets again, on the other side of the Common, we added another alien grass to our list, this time Green Bristle-grass *(Setaria viridis).* We were also shown Blue Passion–flower *(Passiflora caerulea)*, which can be found self-sown in a handful of locations in the city. We were lucky to catch this plant in full flower before stopping for lunch in the pleasant surrounds of Mill Road Cemetery. The cemetery produced records of two conifers, self-sown Cedar of Lebanon (*Cedrus libani*) and Chinese Thuja (*Platycladus orientalis*), and a birch, considered to be *B. pendula* x *B. utilis*. Our third *Setaria* species of the day Rough Bristle-grass *(Setaria verticillata*) came just after lunch, which allowed us the chance to compare characters with the two found earlier. The pavement cracks once again proved to be a productive hunting ground containing Black Nightshade *(Solanum nigrum* ssp. *schultesii*), Lovage *(Levisticum officinale*), Gallant-soldier *(Galinsoga parviflora)*, Four-leaved Allseed *(Polycarpon tetraphyllum)* and Pink-headed Persicaria *(Persicaria capitata*).

Now making our way towards Christ's Pieces we were treated to the spectacular Witch-grass *(Panicum capillare),* which justifiably received much admiration. The group then

gathered on Castle Street, outside the pub, to look at Membranous Nettle *(Urtica membranacea)* and the Fern-grass *(Catapodium rigidum* ssp. *majus).* We then made our way between several of the Cambridge colleges, picking up Dartford Cotoneaster *(Cotoneaster obtusus)*, Black Mulberry *(Morus nigra)* and a very robust example of Pale Galingale *(Cyperus eragrostis)* gaining a foothold in a road gutter.

Now late afternoon, we made our way back towards the town across Coe Fen, where we saw Bois's Cotoneaster *(Cotoneaster boisianus)*, the statuesque climbing rose Himalayan Musk Rose *(Rosa brunonii*) and Yellow-flowered Teasel *(Dipsacus strigosus)*, which enjoys something of a stronghold around Cambridge. Many thanks to Alan for sharing with us his extensive knowledge of Cambridge's remarkable alien flora and for a very interesting and enjoyable day.

NICOLA DIXON

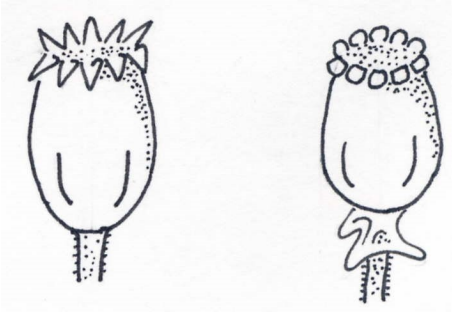
AUTUMN ONE DAY HUNT, COLCHESTER, ESSEX 29TH OCTOBER

It was a warm and sunny day as 11 intrepid botanists turned out for Branch Y's autumn one day hunt. Due to the nearness to Halloween it had been decided it was safer to venture out before the 31st. Suitably attired and full of enthusiasm we set off along the River Colne to see what we could find. Our leader, Dr Stephen Clarkson, informed us that the area is called The Hythe and it's possible to walk all the way to Fingringhoe (a local wildlife centre) from there. This was an eye opener. I've been going to Fingringhoe for years and never realised quite how close it was to Colchester. The walk took us through diverse habitats with some riverside, grassland and roadside, near to disused industrial warehouses.

We managed to find 80 species still in flower, the most notable of which were a rayless form of Sea Aster (*Aster tripolium* var. *flosculosus*), which seems to be fairly common around our eastern coastline. We found Least Yellow-sorrel (*Oxalis exilis*), which looks very much like the common Procumbent Yellow-sorrel (*O. corniculata*), except Least Yellow-sorrel has 5 stamens with anthers and 5 without, whereas Procumbent Yellow-sorrel has anthers on all 10 stamens. Both grow in similar places, so it's one to look out for. We found a Sea-spurrey in flower and once we had seen its large seeds all surrounded by wide wings we knew we had Greater Sea-spurrey (*Spergularia media*). There was much discussion over a specimen of Hoary Mustard (*Hirschfeldia incana*) as it is so similar to Black Mustard (*Brassica nigra*). It can be distinguished from Black Mustard by its fruit having a distinct swollen beak which usually contains at least one seed whereas Black Mustard fruit is narrowly conical to linear and its beak has no seed inside it. If you have a very immature fruit, like we had, make sure you have a sharp knife, nerves of steel and lots of patience. Some Brassicaceae fruits are shown on page 415 of the third edition of Stace.

As usual, Stephen was a fount of information, teaching us not just

about the plants we found in flower but even those that had long since gone over. We were told that the way to reliably tell whether you had found White Campion (*Silene latifolia)* or Red Campion (*S.dioica*) just by the dead seed capsule is to look at the teeth surrounding the top of the capsule. If they point upwards then it's white, if they are recurved then its red. Lots of w's = white, recurved = red. Also, the difference between White Campion and Night-flowering Catchfly (*S. noctiflora*) is that white campion is either male or female but night flowering catchfly has both stamens and stigmas inside the same flower.



White Campion Red Campion Seed Heads

Illustration: Hilli Thompson

Believe it or not but we all nearly walked right under Giant Knotweed (*Fallopia sachalinensis*). It was hiding in plain sight in a hedge full of hazel. Stephen had heard it grew there and pointed out the distinctive cordate base to its leaves, which is one difference from Japanese Knotweed (*Fallopia japonica*) whose leaves have flat bases. Japanese knotweed is one of the world's worse invasive weeds because of its ability to come up through concrete, often into peoples' houses. Luckily Giant Knotweed is much better behaved.

As usual we all had a really good time of botanical fellowship and teaching. Roll on next year. Thanks to Stephen and everyone who turned up to make it such a good day.

SUE GRAYSTON

2016 AUTUMN WEEK HUNT

Unfortunately my old email address was printed in the Autumn Magazine and consequently Ro FitzGerald and Simon Leach's lists did not reach me. They were good enough to contact me after seeing the report in the Winter Magazine, for which I am grateful.

Ro FitzGerald	Somerset	204
Simon Leach	Somerset	similar

Ro and Simon were together most of the week and really boosted up the total for the Autumn Hunt seeing 17 plants no other member saw. Some of these were Angelica *(Angelica sylvestris)*, Wild Celery *(Apium graveolens)*, Meadow Barley *(Hordeum secalinum)* and Pale Flax *Linum bienne)*. This makes the total now 538. Ro believes this year is her personal best. She says there were red berries everywhere and the Fieldfares were enjoying a feast.

JULIE CLARKE

RECORDING FOR ATLAS 2020: COUNTY CORK

Thanks to a very generous Wild Flower Society grant I spent an enjoyable few weeks in the very north of County Cork recording the plants of the area for the next Atlas of Britain and Ireland. This is a short report of my main findings in an area that many people think is a rather boring part of the county. Could I prove them to be wrong?

My first visit was in late April, timed to record spring species that might be missed later in the year. As I arrived at Fermoy and got out of the car to stretch my legs, I was confronted with my first new native species for Cork, the diminutive Lesser Chickweed (*Stellaria pallida*), two plants in a small front garden. It was growing with Sea Mouse-ear (*Cerastium diffusum*), two coastal species 30km inland from the nearest coast. Crested Field-speedwell (*Veronica crista-galli*) was a weed of several road verges in Fermoy and for some reason this non-native Speedwell turned out to be exceptionally common in parts of Cork. I found Hidcote Comfrey (*Symphytum* x *hidcotense* 'Hidcote Blue'), a garden throw-out and new species for the county at three places and Tuberous Comfrey (*Symphytum tuberosum*), known from only two sites, was another good discovery. But my best find consisted of many clumps of Wood Fescue (*Festuca altissima*) in rocky woodland above the River Blackwater on the east side of Mallow. If you want to read more about its distribution and ecology in the British Isles, a species account is available on the BSBI website http://bsbi.org/species-accounts.

In May I spent an enjoyable two days on Cape Clear, one of the many islands off of the Cork coast. Jim FitzHarris joined me to brush up on his botany and we covered as much of the island as possible, searching for the rare species known here. Bird's-foot Clover (*Trifolium ornithopodioides*) was common along the centre of the narrow roads and Bird's-foot (*Ornithopus perpusillus*) was seen on one small rocky area. Some searching had to be done on a lane side wall to see Lanceolate Spleenwort (*Asplenium obovatum*) hiding behind the overhanding vegetation. Dotted Sedge (*Carex punctata*) put on a wonderful display at the base of a cliff on the side of a road. All are very rare species in Ireland. It was nice to see a rare form of Bush Vetch (*Vicia sepium* var. *ochroleuca*) which has cream flowers that turn orange with age. Noticing before setting out that the BSBI had no records from the very southern tip of Cape Clear, the only land in the hectad V91, and liking a challenge, I made a special effort to record as many species as possible here. We managed 60, not bad on steep, rocky and inaccessible sea-cliffs with very few areas we could walk with safety. But it did rather take its toll and I left Cape Clear feeling exhausted and, perhaps unexpected for those of you unfamiliar with the glorious weather of County Cork, sunburnt!

Making my way through east Cork after the exploits of Cape Clear, I did lots of quick spot recording and each time I spotted a species I hadn't yet

recorded I stopped to make a list. This included Two-spined Acaena (*Acaena ovalifolia*), Great Brome (*Anisantha diandra*) and Butterbur (*Petasites hybridus*). Stopping on the side of the N25 between Carrigtohill and Midleton to see where I was on the map, I happened to park by nine Bee Orchids (*Ophrys apifera*). However, the find of the day was at Lisgoold where I stopped at the shop to pick up some much needed chocolate. On the west bank of the R626, I added the only new species to my lifetime list from Cork; one clump of the very rare hybrid sedge - Prickly Sedge *x* Grey Sedge *(Carex muricata* ssp. *prairae* x *C. divulsa* ssp. *divulsa*.

Bee orchid

Photo: Anne Kell

In July I visited Cork Docks to record the rare aliens that turn up there when the ships off-load grain. This site has added numerous new species to the Cork list over the years. Here I found Common Fiddleneck (*Amsinckia micrantha*) and Loose Silky-bent (*Apera spica-venti*), both of which I had never seen in Ireland before. Narrow-leaved Ragwort (*Senecio inaequidens*), a ragwort turning up all over Ireland in the last few years, was common on an adjoining piece of waste ground. This area of Cork seems very good for garden escapes and I have never seen so much Stinking Tutsan (*Hypericum hircinum*) naturalised in the hedgerows as I saw between Cork City and Kinsale. There are many ruins of Abbeys and castles to visit in this part of Cork. At James's Fort Garden Parsley (*Petroselinum crispum*) was all over the walls. On the ruins of Timoleague Friary I found Round-leaved Crane's-bill (*Geranium rotundifolium*) and Wild Onion (*Allium vineale*), both rare species in the county. My favourite find on this visit was Wood Spurge (*Euphorbia amygdaloides*), a very rare native in Ireland confined to a small area of Co. Cork, spotted as I drove along the R600 between Kinsale and Belgooly. Perhaps the most unusual find was of a rare form of Common Restharrow which is covered in sharp spines (*Ononis repens* var. *horrida*), on top of a wall alongside the sea at Burren, a variety I have only once seen in Ireland before.

August saw me back in north Cork to try and find as many Willowherb species as possible for each hectad. New for the county was Pale Willowherb (*Epilobium roseum*) in a churchyard in Buttevant and three additional sites. I saw plenty of Square-stalked Willowherb (*Epilobium tetragonum*), which took me by surprise as I hardly ever see it in Ireland. I also revisited sites where I found species in the spring that I couldn't identify at the time. One such

plant turned out to be a very large stand of golden yellow Early Goldenrod (*Solidago gigantea*) northeast of Kishkeam. A disused quarry south of Buttevant proved well worth the visit. Here I found large quantities of Autumn Gentian (*Gentianella amarella* ssp. *hibernica*), the first county record for over 50 years and, in a flooded area, Fen Pondweed (*Potamogeton coloratus*) was holding up many flower spikes above the water surface. This is only the third extant site for the county. Newmarket had some unusual aliens, none more lovely than 100s of Yellow-eyed-grass (*Sisyrinchium californicum*) on waste ground and Annual Marguerite (*Mauranthemum paludosum*) as a pavement weed. However, luck wasn't on my side when I tried to find Orange Foxtail (*Alopecurus aequalis*) and at all the sites I visited the habitat no longer looked suitable. Worse was to follow, with the only site in Ireland for Starved Wood-sedge (*Carex depauperata*) now extremely overgrown and the sedge missing. The information I had at my disposal was exceptionally detailed and I fear that Orange Foxtail may now be extinct in Cork and Starved Wood-sedge extinct in Ireland! My search for Golden Dock (*Rumex maritimus*) proved a little more successful and I managed to find it in one site, Ballinaltig Beg, growing on bare mud around a small lough with Marsh Yellow-cress (*Rorippa palustris*). I also checked on Bog-sedge (*Carex limosa*) which I last saw while recording for 'Atlas 2000' in 1999. Fortunately, it just escaped a track that had been put in across the moorland for a windfarm. The bog is now much drier than I could remember. This is the only extant site in the county.

My last visit of the year in September took me along the south coast from Youghal to Whitegate to feed one of my addictions - looking for Glassworts and hybrid Orache. The first place I started my search was at Ballycreane and it wasn't long before I found *Atriplex glabriuscula* x *A. prostrata* and *Atriplex* x *taschereaui* (*A. glabriuscula* x *A. longipes*). However, I soon got distracted by a large area of dumped soil which yielded Lesser Canary-grass (*Phalaris minor*) and White Mustard (*Sinapis alba*) and, on leaving the beach, I stopped at a carrot field to see if there was any more Lesser Canary-grass, and as expected, it was there. My plans quickly changed as I set my targets at visiting all the cultivated fields I saw, whilst trying to stick to my original planned route. The barley fields adjoining the dunes turned out to be overrun with Lesser Canary-grass and it was hard to know which was supposed to be the crop! Broad Bean, Carrot and Potato fields were also seen infested with this grass. This certainly was an action-packed (and very windy) day and doing my best to avoid sand blowing into my eyes, I visited Ballynamona, a known site for Grass-leaved Orache (*Atriplex littoralis*), which I failed to refind, although I did find 16 plants of *Atriplex* x *hulmeana* (*A. littoralis* x *A. prostrata*), a new hybrid to Ireland. It could be that Grass-leaved Orache no longer grows here, with only the hybrid present, as hybrid *Atriplex* often grow in places without their parents. I did manage to find *Atriplex* x *gustafssoniana* (*A. longipes* x *A.*

prostrata) at Ballylongane and Lahard, but even though I saw two hybrid *Atriplex* that have *A. longipes* as one of the parents, this species has yet to be recorded from the county and is so far only known from the Counties of Waterford and Wexford. Saltmarsh habitat was rather thin on the ground and only encountered at Shanagarry, where there was a little of each Long-spiked Glasswort (*Salicornia dolichostachya*) and Purple Glasswort (*S. ramosissima*). By the time I had reached Whitegate, rain was in the air. As I walked along looking for *Atriplex* I kept seeing leaves that looked like garden carrots rather than native carrot. Eventually I was proven correct as I could see an orange carrot below the leaves. It was intriguing why there were so many garden carrots all along the sea-wall as there was no other non-native species!

The last day of recording was spent with Megan Morris recording along the Araglin River east of Kilworth. Here we were lucky enough to park by a large patch of Dwarf Elder (*Sambucus ebulus*) and along the wooded river bank there was Marsh Hawk's-beard (*Crepis paludosa*) – both species that I hadn't seen elsewhere in Cork during the year. Here was the tallest Crab Apple (*Malus sylvestris*) tree I have ever seen. I hadn't realised apple trees could reach such a height! And the roses were good here also; Short-styled Field-rose (*Rosa stylosa*) and *Rosa x scabriuscula* (*R. canina* x *R. tomentosa*) were the two most interesting of the four species and two hybrids we saw.

When checking through my data, one of the main surprises of my work in Cork came when I noticed that I had not recorded Marsh Woundwort (*Stachys palustris*) from north Cork at all on my April visit, but picked it up from 19 monads in August. This goes to show the importance of visiting an area more than once. Over all it was a very productive 21 days. I gathered 10,462 records collected from across 49 hectads, with a total of 790 different species recorded. Thanks to the WFS for supporting my work, the next Atlas will have much more information. I think the critics deriding the north of Cork were a little off – I found it to be a rather nice place to go plant recording. The only area that really was dull was the northwest part of north Cork. Here Salmonberry (*Rubus spectabilis*) is particularly abundant forming some extremely extensive patches. This may be a very invasive species, but I do enjoy seeing the shocking pink flowers in spring!

PAUL R. GREEN

DURHAM WILDLIFE TRUST BOTANY GROUP SPRINGS TO LIFE

Sixteen people braved a bitterly cold January morning this year in search of wild plants in an abandoned magnesium limestone quarry. Turning pages of guidebooks and keys was painful in the frost-laden quarry, yet everyone had a fevered determination to 'name that plant'. Why were these intelligent people, who could be doing other things in warmer places, out in the freezing cold on a deserted Trust nature reserve?

Perhaps the answer goes back to late autumn 2015, when an idea emerged that some people in Durham were keen to learn more about, find and enjoy their local flora. There is such a wide range of habitats to explore within the Durham Wildlife Trust area, from the Tees to the Tyne and from the Pennines to the North Sea. We are privileged to have magnesium limestone sites in mid and east Durham, with the extra special Upper Teesdale to the west. Dark-red Helleborine (*Epipactis atrorubens*) and Spring Gentian (*Gentiana verna*) from these areas attract visiting botanists from far and wide – and rightly so. But the Durham flora hosts many more gems too.

The small body of nascent botanists realised that, in effect, there was no group dedicated to providing regular botanical events across the diverse and botanically interesting Vice County 66, the area covered by Durham Wildlife Trust. We decided to do something about it by establishing a botany group supported by County Recorder, John Durkin and the Durham Wildlife Trust.

On 2nd January 2016 we found 17 species in flower at the Trust's Low Barns Nature Reserve, our first field trip and our inaugural contribution to the BSBI New Year Plant Hunt. Since then we have carried out numerous botanical surveys, each one combining training with practical and purposeful application of newly-acquired skills.

The group, now 60+ strong, continues to thrive and looks forward to a full and ambitious programme of activities in 2017, including more botanical field trips, training, surveys, presentations, self-help workshops and recording. We are inclusive, friendly and supportive and the group welcomes people of all ages and levels of expertise.

We should like to thank the Wild Flower Society for help with funding to establish the group.

Find out more about the group at http://durhamwt.com/groups/botany/ or register your interest by email on botany@durhamwt.co.uk

Photo: Durham Wildlife Trust

Dark-red Helleborine

OBITUARIES

Shirley Burton - 29th April 1935 to 29th February 2016

Shirley Burton lived at Aston, near Nantwich and was a very popular botany tutor with Keele University. She taught adults in classes in Cheshire, Staffordshire and north Shropshire, including venues at Whitchurch and Wem. Shirley was also a dedicated plant recorder.

I first met Shirley in the early 1990s when she took over the Whitchurch class from Dr Peter Thomas. He warned us that she was a very different tutor from him and was a stickler for using correct scientific and common names of plants. I had persuaded my reluctant line manager to allow me to change my working hours so that I could attend the Whitchurch class once a week in winter. Tuesdays became my favourite day of the week.

Shirley taught us not only plant identification, morphology, ecology, biology, nomenclature and classification, but also how to use the new "Stace". She was an old school tutor, a good fair disciplinarian, with a quick put-down for anyone who got out of hand. Only to be expected from someone who had spent a lifetime teaching teenagers and adults. She also had a quick sense of humour, patience with those who struggled and those who challenged. She once commented, "I shall have to crack my whip here." I was mortified to hear a male student say sotto voce, "Yes, please Miss," but she took it in her stride. We were not allowed to be wimps. There were winter field trips, kitted out in coat, hat, scarf and fingerless gloves to write notes. I remember wind whistling through the *Molinia* at Whixall Moss, identifying winter twigs in parkland and gaining a thorough knowledge of basal rosettes on Nesscliffe Hill. Wenlock Edge on a particular big O birthday for Shirley was memorable. Many students encountered the lovely Silurian limestone flora of this site for the first time. One student with a camper van feigned illness and went back and then when we got back we surprised Shirley with a buffet, cake and fizz.

Statuesque Shirley was always smartly dressed in class, despite the use of messy chalk and a mini blackboard in a room with few modern facilities. She was always early, well prepared and organised and it was straight in, heads down, working hard for at least the two hour session.

She was a doting mum and gran and shared a love of music with her husband, John. Shirley sang in three choirs for relaxation and one memorable New Year's Eve, I was one of the lucky ones to be at her house, cat on my lap, when John played his wind instruments.

We were all sad and shocked when we heard that energetic Shirley was very ill. Shafts of sunlight shone on a full house at Crewe Crematorium in March 2016. Everyone was there from Shirley's many interest groups to show their last respects. RIP.

RUTH DAWES

Peter Rollinson

Peter Rollinson died peacefully in Basingstoke Hospital on 7 October 2016 aged 93. Although he did not officially join the WFS until 1982 he was often seen at field meetings prior to that, acting as 'botanical chauffeur and photographer' for his late wife Joy who had long been a member. If the meeting had a nearby railway (preferably steam!) Peter would be off investigating engines or signal boxes and often spotting plants on the tracks, which we might not otherwise have found. His interest in botany grew and on retiring he joined the WFS and BSBI, also Alton Natural History Society, of which he eventually became botanical leader. Peter's first WFS Diary was submitted to Don Turner, then secretary for Branch R, who reported that he had, "A strikingly distinctive style, with meticulous habitat details, which I commend to all." [WFS Magazine Summer 1983, p26] This precision and detailed accuracy in all of Peter's recording perhaps stemmed from his engineering background. In WW2 he was with the Royal Engineers on active service in Holland and Germany, later becoming a civil engineer with Basingstoke Council. In the field no plant identification was taken for granted, he would patiently work through the Flora checking every detail, which resulted in his becoming an excellent botanist. After Joy died Peter continued adding to his Valhalla Diary and joining field meetings around the country for several years until, becoming a little less agile, he concentrated on his local Hampshire flora. Joy and Peter had made many friends in the Society and Peter was always willing to drive them out for a day's local botanising. He also continued recording into his early 90s for Alton NHS, working on a botanical checklist for Lasham Airport. Latterly, although Peter's mobility reduced, his interests and intellect never failed. Last summer, after a pub lunch, he greatly enjoyed a hundred yards or so stroll along a quiet Hampshire lane counting the wayside plants and checking he still knew their Latin names (he did!). As well as botany he was a keen philatelist, water-colour artist, and photographer. A kind, gentle and tolerant man, Peter will be sadly missed by his many friends and by his large and devoted family. The WFS sends warm condolences to his sons, Andrew and Simon, and to their families.

PAT VERRALL

BOOK REVIEWS

Mountain Flowers, Michael Scott, Bloomsbury (2016). HB: ISBN 978-1-4729-2982-2. £34.99

This beautiful book is No. 4 in the admirable series being produced for *British Wildlife* magazine and is available from the Natural History Book Service (NHBS), customer.services@nhbs.com, 01803 865913. It is a substantial hardback, and this is reflected in the substantial price, but for anyone with a birthday coming I'd put in a heartfelt recommendation.

It has many good elements. The New Naturalist *Mountain Flowers* by John Raven and Max Walters first appeared way back in 1956 so there is now a whole generation (at least) of botanists without a really good, inspiring guide to these fascinating plants. Mike Scott is passionate about them and their conservation in the landscape, and he is an excellent communicator. He is a real mountain man, but the most fascinating message of this book is that it is the plants which define the subject, not the altitude where they grow. For instance, Spring Sandwort (*Minuartia verna*) can be found on the Lizard Peninsula in Cornwall, barely more than 100m above sea level, as well as on mountains, where it survives at nearly 900m. The reason is that such plants were the pioneers as vegetation developed after the last Ice Age left Britain. They are our oldest native wild flowers and some have found various homes, lowland as well as highland, while others only survive in real montane conditions. There is much science involved in this history but Mike explains it so lucidly that the book is pleasurably readable as well as stuffed with information.

It's full of lovely photographs of plants and places. It describes hills or habitats in every part of England, Wales and Scotland so wherever you live it would be useful. Each important plant has an illuminating short descriptive section. I can think of no better way to learn more about this wonderful part of our flora.

I dislike saying anything critical in reviews, but must add a brief warning about names. Readers have to get a grip of how this book works, because there is no overall plant index. Mountain flowers are indexed (in family order) in the introductory chapters, giving English and Latin names. Lowland plants, which happen to occur in the text, have an index in the back of the book, alphabetical, by English name. Species accounts of course have both names but, in the text and captions, only English names are used. Latin names are often criticised nowadays, but in this case I find the English ones equally confusing – is Issler's Clubmoss (which I've never found) a *Diphasiastrum* or a *Lycopodium* or even a *Huperzia* relative? However, index problems are a tiny price to pay for the huge enjoyment and knowledge available from this book.

RO FITZGERALD

Breckland Wild Flowers: Heaths and Grasslands. By Iceni Botanical Artists. Published by Iceni Botanical Artists. 2016. £15.00 + p & p Paperback. ISBN: 978-1-5272-0195-8

Iceni Botanical Artists are a group based in East Anglia, established in 2010, with the aim of promoting and exhibiting botanical art. In 2013 they set themselves a challenge to record, in accurate scientific detail, the unique flowers of the Brecks. This culminated in a series of exhibitions throughout the region in 2016 and the production of a book '*Breckland Wild Flowers – Heaths and Grasslands*' to showcase their work, published in December.

45 species are recorded in fine detail with a double page spread being devoted to each one. Some might be considered to be species common throughout the British Isles, such as gorse (*Ulex europaeus*), but many can only be found in the Brecks, such as Spanish Catchfly (*Silene otites*) and Spiked Speedwell (*Veronica spicata* ssp. *spicata*) – see illustration reproduced on the back cover of this magazine. On one page is an illustration, in colour, of each plant and, in many cases, individual drawings of flower structure and leaf shape, highlighting the diagnostic features. The plates provide the sort of detail it would be impossible to capture in a photograph, with flowers teased apart to show cross sections and individual parts that are only really visible with the aid of a hand lens. Accompanying each illustration, on the facing page, is a written description providing the detail one would expect to find in a flora.

The attention to detail is amazing. As one who has spent many a happy hour grovelling on her hands and knees trying to find the three species of speedwell unique to this habitat (Spring Speedwell (*Veronica verna*), Breckland Speedwell (*V. praecox*) and Fingered Speedwell (*V. triphyllos*), with flowers no bigger than 4mm across, it is easy to appreciate that capturing the detail of flower structure with such precision is no mean feat. In addition, many of these flowers only have a brief flowering period and can't be picked, so the illustrations had to be added to in different years, as the seasons dictated.

The scientific accuracy is such that the illustrations would make an excellent aid to identification, although I would be reluctant to take such a beautiful book into the field. The accompanying text helps to give an idea of scale, so that scale bars do not detract from the image.

Field botanists with little artistic ability can only admire the skill and artistry of the plant portraits but also appreciate the attention to fine botanical detail presented in the magnified drawings. This is a book for anyone who loves flowers and the portrayal of those flowers.

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ANNE KELL