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Image 6: *Angelica sylvestris* at South Stack. © R.A.Jones. See page 30.

Items for inclusion in the next Welsh Bulletin should be sent to Richard Pryce by 1

May 2019: Pryceeco@aol.co.uk

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See www.bsbi.org.uk/wales.html for back issues.

Introducing the new Welsh Officer

Barbara Brown

Email: barbara.brown@bsbi.org

I am stepping into the role of Welsh Officer for the BSBI though it is hard to follow the great work done by my predecessors Paul Green and Polly Spencer Vellacott. I have lived in Wales, on and off, for over a decade now, having first been sent here as an Information Officer to RSPB South Stack in 1998. This was followed by a stint at RSPB Ynys-hir and a role first as Tutor and then Senior Tutor for the Field Studies Council (FSC), Rhyd-y-Creuau at Betws-y-Coed. I was pleased to have the chance to come back to Wales as OPAL Community Scientist for south Wales where I helped a wide range of audiences learn more about the natural environment and take part in citizen science surveys on everything from earthworms, pollinators, lichens and tree diseases.

Most recently I have been working for the Radnorshire Wildlife Trust at Gilfach Nature Reserve where I worked with and trained up volunteer plant surveyors as well as obtaining Natural Resources Wales' consent for the collection of *Vicia orobus* (Wood Bitter-vetch) and *Trollius europaeus* (Globeflower) seeds.

Owing to picking up a little bit about bees whilst working as OPAL Community Scientist, I realized that the reserve had a dearth of records for this group, so with the help of local recorders and Liam Olds (Buglife), I managed to collect and have verified a suite of significant records that confirmed the importance of the reserve for pollinators.

As a partly intentional side effect of surveying for the QGIS map, the Gilfach volunteer rangers and I collected a lot of data on plant and fungi distribution on the reserve, which I used to create QGIS distribution maps and inform the conservation management process. These were particularly helpful in showing the distribution of *Vicia orobus* at Gilfach, and considering if there was a case for introducing it to new areas.

In my spare time I have been taking part in Plantlife's Cennad Apprentice Scheme which has helped me to learn a lot more about lichens and biological recording. This project was run by Tracey Lovering of Plantlife Cymru and it trained a cohort of people from a wide range of backgrounds including artistic, scientific and professional. We had quarterly across-Wales training sessions in different habitats, and we mostly focused on the lichens which grow on trees.

Gradually we have been introduced to the use of keys, different lichen communities, re-introduction projects and the use of dissection and compound

microscopes. It has been a fascinating journey and I have used the experience to produce some lichen leaflets for Gilfach Reserve, to carry out APIS surveys, (which use lichens as bioindicators for nitrogenous air pollution) and to submit lichen records for North Radnorshire and Montgomeryshire border area, as this has been somewhat under-recorded.

As you can see from the above, I am something of a generalist. Twenty years ago, Sarah Stille (vice-county recorder for Merionydd), warned me of the dangers of this! Perhaps I should have taken more heed then, but this approach has certainly helped me to notice and consider the place of very many interesting species.

I hope to bring my teaching background to the Welsh Officer post to deliver entry level botany sessions based on the 'Pocket Guide to Wildflower Families' approach which has had success in Scotland. I will also be arranging intermediate and advanced level training for vice-county recorders and members, as well as working to promote botany and the central role of plants in the web of life.

Living in Rhayader, I hope to be in relatively easy reach of most of the vice-county recorders and will be in touch with you shortly to listen to your plans for next year, talk about data flows and exchange ideas about identification courses.

BSBI Field Meetings Wales – 2019

R.A. Jones, *BSBI Welsh Field Meetings Secretary*

Email: aberystwyth1234@gmail.com

Saturday 16 February: Plas Gogerddan, Cardiganshire (v.c.46).

Conifer Identification Workshop. Outdoor meeting in mature estate woodland, with reference material collected from nearby arboretum and plantations.

Booking and further details contact Andy Jones: aberystwyth1234@gmail.com

Tuesday 21 May to Thursday 23 May: Carmarthenshire (v.c.44)

BSBI Welsh AGM and Exhibition Meeting based in Llanelli. Provisionally with excursions to 1) brownfield sites in Burry Port, 2) Carboniferous Limestone woodland and grassland and 3) dunes at Pembrey

Leaders Kath & Richard Pryce. See booking form on BSBI website or flier in BSBI News or contact Kath and Richard: PryceEco@aol.com

Saturday 1 June: Radnorshire (v.c.43), Stanner Rocks.

A unique outpost of Continental species (including *Scleranthus perennis* (Perennial Knawel), *Veronica spicata* (Spiked Speedwell) and *Gagea bohemica*, Early Star-of-Bethlehem) on the Welsh borders and a "time capsule" of the early post-Glacial flora; now a National Nature Reserve undergoing active restoration.

Leader Andy Shaw. Booking and further details contact Andy Jones: aberystwyth1234@gmail.com

Saturday 22 June: Brecknockshire (v.c.42), Llangorse Lake.

Callitriche identification workshop, led by Richard Lansdown (author of the BSBI Water-starworts Handbook). Indoor tutorial with material from all the British species, outdoor visit to learn collecting techniques and identification in the field and follow-up tutorial. £20 guide price.

Booking and further details contact Andy Jones: aberystwyth1234@gmail.com

BSBI Wales Annual General Meeting 2018

Aberystwyth University

Saturday 18th August 2018 at 9.45am

Minutes of the 56th Annual General Meeting of the BSBI in Wales

32 people in attendance, including 10 non-voting members

1. **Welcome:** The Chairman, Julian Woodman welcomed everyone to Aberystwyth.

2. **Apologies for Absence:** Elsa Wood (Secretary), Ray Woods and Sue Spencer.

3. **Minutes of 2017 AGM:** Minutes of the 55th Annual General Meeting held at Stamford Gate Hotel, Holywell, Flintshire on 6th June 2017 (printed in Welsh Bulletin No.101) were agreed by all present and signed by the Chairman as a true record of the proceedings.

4. There were no **Matters Arising**.

5. **Chairman's Statement:** Julian Woodman thanked Andy Jones for arranging this AGM, and asked all to support him over the weekend. Justin Lyons, Senior Reserve Manager, was thanked for agreeing to lead the field meeting at Ynys Las on Sunday and Julian extended thanks to all those in attendance. He mentioned that the Welsh Officer post would soon be advertised as NRW would be supporting the post for a further year. Paul Green who was in post until June has left to concentrate on BSBI activities in Ireland and was thanked for his support of Welsh members and recorders (see item 6). Julian suggested that Paul Green could be invited back to Wales to lead workshops in future.

Julian informed the meeting that the funeral of Alan Hale had taken place this week and that Alan did much invaluable work on the Rare Plant Registers and computerising records. In March, Andy Jones had retired from the post of NRW Vascular Plant Ecologist and he (Julian) had been appointed as his successor.

Julian went on to thank Sally Whyman, Katherine Slade and Richard Pryce for their work as co-editors of the Welsh Bulletin and thanked the officers and members of the Committee for Wales for their help and attention over the year.

Julian concluded by wishing well to Stephanie Tyler, the incoming Chair of the Committee who will take up her duties at the end of this meeting.

6. **Welsh Officer's Post:** The Chairman explained that Polly Spencer-Vellacott, the BSBI Welsh Officer, had moved away from Wales, so had had to

resign from the post. Paul Green had stepped-in until June when funding for the post terminated. NRW has recently indicated that it would be supporting the post for a further period and so the post would be advertised very soon. It would be three days per week until December 2019. All present were asked to encourage suitable people to apply.

7. Welsh Officer's Report: Paul's report has been printed in the latest issue of the BSBI Welsh Bulletin and in BSBI e-news. His recent role has had an emphasis on recording.

8. Welsh Bulletin: Richard Pryce reported that the BSBI Trustees have agreed to underwrite the costs of all the 'country newsletters' in future. This was welcome news to all present. He said that issue 102 was very well received especially Matt Sutton's article. Members not residing in Wales used to pay £2.50 per copy if they wished to receive a printed copy of the Bulletin. However, those wishing to have a copy will now be able to request it at no cost. Each issue will also be promptly uploaded to the BSBI website rather than after a year as is the current practice.

Richard concluded by appealing for contributions for the next issue by 1st December 2018.

9. New Constitution and Election of Officers and Committee Members: The New Constitution aims to reduce the number of voting members on the Committee and the Welsh Committee has agreed to this.

The following continue in their posts as officers of the Committee for Wales: Elsa Wood as Hon. Secretary, Andy Jones as Meetings Secretary and Liz Dean as Treasurer. Julian Woodman has finished his term as Chairman and Stephanie Tyler takes-over after serving a four-year term as Vice-Chair. It was proposed that the Officers and Committee members be re-elected *en-bloc*. This was proposed by Richard Pryce and seconded by Sarah Stille.

The Committee now comprises:

Chairman:	Stephanie Tyler
Vice Chairman:	to be confirmed
Secretary:	Elsa Wood
Treasurer:	Liz Dean
Meetings:	Andy Jones
Voting Members:	John Crellin, Sarah Stille, Kate Thorne, Steve Chambers, Ray Woods, Richard Pryce – Bulletin Editorial Team representative

The following are NON-VOTING observers:

Stephen Evans and Kath Pryce (minutes secretary)
Bulletin Co-editors: Katherine Slade, Sally Whyman
(corresponding members)
Observer ex officio HGS Delyth Williams
CCW Observer: Julian Woodman
Plantlife Representative: Colin Cheesman
Corresponding members: Sue Spencer, Natasha De Vere

10. Any Other Business:

1. Delyth Williams thanked Julian Woodman for his Chairmanship over 4 years, and those present gave a round of applause.

2. Delyth Williams congratulated Goronwy Wynne, Emeritus Vice-county Recorder for Flintshire, a polymath who has recently published a book in Welsh about plants in Wales, *Blodau Cymru – Byd y Planhigion*, which recently won the non-fiction category of the Welsh Book of the Year award. Goronwy responded by saying that he is sometimes asked, “How long did it take to write the book?” and his answer is, “I cannot remember whether it was 200 years or 300 years”. In answer to whether an English version is in the pipeline, he said that it was not really possible to translate his personal thoughts and experiences, so the answer must be “no”. He said he had been doubtful about sales, however the book is into its third printing and 1500 copies have been sold. Delyth emphasised that the many illustrations are excellent and that the Welsh is very accessible to those with only a smattering of the language. Goronwy was congratulated and given a round of applause.

3. The meeting was told that the next Welsh AGM (2019) will be held in Carmarthenshire (date yet to be decided).

4. The incoming Chair, Stephanie Tyler wound-up the meeting by thanking Julian Woodman, all the Committee and all those attending the AGM weekend meeting.

The proceedings concluded at 10:15am.

Report of the BSBI Welsh AGM 2018

R.A. Jones

The 56th Welsh BSBI AGM was held this year at Aberystwyth University on the 17th to the 19th of August, with a full programme of workshops, talks and excursions. Despite this, attendees also had a chance to socialise, relax and explore the attractive modern campus so perhaps we got right the balance of leisure and activities.

Friday began with a visit, led by Arthur Chater and Julian Woodman, to arable margins at the nearby Institute of Biological, Environmental and Rural Sciences (IBERS), formerly the Plant Breeding Centre, with over 30 species and subspecies of arable weeds. Back for tea, we opened the very popular £5 Natural History Book Stall, supplied by Ystwyth Books, and a room full of posters and exhibits, including a collection of materials relating to John Salter (author of the first Flora of Cardiganshire) by Arthur Chater; “Serotinous flowering in Crack Willow”, “Differential defoliation of Willowherb by Elephant Moth caterpillars” and “Putative *Ranunculus omiophyllus* x *hederaceus*” by Steve Chambers; “*Ranunculus omiophyllus* x *R. hederaceus*: a New Natural Hybrid in Subgen. *Batrachium*, from Cardiganshire, v.c.46”, “South Stack *Angelica sylvestris*” and “*Baldellia repens* x *B. ranunculoides* in Perthshire and Pembrokeshire” by Andy Jones; and fascinating, detailed posters of “*Polypodium* species” by Martyn Stead. After dinner the talk by Andy Jones “Arrowheads and Weasel’s Snout” dealt with the arrival of agriculture in southwest Britain and the archaeological significance of arable weeds.

On Saturday, in heavy rain, we ascended to the historic lead mines of Esgair Hir, behind Talybont, for a wealth of ferns and fern-allies, including *Botrychium lunaria* (Moonwort), *Ophioglossum vulgatum* (Adder’s-tongue) and the hybrid horsetail *Equisetum x dycei*. Tea-time included a workshop on the ‘Vegetative Key’ by its author, John Poland and, after dinner (and drinks courtesy of the John Topp memorial fund!) Ray Woods took the stage for “A Plant’s Life in a Changing World”: a remarkable blend of climate science, mycology and lepidopterology (and much more) as applied to plants. The conversation afterwards at the bar was very animated.

Sunday’s visit to Ynyslas completed our tour of Cardiganshire’s natural variety, including an overview of the Dyfi Biosphere Reserve from Justin Lyons, Natural Resources Wales’ Site Warden and a visit to the Freshwater Habitats Trust habitat restoration project that actually seems to be eradicating *Crassula helmsii* (New Zealand Pigmyweed)(!) – with remarkable benefits for native dune slack species (including one plant of *Anagallis minima* (Chaffweed). We

finished a friendly, informative and thoroughly enjoyable weekend on restored coastal grazing marsh with a small, scattered population of *Baldellia ranunculoides* (Lesser Water-plantain) and gentle showers drifting in from Cardigan Bay.

BSBI Wales

Annual General Meeting and Exhibition Meeting 2019

Tuesday 21st - Thursday 23rd May

The 2019 BSBI Wales AGM and AEM together with the associated field excursions will be based at the 4-star Stradey Park Hotel, Llanelli, Carmarthenshire, SA15 4HA. Accommodation will be in *en suite* single-occupancy rooms. The price includes bed, breakfasts and 3-course evening dinners, packed lunches and afternoon teas but does not include use of the hotel's spa facilities. The hotel is located at SN504014 on the north-western edge of Llanelli and a taxi from the railway station would cost around £5.00.

This will be the final Welsh AGM before the close of recording for the Atlas 2020 project and Pete Stroh will be in attendance and happy to respond to any outstanding issues.

A preliminary programme has been prepared which will include:

- Field visits to local sites of botanical interest on Tuesday afternoon, Wednesday and Thursday.
- Talks by Pete Stroh on Atlas progress, Nigel Stringer on Rusts and Richard Pryce on recent advances towards the Carmarthenshire Flora.
- The BSBI Wales AGM will take place on Wednesday morning.
- Display of books for sale by Ystwyth Books.
- Exhibits and posters prepared by members.
- Help table: you are invited to bring specimens that you would like experts to identify.

The preliminary programme includes visits to brownfield and coastal sites in the Burry Port area on Tuesday afternoon, Carboniferous Limestone grassland and woodland following the AGM on Wednesday and Pembrey Burrows on Thursday. Field excursions may be tailored to the weather on the day. There will also be the opportunity for participants to help with Atlas recording as an alternative, if they wish.

An important part of the meeting will be the exhibition of posters prepared by members and we are encouraging as many people as possible to contribute. This is a great way to communicate your observations and stimulate discussion. Any material that will be of interest to other members is welcome - don't worry about producing a highly-polished, scientific poster! There will be plenty of space at the Stradey Park for exhibits. Please indicate on the booking form the amount of space you need for your exhibit and whether you need a table or vertical space.

A BOOKING FORM WAS INCLUDED WITH BSBI NEWS 140

Payments may be made by cheque, bank transfer or, by visiting the BSBI website, by PayPal

PLEASE BOOK AS SOON AS POSSIBLE BUT, AT THE LATEST, BY 30th APRIL 2019.

We look forward to welcoming you to Llanelli.

Some highlights during fieldwork in Monmouthshire, v.c.35 in 2018

Stephanie J. Tyler & Elsa Wood, *Joint Vice-county Records for
Monmouthshire*

We organised six meetings of Monmouthshire Botany Group during the spring and summer. Our spring walk on 28 April was near Grosmont in SO4023 walking up on to Graig Syrffwd and back down to the lane through Hoadalbert, adding many species to the tetrad. *Ranunculus auricomus* (Goldilocks Buttercup) and *Sanicula europaea* (Sanicle) were frequent on a riparian strip alongside a stream and other ‘goodies’ included *Lathraea squamaria* (Toothwort) on Hazel by the Tressenny Brook. A brief visit was made to Grosmont Castle (SO4024) to show members the *Saxifraga tridactylites* (Rue-leaved Saxifrage) and *Polypodium cambricum* (Southern Polypody).

In late May, we walked through some unimproved damp grasslands at Kilgwwrg near Devauden (in ST4698) and clocked up a good assemblage of sedges including *Carex laevigata* (Smooth-stalked Sedge), *C. panicea* (Carnation Sedge) and *C. demissa* (Common Yellow-sedge). A hot day in June saw the Group up on the Blorenges exploring Pwll Du, a vegetating coal tip. The target was to show members the recently discovered *Diphasaistrum alpinum* (Alpine Clubmoss) in SO2410, which we did eventually re-find with two new patches nearby. At the end we took people to a nearby site for *Lycopodium clavatum* (Stag’s-horn Clubmoss). An unexpected bonus was a Silurian Moth (confined to the uplands in western and northern Monmouthshire and adjacent Herefordshire) feeding on *Cirsium palustre* (Marsh Thistle) flowers.

In mid-July, we tried again to re-find *Sibthorpia europaea* (Cornish Moneywort), last seen in 2003 at its only known v.c.35 site on the banks of the Nant Draenog in the Sirhowy Valley (ST1892). Despite our best efforts, we had to admit defeat and it seems that an organisation decided to fence it some five or six years ago and now the area is so overgrown that it has disappeared.

On 11 August, we met up at Manmoel in western Monmouthshire to look at another coal tip and to walk down into forest to locate a patch of *Pyrola* (Wintergreen) found by Sam Bosanquet in early spring in SO1602. The coal tip was very dry but we could make out abundant *Aira caryophyllea* (Silver Hair-grass) and *A. praecox* (Early Hair-grass) as well as *Filago minima* (Small Cudweed) and a patch of *Linaria repens* (Pale Toadflax). We did find the wintergreen patch, or rather patches, in larch woodland and on the way added among other species, *Agrimonia procera* (Fragrant Agrimony) and *Solidago*

virgaurea (Goldenrod). The wintergreen had flowered well but was then in fruit but we decided it had to be *Pyrola minor* (Common Wintergreen) as Sam had thought from the leaves, the fourth site for the vice-county. On 3 July Steve Williams had reported an extensive large flowering colony of this species found by Rachel Edwards at another new site - upper Garn Lake north-west of Blaenavon in SO2310. Both *Pyrola minor* and *P. rotundifolia* (Round-leaved Wintergreen) have turned up at several new sites, usually on coal waste, in recent years and both are no longer classed as County Rare (one to three sites) but are now County Scarce (4-10 sites) as both are now known from five sites.

The 12 September meeting was open to members of the BSBI as well as the Botany Group. We visited Peterstone and Rhymney Great Wharf (between ST2679 and ST2478), hoping to find *Bupleurum tenuissimum* (Slender Hare's-ear) amongst other interesting species. We failed to find the *Bupleurum* but did find *Lepidium latifolium* (Dittander), *Althaea officinalis* (Marsh-mallow) and *Hordeum marinum* (Sea Barley).

We have been out together most weeks during the season and often separately too, adding species for the 2020 Atlas. We thank Heather Colls and Sam Bosanquet too for their contributions to boosting totals in various tetrads. Thanks also go to Mike Ogden who visited many old pre-2000 sites for *Scirpus sylvaticus* (Wood Club-rush), *Schoenoplectus lacustris* (Common Club-rush) and *S. tabernaemontani* (Grey Club-rush) among other scarce species. Mike was sometimes lucky and at other times less so, but one particular highlight was that he re-found the rare *Campanula patula* (Spreading Bellflower) in Highmeadow Wood (in SO5313), the first sighting for ten years.

Of note was SJT's find, when checking a Dipper nest on 14 June, of two large patches of *Stellaria nemorum* (Wood Stitchwort) in woodland by the Afon Honddu at Pandy (in SO3322). In v.c.35, it was only known from the Wye Valley so this is well away from the known range. EW and SJT returned a few weeks later to see it and again in mid-August to collect seed to determine the subspecies but the capsules were empty.

Another good find, on 26 July, were several plants of *Chenopodium glaucum* (Oak-leaved Goosefoot) by an old muck heap near Llangwm (in SO4200). Unfortunately, it was in the same hectad where we had found a few plants in 2015 and 2016 but was in the south-western part, previous records being in the north-east. All other records in v.c.35 are coastal on the Gwent Levels. Andy Karran found *Atropa belladonna* (Deadly Nightshade) in the woodlands by Livox quarry near the Blackcliff (in ST5398) on 6 June; there are old records for this species in the area going back a century but it had not been seen for years so this was a nice re-find.

Thalictrum flavum (Common Meadow-rue) was found in a new tetrad alongside a very polluted reën on an industrial estate near Caldicot (in ST4987) showing how tolerant some plants are!! *Anthemis cotula* (Stinking Chamomile) is quite frequent in SO30, SO31 and SO40 but plants near Cefn Tilla (in ST3395) comprised a new hectad record. The very wet winter had been very favourable to *Bidens tripartita* (Trifid Bur-marigold) that completely dominated the fields on the flooded Nedern pastures under the M4. Shelley Cross found tens of thousands of plants instead of the occasional clump.

On a SEWBRcC Bioblitz at Llanvetherine Court near Abergavenny (in SO3516) on 14 July among the species recorded was a plant of *Carex pseudocyperus* (Cyperus Sedge) at one of the ponds; this sedge is mainly found on the Gwent Levels and is uncommon inland. Another Bioblitz at St Woolos Cemetery in Newport (in ST2987), on 21 July, was plagued by very dry conditions and the whole area being recently cut despite instructions otherwise! Over 100 species were recorded though including a flowering spike of *Epipactis helleborine* (Broad-leaved Helleborine) on a grave.

The march of the aliens continues as we record species such as *Conyza floribunda* (Bilbao Fleabane) in more and more squares. The grasses *Setaria pumila* (Yellow Bristle-grass) and *S. viridis* (Green Bristle-grass) both found in crops near the Rhymney River at Coed Craig Ruperra (in ST2287) on 2 August and the latter earlier in the year at Livox near Blackcliff (in ST5497). *Allium paradoxum* (Few-flowered Garlic) was found at three sites – in Penallt (in SO5019), at Grosmont (in SO4024) and at Chepstow Park Wood (in ST4996) whilst *Scrophularia scorodonia* (Balm-leaved Figwort) was found by the River Ebbw at Tredegar, Newport (in ST2986) on 30 May. The grass *Echinochloa crus-galli* (Cockspur) was found near Wyndcliff (in ST5297) on 5 August, near St Mellons (in ST2283) on 12 August, in maize crops near Clytha (in SO3709) on 17 and 30 August and Bryngwyn (in SO3907) on 12 September, in a Cwmbran garden (in ST2894) on 25 September and at Goldcliff (in ST3683) on 27 September. Other maize associates at Clytha included *Amaranthus hybridus* (Green Amaranth), much *Datura stramonium* (Thorn-apple), *Digitaria sanguinalis* (Hairy Finger-grass) and *Chenopodium hybridum* (Maple-leaved Goosefoot). Green Amaranth was also found near Quab Lane, New Mills (in SO5107) on 11 September at the edge of a maize crop and more Thorn-apples were found in maize north-east of Bryngwyn (in SO3910).

Anisantha madritensis (Compact Brome) has turned up in some numbers at many sites including at Tredegar Park (in ST2997) on 5 May, near Tintern (in SO5101) on 4 July, near St Brides Wentlooge (in ST2982) on 11 July, in ST4129 on 15 July and in ST3395 on 30 July, at the edge of harvested arable

fields near Llanarth Court (in SO3811) on 15 September, near Llanishen (in SO4802) on 5 September, Abergavenny (in SO3115) on 18 October and on Caldicot Moor (in ST4988) on 31 August. *A. diandra* (Great Brome) was found in an arable field near Michaelston-y-Fedw (in ST2484) on 24 October.

Pratia pedunculata (Matted Pratia or Blue Star Creeper) was found in a lawn at Abergavenny (in SO3104) during September by Val Leisler and Mike Hoult. This delicate alpine has also been recorded as naturalised at two sites at Penallt (in SO5008 and SO5210) and on Cobbler's Plain (in SO4601) on 4 August.

Finally, *Cuscuta campestris* (Yellow Dodder) turned up again, this time noted by Kay Swift and Brian Williams in their garden at Crick. They believed that the seed came from packets of wildflower seed from Kew, from Unwins or from Bee friendly Monmouthshire. So much for seed of local provenance! The two previous records were at St. Maughans (SO4617) in 2010 and Penallt (SO5210) in 2017.

Montgomeryshire Flora Group Field Trips in 2018

Gill Foulkes & Kate Thorne, *Joint Vice-county Recorders for Montgomeryshire*

The Montgomeryshire Flora Group had day outings in 2018 to:

Neuadd Bridge, Llanfair Caereinion (SJ00) in April

Habitat: lane verges and wet woodland.

A good range of plants (mostly not in flower) on the lane verges and some areas of wetter, older woodland at the edge of NRW plantation tested our vegetative identification skills. Finds included *Valeriana dioica* (Marsh Valerian).

Clatter to Pontdolgoch (SN99) in early May

Habitat: wooded riverside, lane verges, rough pasture, amenity woodland.

Highlights: *Serratula tinctoria* (Saw-wort) on a roadside bank, a mature specimen of *Populus nigra* subsp. *betulifolia* (Black-poplar), *Viola lutea* (Mountain Pansy) beginning to flower in rough pasture and around 100 plants of *Carduus tenuiflorus* (Slender Thistle) by a field track. The last is a new county record. *Claytonia sibirica* (Pink Purslane) was spotted along the Afon Carno at Clatter. This neophyte has been turning up in lots of different places in

Montgomeryshire (v.c.47) this year (11 records in 10 hectads with only 2 records prior to 2018).

Llanymynech Hill (SJ22) later in May

Habitat: limestone grassland

Although the day was primarily aimed at brushing up identification skills, a few records were added to the list.

We saw several limestone specialities such as *Scabiosa columbaria* (Small Scabious), *Inula conyzae* (Ploughman's-spikenard), *Helianthemum nummularium* (Common Rock-rose), *Arabis hirsuta* (Hairy Rock-cress) and six orchid species. We were able to compare a good range of grasses (*Poaceae*) including *Arrhenatherum elatius* (False Oat-grass), *Trisetum flavescens* (Yellow Oat-grass), *Bromopsis erecta* (Upright Brome) and *Avenula pubescens* (Downy Oat-grass).

A joint trip with BSBI near Llanbrynmair (SH90), July

Habitat: open access moorland and lane verges.

The boggy moorland was the most interesting area with *Osmunda regalis* (Royal Fern) growing in a drainage ditch. It was disappointing to find several naturalised "garden" species growing in such a rural location with only scattered houses. More worrying was *Lysichiton americanus* (American Skunk-cabbage) spreading along a ditch. We managed to make over 350 records. However, the star of the day was not a plant but a bird - a Grasshopper Warbler which sang so beautifully.

Llyn Newydd and Llyn Hir near Llanerfyl (SJ00), early August

Habitat: upland moorland, lakes and bogs.

There were some lovely views from these hidden upland lakes. Good stands of *Eleogiton fluitans* (Floating Club-rush) at Llyn Newydd formed a thin "skin" over a scarily quaking (floating) bog which is gradually filling in the lake. *Utricularia minor* (Lesser Bladderwort) was found at both lakes (new sites for this species) and *Persicaria minor* (Small Water-pepper) was refound at Llyn Hir. *Vaccinium oxycoccos* (Cranberry) was extensive in the surrounding bogs.

NW of Bwlch-y-ffridd and Gwgia Reservoir (SO09), late August

Habitat: upland moorland and bog; an old reservoir.

After tramping over some surprisingly dry *Molinia*-dominated moorland, we reached a large boggy area that was very wet but had fine stands of *Carex rostrata* (Bottle Sedge), *Comarum palustre* (Marsh Cinquefoil), and *Menyanthes trifoliata* (Bogbean). Running through this were some classic runnels (soakways) with *Potamogeton polygonifolius* (Bog Pondweed) and *Hypericum elodes* (Marsh St John's-wort). A base-rich flush produced *Carex hostiana* (Tawny Sedge), *Linum catharticum* (Fairy Flax), and a small *Euphrasia* (Eyebright). But the highlight was a short, but incised stream, which the sheep could not access. This had good stands of *Phegopteris connectilis* (Beech Fern) as well as lowland species such as *Geum rivale* (Water Avens), *Primula vulgaris* (Primrose), and *Betonica officinalis* (Betony). A short visit to Gwgia (the old reservoir for Gregynog Hall) was successful in refinding *Elatine hexandra* (Six-stamened Waterwort) in quantity, not in flower, but the fruits were visible.

Ddol Cownwy (SJ01 and SH91), late September

Habitat: Lane verges and plantation.

This last outing proved challenging as we attempted to record in five monads spread over two hectads. Most plants were "gone-over", although *Succisa pratensis* (Devil's-bit Scabious) was flowering profusely. The lane verges produced a good number of records and the return route through conifer woodland revealed *Euphrasia* agg. still in flower and several sedges including *Carex laevigata* (Smooth-stalked Sedge), *C. spicata* (Spiked Sedge), *C. lepidocarpa* (Long-stalked Yellow-sedge) and *C. pallescens* (Pale Sedge) as well as a magnificent shuttlecock of *Dryopteris cambrensis* (Narrow Male-fern).

3 day recording, based at The Bunkhouse, Hafren Forest (SN87, SN88, SN97, SN98, and SN89) in June

Three to four separate groups covered upland areas and lanes around Llangurig and the upper Wye Valley on day 1, ground in the Clywedog Valley and Hafren Forest area on day 2, and the Twymyn Gorge and a small upland pool (Rhyd y Porthmyn Pool) on day 3.

One of the highlights from these outings, and/or during the preparatory walks, was *Vicia orobus* (Wood Bitter-vetch) - two good stands (new sites) were found on the steep banks along the A44, and two other known small colonies were re-found (for the first time for many years) along or close to lanes. The highlights on day 3 were *Utricularia minor* (Lesser Bladderwort) and *Isoetes echinospora* (Spring Quilwort) – these were both updates from 1985.

Other

Outings organised by the Montgomeryshire Field Society, with which the Flora Group has close ties, and individual recording, have also contributed hugely to the several thousand records submitted to the DDb for this year.

Bryophytes

The County Bryologist (Mark Lawley and his friend Ralph Martin) have attended most of our outings and have found some interesting bryophytes, including some county firsts and other rarities.

Section 7 species

The find of most interest for the year is a second site for *Cephalanthera longifolia* (Narrow-leaved Helleborine). Both sites are in separate areas of woodland near Kerry in the east of the county. This find is thanks to John Clayfield's diligent search of the area.

In addition to the above records for *Vicia orobus*, another new site was found and another old site re-found, again more or less in the vicinity of the Upper Wye Valley, and on road verges. The Flora Group has liaised with Powys Council in the past to get *Vicia orobus* verges made into Powys Roadside Reserves. The length of each Reserve invariably exceeds the *Vicia orobus* stands as this species is often located within a much longer section of diverse verge. At the beginning of the year, six such Reserves were listed. Whilst we have contributed some new sites and/or updated information on known sites this year, we have also found that *Vicia orobus* areas in two of the Reserves have been destroyed by road works or cable laying. Works were apparently unavoidable at one of the sites as the other side of the lane was subsiding.

V.c.48 Meirionnydd

Sarah Stille, 38, *Foregate, Preston PR2 8LA. Email: mossysal@btinternet.com*

Once again, we have had a busy year's recording for Atlas 2020 with a full programme of nine monthly field meetings, in spite of illness, accidents and babies! Exceptionally we've had to cancel two including the national meeting at Morfa Harlech due to the parched condition of the dunes but also from a distinct lack of interest – maybe people are too busy in their own counties recording for Atlas 2020? The heatwave of this summer seems a long way away now but it must also have limited the plants we were able to find as things were so shrivelled much earlier than usual.

However, support for Caerdeon was the best ever and we could have had more participants if we'd had more rooms! A reminder to book early for 2019! It is gratifying that so many people return year after year and I really enjoy their support. Once again, we had a great weekend, making over 3000 records (out of a total of almost 5000 for the year) and enjoying some lovely weather. A report on our outings to Caerdeon will appear in the BSBI Yearbook.

In February, we went to a 'virgin' tetrad and recorded in a lovely deep, wooded valley on the north border of the vice-county, shared with Denbighshire. Next was Heather's meeting at Peniarth, on the Afon Dysynni near Tywyn, where there was a new hectad record, *Carex distans* (Distant Sedge), a Scarce Plant in our Rare Plant Register. In March, we had a warm welcome – with chocolate biscuits – from Rachel and Geraint at Fedw Arian, near Bala, and although the sheep were still on most of the fields, we made a good list for the farm and the surrounding tetrad.

In April, we were joined in Llanegryn by Dafydd Roberts, Senior Ecologist at the Snowdonia National Park Authority and Paul Green, for the last time as Welsh Officer. At the end of the day, we unexpectedly found ourselves in a delightful little valley with *Caltha palustris* (Kingcup), *Carex remota* (Remote Sedge), *Chrysosplenium oppositifolium* (Opposite-leaved Golden-saxifrage) and sheets of flowering *Anemone nemorosa* (Wood Anemone).

Jo Clark led a walk in June, in the difficult and rocky ground of Craig Aberserw, high above the widened and straightened A470. She was in action again in October, leading at Hafod y Llyn on the Glaslyn estuary where we saw a number of interesting and strange *Persicarias*! We wound up the recording year in Llan Ffestiniog – which as a Local Change tetrad already had a very good list but we were delighted to improve on this to over 300 species post-2000 (a 79% refind rate!).

Visitors to the county have sent me some great records such as Paul Day's *Botrychium lunaria* (Moonwort) from the Moel Fferna area and *Cyperus longus* (Galingale) which Faith Anstey found at Portmeirion. Barbara Brown introduced herself (before even being appointed as our new Welsh Officer!) by finding a new site for *Antennaria dioica* (Mountain Everlasting) on Rhobell Fawr. Gillian and Peter Foulkes sent me records for *Carex magellanica* (Tall Bog-sedge) and *C. limosa* (Bog-sedge) from high up in the Berwyn Mountains near the Montgomeryshire border. Ivor Rees made two new vice-county records with *Atriplex longipes* (Long-stalked Orache) and its hybrid with *A. prostrata*, *A. x gustafssoniana* (Kattegat Orache). Finally, Mark Duffell and John Handley sent me a wonderful list of over 400 records after their holiday here in May.

As ever, I feel very grateful for the support of my 'regulars' who come out month after month in all weathers and who volunteer to lead meetings when I can't. My thanks too, to everyone else who has sent me records. Welcome to Barbara and farewell and thanks to Paul for all his help, with all our best wishes for the future!

A few words from Denbighshire, v.c.50

Delyth Williams, *Vice-county Recorder for Denbighshire*

About 20 field meetings were held in Denbighshire in 2018 and it has been difficult selecting the highlights. This is just a snapshot of a few days, making mention of species less common here. Doubtless, I have missed many.

Recording started on 2nd January with the annual NYPH (New Year Plant Hunt – nothing to do with New York Police!). We thought an urban environment might be warmer so we tried Bersham, near Wrexham (SJ3049) but this year didn't manage very many in the timeframe allowed; only 46 species in flower although perhaps to be expected after a cold snap earlier in the winter. We did though find *Veronica persica* (Common Field-speedwell), *Veronica agrestis* (Green Field-speedwell), *Geranium pyrenaicum* (Hedgerow Crane's-bill), *Silene dioica* (Red Campion), *Senecio squalidus* (Oxford Ragwort), *Fumaria muralis* subsp. *boroei* (Common Ramping-fumitory) and *Lamium album* (White Dead-nettle).

The year started in earnest on 29th April in Gatewen Marsh, Wrexham (SJ35A) yielding 166 taxa, amongst them, everyone's favourite *Adoxa moschatellina* (Moschatel) as well as the less common *Bryonia dioica* (White Bryony), *Berula*

erecta (Lesser Water-parsnip), *Ballota nigra* (Black Horehound), *Galium album* (Hedge Bedstraw) and *Barbarea verna* (American Winter-cress).

On 13th May, we searched for *Trollius europaeus* (Globoseflower) along the banks of the Afon Iwrch, south of Nebo (SH85H). Had we gone 50m further along than our turn-off point we would have found it – as someone who returned a few days later did. However, we did find *Carex aquatilis* (Water Sedge), *Myosotis laxa* (Tufted Forget-me-not), *Hypericum humifusum* (Trailing St John's-wort) and *Lythrum portula* (Water-purslane) that day.

The season was notable of course for the glorious extended period of hot sunny days. Seasoned locals tell me this is the first time since the 1970s that Bryniau Clwyd were brown, crisp and shrivelled. We avoided the heat by sticking to shady lanes and verges, finding *Veronica spicata* (Spiked Speedwell) – rare in Denbighshire – on a verge heavily-dusted by a limestone quarry, in St. George (SH968760) on 10th June. Within 20 minutes or so, dodging the heavy lorries, we recorded about 90 taxa on the crossroads, including *Anacamptis pyramidalis* (Pyramidal Orchid), which is common around here, *Hypericum montanum* (Pale St John's-wort), *Hypericum hirsutum* (Hairy St John's-wort), *Clinopodium vulgare* (Wild Basil), *Catapodium rigidum* (Fern-grass) and *Pulicaria dysenterica* (Common Fleabane). Later on that day, we found *Viola reichenbachiana* (Early Dog-violet) on a damp bank, *Chenopodium rubrum* (Red Goosefoot) in a field, *Glyceria notata* (Plicate Sweet-grass) in a pond and the rare *Agrimonia procera* (Fragrant Agrimony) by the base of a stile. The Agrimony was not in flower but tiny glands on the underside of the leaves produced the characteristic lemony smell after it was crushed underfoot. We have 242 records in it for that lovely day.

Tal-y-cafn (SH7871) on 9th August yielded the most records taken in a single day: 273. The day began by the banks of the Afon Conwy with the re-find of *Bolboschoenus maritimus* (Sea Club-rush), as well as other likely suspects from the muddy brackish water's edge such as *Samolus valerandi* (Brookweed), *Oenanthe lachenalii* (Parsley Water-dropwort), *Spergularia marina* (Lesser Sea-spurrey), *Puccinellia maritima* (Common Saltmarsh-grass) and *Juncus gerardii* (Saltmarsh Rush). The railway station behind was too tidy to be of interest but a patch of bare ground behind it held many treasures such as *Viola tricolor* subsp. *tricolor* (Wild Pansy), *Papaver rhoeas* (Common Poppy) (surprisingly uncommon), *Vicia sativa* subsp. *nigra* (Narrow-leaved Vetch), *Helminthotheca echioides* (Bristly Oxtongue), *Senecio vulgaris* subsp. *vulgaris* var. *hibernicus* (rayed form of Groundsel) and *Aethusa cynapium* (Fool's Parsley). Lunch was enjoyed there before heading up away from the river towards lanes and woodland belonging to the famous Bodnant Estate. We found

Euphrasia arctica (Arctic Eyebright) by a gateway, *Lepidium heterophyllum* (Smith's Pepperwort) and *Carex muricata* subsp. *pairae* (Prickly Sedge) on a bank and, best of all, a lovely stand of about ten huge *Pinus radiata* (Monterey Pine), quite surprisingly a county first record.

We found *Euphrasia tetraquetra* (Western Eyebright) in Minera Quarry on 2nd September – second record for v.c.50 as well as a much argued over hybrid toadflax *Linaria* x *dominii* (*L. purpurea* x *L. repens*), originally recorded as *Linaria repens* (Pale Toadflax) by me before I learnt of the existence of a hybrid. John Osley found *Alnus rubra* (Red Alder) in a plantation in Coed Sara (SH86I) – another county first. Martyn Stead found what we think to be *Hordelymus europaeus* (Wood Barley) by the banks of the Afon Clywedog not far from Rhewl (SJ1160) – not a county first but second recent record. After the dry spell, three records (out of five in total) were sent in of *Datura stramonium* (Thorn-apple) and Bryan Formstone refound *Rubus parviflorus* (Thimbleberry) at its only site in the county – last seen in 1992 in Pont-y-Capel Wood near Gresford (SJ340 546).

The last day of the season was in Marchwiel and as was eventually inevitable, the heavens opened. Undeterred of course, we persevered to find a few arable weeds, not common in Denbighshire, along the edge of a maizefield, *Spergula arvensis* (Corn Spurrey), *Stachys arvensis* (Field Woundwort), *Fallopia convolvulus* (Black-bindweed) and *Viola arvensis* (Field Pansy). Later we found *Armoracia rusticana* (Horse-radish), *Oenothera stricta* (Fragrant Evening-primrose), *Lamium amplexicaule* (Henbit Dead-nettle) and *Humulus lupulus* (Hop).

This is just the briefest of snapshots of our activities and I would like to end by thanking all who contributed and welcoming anyone to join us here in Denbighshire next season.

Anglesey Plants in 2018

Ian Bonner, *Joint Vice-county Recorder for Anglesey*

This is partly a record of interesting plants found and also a note about the twelve Flora Group meetings organised by Nigel Brown.

The first Flora Group recording day was on Sunday 15th April at Glyn, Benllech, SH51.81, with Roger Tebbutt, the landowner, joining the Group for the morning.

Other Flora Group Meetings were on:

- 28th April, Malltraeth, SH41.69,
- 14th May, Llanddwyn, SH38.62, 38.63, 39.62, 39.63 & 41.64,
- 15th May, Llaneilian, SH47.92 & 48.92,
- 16th May, Valley Lakes, SH31.75, 31.76,
- 17th May, Tywyn Trewan Common, SH32.75 & 32.76,
- 26th June & 2nd July, Tan Dinas, SH58.81, 58.82 & 59.82,
- 27th July, Fagwyr Bach, Talwrn, SH48.79,
- 6th August, Inland Sea, Four Mile Bridge, SH27.78 & 27.79,
- 29th August, Llyn Alaw SH40.86,
- 14th September, Llyn Alaw, SH38.85 & 39.8,
- 5th October, Lleiniog, SH61.79 & 62.79.

Attendees: Nigel & Caroline Brown, Ian Bonner, Charles Aron, Lesley Ball, Richard & Kathryn Birch, Robbie Blackhall Miles, Les Colley, Alan Cowlshaw, Andrew Dixon, Debbie Evans, Sam Hawkins, Hugh Knott, Catharine Moss, Jane & Ivor Rees, Jamie Robertson, Mari Roberts, Martyn Stead, Jen Towill and Barry Wrightson.

There has also been the usual welcome flow of records from individuals, headed by Debbie Evans with lists from 54 monads from 2017 and 5 monads from 2018 (with the promise of more to come) and by Ted Phenna and Ivor Rees with additions and regular updates to coastal species.

The only additions to the native taxa are *Carex x pseudoaxillaris*, the hybrid between *C. otrubae* (False Fox-sedge) and *C. remota* (Remote Sedge), spotted by Richard Birch in rank grassland near the mouth of the Afon Lleiniog, SH61.79 in October, and two additional *Atriplex* (Oraches) taxa.

Atriplex praecox (Early Orache) was found by Ivor Rees by the shore of the Menai Strait, by Plas Penrhyn, SH45.63. This is almost opposite the site in

Foryd Bay where Ivor added Early Orache to the Caernarfonshire list in 2017. Growing close to the Anglesey plants was the hybrid between *Atriplex praecox* and *A. glabriuscula* (Babington's Orache) identified with help from Paul Green, who has encountered both these taxa and the hybrid near Wexford in County Waterford.

While mentioning Oraches – *Atriplex glabriuscula* has always been well recorded along the more exposed west coast and around Red Wharf Bay, but additionally this year, Ivor has also found it along the more sheltered shore of the Menai Strait – from the mouth of the Braint east to Llanidan – an additional 9 monads.

Additions and reconfirmations of rare and scarce species were more numerous and included the following.

At least 500 plants of *Teesdalia nudicaulis* (Shepherd's Cress) were in evidence along sandy tracks west of Malltraeth SH40.68 in April. We could not find it at the other recent locations to the east of the village and it has not been seen at the Aberffraw and Newborough localities for around 20 years. See image 14 on the back cover.

Baldellia ranunculoides subsp. *repens* (Lesser Water-plantain) was doing well at Llyn y Fydlyn SH29.91, despite the low water levels this summer and was also still at its only other Anglesey location at nearby Mynachdy SH30.92. Although, here, recent agricultural intensification has meant that some of the eutrophication-sensitive plants like *Apium inundatum* (Lesser Marshwort), *Littorella uniflora* (Shoreweed) and *Myriophyllum alterniflorum* (Alternate Water-milfoil) that were present in 2017 could not be found this year by Andy Jones.

Bromopsis erecta (Upright Brome) was reconfirmed by Tim Blackstock from calcareous grassland at Penmon Point SH64.81. It was last noted here in 1999 and is not currently known from elsewhere.

The dry summer caused significant draw-down on Anglesey water bodies and this resulted in fine displays of some of the small aquatic species. At Llyn Alaw, SH38, for example, in September, *Eleocharis acicularis* (Needle Spike-rush), and both *Elatine hexandra* (Six-stamened Waterwort) and *E. hydropiper* (Eight-stamened Waterwort) were locally abundant all round the reservoir, the spike-rush forming an orange/yellow band contrasting with the dark red of the waterwort. A similar display was in evidence at Cefni Reservoir, SH47.

The dry summer also enabled Nigel Brown to explore further into the fen at Cors Goch Nature Reserve and refind a single *Osmunda regalis* (Royal Fern) with just two sterile fronds; it was last noted from here by R H Roberts as two

plants in 1987. John Bratton also refound *O. regalis* on the cliff near Ffynnon Eilian, SH46.93, another Dick Roberts record from 1993.

Conversely, the dry summer resulted in a major reduction in the gentians on the dunes around Rhosneigr, both *Gentianella campestris* (Field Gentian) and *G. amarella* (Autumn Gentian) were very scarce and subsp. *septentrionalis* of the latter species was not found at all.

The trips to Llyn Alaw enabled reconfirmation of *Rorippa islandica* (Northern Yellow-cress) on the gravelly parking area by the track to Penworthy, SH406.865, where first discovered in 2006 and still not found elsewhere on the Island.

A visit to Llanddwyn in May showed the single patch of *Empetrum nigrum* (Crowberry) still on its hill top where first noted by Liz and Mike Howe in 2004 – its only known locality in Anglesey. Although there is a note that it had been seen between Amwlch and Point Lynas in c. 1896 – perhaps awaiting rediscovery! See image 11 on the back cover.

Llanddwyn also gave the opportunity to refind *Ophioglossum azoricum* (Small Adder's-tongue) at its only Anglesey location, growing with what appeared to be *O. vulgatum* (Adder's-tongue). See image 13 on the back cover. With the warden's agreement a sample of both were collected and sent to the Royal Botanic Garden in Edinburgh where, in September, Markus Ruhsam confirmed that we had indeed found both species. Later the same week on a visit to the north end of Tywyn Trewan, SH31.76, Flora Group members found more Adder's-tongue resembling both species in rather coarse grassland and gorse scrub on damp peaty sand. Again, Markus confirmed the presence of *O. azoricum* – at last a second Anglesey locality.

Still at Tywyn Trewan we failed to find *Chamaemelum nobile* (Chamomile) in its damp hollow. Despite regular searches it has not been seen since 2010, again this was its only recent Anglesey locality. However, *Moenchia erecta* (Upright Chickweed) was quite plentiful on the fairway of the golf course and the central strip of the track crossing the site in SH32.75. See image 9 on the inside back cover. Sunshine also enabled us to spot several small patches of *Hypochaeris glabra* (Smooth Cat's-ear) scattered across the dune system.

A nice surprise on a visit to Cae Hywel SH33.77, part of the RSPB's Valley Lakes complex, was about 100 plants of *Filago vulgaris* (Common Cudweed) on a rocky outcrop – only the third post-2000 locality. See image 7 on the inside back cover. On the RSPB's Cors Ddygai reserve, Lesley Ball noted *Utricularia australis* (Greater Bladderwort) in flower in one of the drains beside the Afon Cefni. See image 12 on the back cover.

Two British natives in unusual situations were *Lathyrus nissolia* (Grass Vetchling) and *Viburnum lantana* (Wayfaring-tree). The *L. nissolia* was spotted by Steph Hoare beside a mown path at the Woodland Trust's Coed Cwr y Pwyll site at Llanfaelog, SH34.73, possibly introduced with grass seed. The *V. lantana* was a straggly specimen spotted by the Flora Group in deep shade on the Mound at Lleiniog SH62.79, probably originally planted, but still the first record away from known introductions.

Turning to neophyte taxa, an addition to the flora was *Telekia speciosa* (Yellow Oxeye) photographed on a road verge near Penhesgyn SH53.74 by Jane & Ivor Rees. See image 10 on inside back cover. Another first record was of *Solanum physalifolium* (Green Nightshade), several plants of which were spotted by John Bratton on recently cleared ground by the War Memorial on Church Island, Menai Bridge, SH55.71.

On a bank between Valley and Four Mile Bridge Debbie Evans noted *Rhus typhina* (Stag's-horn Sumach), the first Anglesey record, along with *Weigela florida* (Weigela), *Forsythia x intermedia* (Forsythia) and *Buddleja globosa* (Orange-ball-tree) – all originally planted some time ago.

Claytonia perfoliata (Springbeauty) is worthy of a mention with the only known record from sandy ground at Malltraeth in 1993 by Peter Hope-Jones. Though originally noted as a casual, the Flora Group confirmed it is still present and well established in sandy grassland on the western edge of Malltraeth, SH402.685. See image on the front cover.

Following the first record of *Zantedeschia aethiopica* (Altar-lily) in 2016, a second location was spotted by Nigel Brown, where a good-sized plant was growing at the entrance to the sewage works at Pentre Berw, SH466.725. Another second record was the 3m wide clump of the bamboo *Phyllostachys bambusoides*, well established on a coastal bank near Valley.

The presence of *Yucca gloriosa* (Spanish-dagger) at Newborough has always been intriguing. Rumour has it that one was washed up on the beach in the 1960s and planted by staff of the Forestry Commission. Plants now occur in three monads, SH38.64, 38.65 & 39.65, mainly between the fixed dune and the plantations, although two plants were actually beneath Corsican pines. In 2018, Nigel Brown counted 22 shoots of which 14 were flowering spikes. In addition, in 2018, the Flora Group found three plants (one a variegated specimen) on soft coast at Lleiniog, north of Beaumaris, SH61.78 & 62.79.

As we approach the final year of recording for the 2020 Atlas a summary of progress is relevant. The BSBI Database shows that for the 16 hectads, the average refind rate is 80% and the average number of species not refound since

2000 is 152, these figures seem disappointingly high; but the figures are based on all date classes – so will include species that may well have been lost many years previously or were only recorded as casuals. However, on the positive side the average number of additional taxa per hectad is 130. For 2019, we will have available lists of the “missing” taxa for each hectad and be making a final effort to reduce these.

Very grateful thanks are due to Nigel Brown, my co-recorder, for all our deliberations and for organising all the Flora Group meetings. In addition, thanks to those who have provided photographs and additional records and to the whole Group for their company in the field.

Finally, some very sad news, Barry Wrightson died unexpectedly in mid-November. Barry was one of our most regular attendees of Flora Group meetings with a special knowledge of the Newborough area and a deep understanding of the geology of Anglesey. We will miss him and his eagle eye very much. See a photo of Barry on inside back cover (image 8).

Species-rich Marshy Grasslands in the Dulais Valley, Neath Port Talbot

Charles Hipkin & Hilary Hipkin

In the summers of 2015 and 2016 we made a conscious effort to look for species-rich marshy grasslands in Neath Port Talbot (NPT) where we’ve been recording vascular plants and bryophytes systematically in 1km squares for a couple of decades. We had been aware for some time that there was a dearth of records for species like *Genista tinctoria* (Dyer’s Greenweed), *Triglochin palustris* (Marsh Arrowgrass), *Dactylorhiza maculata* (Heath Spotted-orchid), *Cirsium dissectum* (Meadow Thistle), *Genista anglica* (Petty Whin) and *Serratula tinctoria* (Saw-wort) in our database and that provided us with the impetus to look for suitable sites. All of these species are good *indicators* of biodiverse marshy grassland habitats in NPT and their occurrence provides useful criteria for the designation of Wildlife Sites or SINC’s (Sites of Important for Nature Conservation).

A significant part of our survey effort was concentrated in the upper Dulais Valley between Crynant and Onllwyn where aerial photographs revealed grassland compartments that looked promising. Near Blaendulais (Seven

Sisters), which lies in the middle of this region, we discovered three meadows all of which contained several *indicator species* and a few others that we weren't expecting. One large marshy meadow in SN8208 and SN8209 contained the largest population of *Genista tinctoria* (Dyer's Greenweed) (see image 2, on page 2) that we have ever seen plus small amounts of *G. anglica*. *Serratula tinctoria* was also locally abundant along with small patches of *Dactylorhiza maculata* and some large colonies of *Leucobryum glaucum* (Large White-moss). An interesting feature of the meadow was a conspicuous population of Umbellate Hawkweed (*Hieracium umbellatum*). Elsewhere there were swards of *Trichophorum cespitosum* (Deergrass) and boggy areas with huge amounts of *Narthecium ossifragum* (Bog Asphodel). Adjacent to this meadow, a former Sitka Spruce coupe was clear-felled several years ago and the site is now managed by NRW and Butterfly Conservation in an effort to reclaim the original rhos pasture and provide suitable habitat for Marsh Fritillary butterflies (*Euphydryas aurinia*). The occurrence of *Serratula*, *Succisa pratensis* (Devil's-bit Scabious) and *Achillea ptarmica* (Sneezewort) and a large population of *Dryopteris carthusiana* (Narrow Buckler-fern) here is promising.

More *Genista tinctoria* and a significant population of *Dactylorhiza maculata* was then found in another area of marshy grassland in nearby SN8108. In the same monad, we noted a relatively small meadow which was heavily grazed by horses which at first sight looked rather unpromising. However, on close inspection we found this to be an exceptional site. One of the first things that drew our attention was an abundance of *Succisa* and a local abundance of *Pedicularis palustris* (Marsh Lousewort). However, the occurrence of a significant area of base-flushing with large amounts of *Drepanocladus cossonii* (Intermediate Hook-moss), some *Campylium stellatum* (Yellow Starry Feather-moss), *Plagiomnium elatum* (Tall Thyme-moss), *Pinguicula vulgaris* (Common Butterwort), *Valeriana dioica* (Marsh Valerian) and *Triglochin palustris* (Marsh Arrowgrass), set this meadow apart from all the others we had surveyed in the Dulais Valley. Other species of interest that we noted here during our initial surveys were *Cirsium dissectum*, which is very scarce in NPT, *Euphrasia rostkoviana* (Large-flowered Eyebright), *Carum verticillatum* (Whorled Caraway), *Hydrocotyle vulgaris* (Marsh Pennywort) and *Carex hostiana* (Tawny Sedge). This July we revisited the site in the company of Barry Stewart and we were delighted to find a population of *Galium uliginosum* (Fen Bedstraw) that we had previously overlooked. There have been no previous records of this species in NPT as far as we know and there are very few extant occurrences of it in v.c.41. In fact, it appears to be genuinely scarce in south Wales where, evidently, many populations have been lost in the last fifty years.

During our SINC surveys in 2016, we discovered another heavily horse-grazed meadow at the head of the Dulais Valley near Onllwyn (SN8510). We were pleased to find another site for *Triglochin palustris* and *Pedicularis palustris*, but the real surprise was the presence of *Epipactis palustris* (Marsh Helleborine) and *Samolus valerandi* (Brookweed), which are both extremely uncommon away from coastal dune slacks in south Wales. Other notable species in this meadow included *Veronica scutellata* (Marsh Speedwell), *Hydrocotyle vulgaris* and *Scutellaria minor* (Lesser Skullcap).

Species-rich marshy grasslands are uncommon in NPT. Historic records of iconic species like *Trollius europaeus* (Globe Flower) from various parts of the Neath, Dulais and Pyrddin Valleys, paint a picture which is unrecognisable today. The last time we saw Globe Flower in NPT was over twenty years ago in 1997. Other species such as *Lathyrus linifolius* (Bitter-vetch) and *Vicia orobus* (Wood Bitter-vetch) have undoubtedly suffered in the region too. Coal mining, agricultural improvements and the expansive coniferization of NPT's upland landscape have all played a part in the unfortunate demise of these nationally important habitats and species. Somehow, amidst all this, some precious remnants still survive in places like the Dulais Valley, at least for the time being.

South Stack Angelica

A Distinct Coastal Variant from Anglesey, v.c.52

R.A. Jones

The 'Flora of Great Britain and Ireland' (Sell & Murrell, 1996-2017) shows how many subspecies, forms and varieties of vascular plants have – so far – been found here and perhaps where to find variants. Certainly, some habitats (like some species) seem particularly rich and it would be interesting to analyse the distribution of variation in the British and Irish flora. In particular, there may be significant concentrations on exposed coastal promontories.

On June 12th 2010, the 48th Welsh BSBI AGM (and 28th Exhibition Meeting) visited South Stack in Anglesey (v.c.52) to admire the views and the very remarkable flora, some of which occurs nowhere else on earth. *Tuberaria guttata* subsp. *breweri* (Planch.) E.F. Warb. (Spotted Rock-rose) is found only on Anglesey, Llŷn and in parts of western Ireland and the beautiful *Tephrosieris integrifolia* subsp. *maritima* (Syme) B. Nord. (South Stack Field-fleawort) is endemic to this part of Ynys Gybi / Holy Island. There is healthy debate over

the taxonomy of *Anthyllis vulneraria* subsp. *corbierei* (Sell & Murrell, 1996-2017; Rich, 2001) (Kidney Vetch) but South Stack certainly supports a very distinctive variant.

On this visit the presence of several very experienced botanists allowed us to recognise other, infraspecific taxa at South Stack that could occur elsewhere, like the densely pilose Heather named by Lynne Farrell as *Calluna vulgaris* var. *hirsuta* (also found in Cornwall) and a very dark form of *Carex flacca* (Glaucous Sedge) that Arthur Chater said was widespread – but unnamed – in coastal heath.

Returning to the car park near Elin's Tower SH206.819 we encountered an odd umbellifer that I at first failed to recognise as *Angelica sylvestris* (Wild Angelica) not least because it appeared to be in the “wrong” habitat – or unusual, at least, in dry heath (see image 6 on page 2). It had conspicuously large, glossy and overlapping leaflets with very curved, mostly uniserrate margins, distinctive basal leaflets at the junction of the main leaf division and a notably stiff, fleshy texture. The flowering stems were relatively short (<1m high) and stout for such large leaves and had very tightly compressed, rounded umbels. In all these respects the South Stack Angelica is not like the common *A. sylvestris* from more sheltered (and often shaded) habitats inland but nor did it seem to match any of the described subspecies and varieties in Sell & Murrell (1996-) and I can find no other reference to this variant, except perhaps the mention of “dwarf ... variants ... [from] very exposed positions in W. Scotland” (Tutin, 1980) or maybe the “var. *decurrens* Fisch., Mey. & Lallemand which is said to prevail in the north and west” (Allen, 1987). A sample survey of *A. sylvestris* in British herbaria found no comparable specimens in OX, CGE and KEW but, maybe for reasons of size or bulk, the species seems to be poorly represented in collections.

In November 2016, I got permission from the RSPB (as landowners) to collect a few seedlings of Angelica for cultivation in a more sheltered site, and to see how much of their appearance was due to strong winds, salt etc. and how much was inherited. In 2017 these cultivated plants all showed the same glossy, congested foliage as the South Stack population and in 2018 they all flowered – in June, at least 6 weeks before inland populations of *A. sylvestris* – with the same very thickened stem and dense umbel (see image 4 on page 2). (Notably, perhaps, these plants were also infested by an unidentified aphid that did not seem to seriously affect inland plants.)

I think this is good evidence for inherited characteristics in South Stack Angelica and the variant may well need a more detailed description. Recent fieldwork in 2018 only found the plant in small areas of coastal heath between

Pen-las Rock, SH208.816 and Mynydd Tŵr / Holyhead Mountain, SH218.829 but further surveys are required north of here – and indeed elsewhere¹. The whole population seemed relatively uniform in terms of morphology and phenology but it would also be interesting to see if it formed intermediates with other populations of *A. sylvestris* and also see the extent of early flowering (as this could be a barrier to gene-flow and, thus, incipient speciation).

*

Revisiting South Stack also revealed other variants that could deserve investigation: in particular, a very distinct population of *Pimpinella saxifraga* (Burnet Saxifrage) that flowers in mid-June (again, 6 to 7 weeks ahead of its inland counterparts), with notably thick stems and entire, un-dissected leaflets (see image 5 on page 2). In June 2018, several plants were host to a rust fungus *Puccinia pimpinella* (F. Strauss) Link. that has been assessed as ‘Critically Endangered’ in Wales (Woods et. al., 2015) and could be further evidence of genetic distinctiveness.

It is interesting that the South Stack Angelica and Burnet Saxifrage both belong to the same family – Apiaceae – and, of course, these variants are accompanied by abundant *Daucus carota* ssp. *gummifer* (Syme) Hook. fil. (Wild Carrot). Elsewhere, in southwest Pembrokeshire, v.c.45 there are reportedly dwarf variants of *Heracleum sphondylium* L. (Hogweed) and it is possible that the tap-roots and rosettes ‘pre-adapt’ members of the Apiaceae to high wind and water stress (although tolerance to high UV is surprising in *A. sylvestris*).

Another group that showed notable resilience in the drought of 2018 was plants of the Asteraceae, and that most likely reflects different physiological mechanisms (such as, perhaps, latex as a form of water-storage). Certainly, the population of *Leucanthemum vulgare* (Ox-eye Daisy) at South Stack remained strikingly green and succulent this year and it might therefore be another very good species for further research in cultivation.

Acknowledgements

Thanks to Fred Rumsey (NHM) for advice on taxonomy, Stephen Evans (Recorder v.c.45) for information on *Heracleum* and particularly Steve Chambers (Recorder v.c.46) for ideas about flowering time and reproductive isolation.

¹ I found very similar plants in October 2018 on exposed coastal heath near Cloughboy, Donegal.

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Erigeron x stanleyi (a hybrid fleabane) new to Wales

Richard Pryce & Kathleen Pryce, *Joint Vice-county Records for Carmarthenshire (v.c.44), Trevechin, School Road, Pwll, Llanelli, Carmarthenshire, SA15 4AL. PryceEco@aol.com*

A taxon new to Wales was discovered by Barry Stewart when carrying out consultancy work at Burry Port on 17th September 2018. The site, east of the harbour and about 250m north of the sea shore at an altitude of c.5m, comprises levelled, coarse, crushed concrete and rubble up to cobble-size, derived from the Carmarthen Bay Power Station that was demolished in 1991-92. Over the last 25 years, it has gradually become colonised with scattered and patchy scrub, mainly of *Salix cinerea* subsp. *oleifolia* (Rusty Willow) with intervening open grassy areas, some tall-herb stands and bare rubble. This area was visited during the BSBI AGM in 2005 when it was much more open than today, principally to show members *Linaria supina* (Prostrate Toadflax), a plant that still grows there, albeit no longer so abundantly. Barry found that, across the site, there was a great abundance of both *Conyza floribunda* (Bilbao Fleabane) and *Erigeron acris* (Blue Fleabane) with many thousands of each. Eventually he came across a few distinctive plants having a peculiar, dense, mop-like conglomeration of flowering branches on top of a c.30cm tall leafy stem with some flowers having phyllaries and ligules a deep carmine colour. He emailed photos to Tim Rich telling him of the abundance of *C. floribunda* but not thinking to mention the presence of *E. acris*. Tim replied "Hybrid with blue fleabane? Exciting! Fertile?" even though *E. acris* had not been mentioned by Barry. A short trawl of the internet found that this hybrid has been named as *X Conyzigeron stanleyi*. *E. acris* is a native species, frequent on the dunes in the area, and abundant at this brownfield site. The other parent is an alien first recorded in Carmarthenshire (in south Llanelli) in 2004, since when it has spread aggressively and abundantly over open, disturbed and brownfield sites through the Llanelli – Burry Port area and is now extending its range throughout the county.

Kath and I went searching for the plants a few days after Barry's discovery and found twelve centred at SN 4491 0036 over an area of about 20m x 10m and another single specimen on another part of the site, close to about ten *Linaria supina* plants at SN 44830 00366. Despite their carmine red hue, they were surprisingly difficult to see as they seemed to blend in with the other *Conyza* plants and were camouflaged against the crushed concrete substrate. It is therefore likely, given the abundance of the parents, that there were more of the hybrid scattered elsewhere over the site.

We emailed photos to Clive Stace who replied "Your plants look like excellent contenders for this hybrid" and he suggested that we also send pictures to Tony Mundell who first recognised it. Tony replied "Yes, I am sure your photos show what is now called *Erigeron x stanleyi* but was first named as *X Conyzigeron stanleyi*. I am delighted that it has been found just as I predicted in my original article in the New Journal of Botany" (Mundell, 2016). "I expect the hybrid of *E. acris* with *C. sumatrensis* or that with *C. canadensis* will be very similar and I am not familiar with those two hybrids, but as you say that both *C. floribunda* and *E. acris* were present in good numbers it is reasonable to assume that they were the parents".

Erigeron x stanleyi was first collected in the British Isles in Dublin in 1984-5 although it was not recognised as being naturalized until 1996 (Reynolds, 2002; Stace, *et al.*, 2015). A single plant was then found in open vegetation over sand and gravel at New Ross, Co. Wexford by Paul Green in 2010 (Green, 2011). Further records have been made at Newmarket, West Suffolk, and at a site in Cambridgeshire (reported at the BSBI Exhibition Meeting by Alan Leslie in 2015) and, also in 2015, of at least twenty plants at Winnall, Winchester, Hampshire, by Paul Stanley, after whom Tony named the hybrid. Tony went on to say that he had had a request for samples of the hybrid and both parents from a researcher in Holland for DNA testing and that he had sent material from its Winchester site. He was later informed by the researcher that its hybrid status had been verified. Tony presumes this hybrid is an annual, or at most biennial, so the fact that it is still at the Winchester site shows that the hybrid can form easily when both parents are present.

Barry's Burry Port site is the first record of *Erigeron x stanleyi* from Wales and as the parents are in great abundance, it is likely to recur in future years, perhaps until the land is redeveloped for housing, which is likely to happen in the near future. Whilst this is an interesting discovery of a new native taxon (native because it has arisen in Britain, even though one of the parents is an alien), it is likely that it will again arise in future wherever the parents grow together, although, it must be said, that we've never seen the parents growing together in any other sites in such profusion, so it may not become at all common. Most of the seeds in the hybrid plants appeared to be malformed and are probably sterile so the hybrid's seed production is likely, at best, to have considerably reduced viability. However, the hybrid could occur even if only a few individuals of each parent are present and it is certainly worth being mindful of the possibility of it occurring elsewhere in the county, or elsewhere in Wales, where both parents grow together.

Associate species from within about a 10m radius of the main colony of plants are as follows:

<i>Achillea millefolium</i>	Yarrow	rare
<i>Agrostis stolonifera</i>	Creeping Bent	occasional
<i>Anthyllis vulneraria</i>	Kidney Vetch	rare
<i>Betula pendula</i>	Silver Birch	rare
<i>Blackstonia perfoliata</i>	Yellow-wort	rare
<i>Carex flacca</i>	Glaucous Sedge	rare
<i>Carex hirta</i>	Hairy Sedge	rare
<i>Centaurea nigra</i>	Common Knapweed	rare
<i>Centaureum erythraea</i>	Common Centaury	rare
<i>Conyza floribunda</i>	Bilbao Fleabane	locally frequent
<i>Cotoneaster integrifolius</i>	Small-leaved Cotoneaster	rare
<i>Dactylis glomerata</i>	Cock's-foot	occasional
<i>Daucus carota</i> subsp. <i>carota</i>	Wild Carrot	locally frequent
<i>Eupatorium cannabinum</i>	Hemp-agrimony	occasional
<i>Erigeron acris</i>	Blue Fleabane	locally frequent
<i>Festuca rubra</i>	Red Fescue	locally frequent
<i>Hedera helix</i>	Ivy	occasional
<i>Hypochaeris radicata</i>	Cat's-ear	occasional
<i>Leontodon hispidus</i>	Rough Hawkbit	locally frequent
<i>Linum bienne</i>	Pale Flax	occasional
<i>Lotus corniculatus</i> v. <i>corniculatus</i>	Common Bird's-foot-trefoil	locally abundant
<i>Lotus corniculatus</i> v. <i>sativus</i>	Alien Bird's-foot Trefoil	occasional
<i>Melilotus altissimus</i>	Tall Melilot	rare
<i>Oenothera cambrica</i>	Small-flowered Evening-primrose	rare
<i>Pastinaca sativa</i>	Wild Parsnip	rare
<i>Pilosella officinarum</i>	Mouse-ear-hawkweed	rare
<i>Plantago lanceolata</i>	Ribwort Plantain	locally frequent
<i>Rhinanthus minor</i>	Yellow-rattle	locally frequent
<i>Rubus armeniacus</i> 'Himalayan Giant'	a garden blackberry	rare
<i>Rubus caesius</i>	Dewberry	occasional
<i>Rubus ulmifolius</i>	Elm-leaved Bramble	occasional
<i>Rumex acetosa</i>	Common Sorrel	rare
<i>Rumex crispus</i> subsp. <i>crispus</i>	Curled Dock	rare
<i>Salix cinerea</i> subsp. <i>oleifolia</i>	Rusty Willow	occasional
<i>Salix x multinervis</i>	a hybrid willow	rare
<i>Sonchus asper</i>	Prickly Sow-thistle	rare
<i>Taraxacum</i> agg.	Dandelion	rare
<i>Trifolium pratense</i>	Red Clover	locally frequent

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Images 7-14: see article Anglesey Plants in 2018, page 24.

Inside back cover images:

7: *Filago vulgaris* (Common Cudweed) at Cae Hywel. © Mari Roberts

8: Barry Wrightson. © Ian Bonner

9: *Moenchia erecta* (Upright Chickweed), Tywyn Trewan. © Hugh Knott

10: *Telekia speciosa* (Yellow Oxeye), road verge near Penhesgyn. © Jane Rees

Back cover images:

11: The Flora Group admire the only patch of *Empetrum nigrum* (Crowberry) on Anglesey. © Ian Bonner

12: *Utricularia australis* (Greater Bladderwort). © Hugh Knott

13: *Ophioglossum azoricum* (Small Adder's-tongue) at Tywyn Trewan. © Mari Roberts

14: *Teesdalia nudicaulis* (Shepherd's Cress) at Malltraeth. © Hugh Knott





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