

English Botanical News

No.2

2021 May



Digitalis purpurea (Foxglove), Newtimber Hill, Sussex (Sylvia Davidson)

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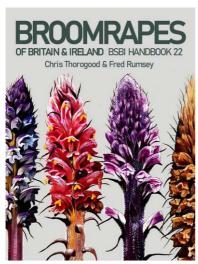
Topics that the newsletter will aim to include are:

- Reports from the England Annual Meeting
- Reports from other England meetings
- Annual reports from England vice-county recorders
- Any items of general vice-county news
- Reports of any new vice-county records of native species, or re-finds of native or alien species thought long extinct – with illustrations. New <u>country</u> records of aliens or other county records of aliens showing a significant change in range.
- Hints, tips and keys

It will not duplicate material that should appear in BSBI News or the BSBI Yearbook. It is aimed at all BSBI members, particularly those resident in England. A printable booklet version of the pdf is available on request.

News from the President: Lynne Farrell

It has been a cold, dry spring, and only now in May are we beginning to see things stir into life. Global warming has taken a step back perhaps, but the climate is certainly changing and the weather patterns have been very different from what we have experienced in recent times.



Although we are still not back to being able to hold both indoor and outdoor meetings, small, local groups can now botanise together, which is welcome. Further good news should come soon, but not in time for the larger, indoor gatherings previously arranged to place. take However we have learnt to Zoom, and that has been beneficial for members scattered all over Britain and

Ireland and we have been able to share talks and events, and to meet each other through the technology. So I hope that you will all be able to continue botanising and exploring your local area meanwhile. It has been a very productive period for many people, who were able to discover sites and species near their homes. Urban botany has increased and there are some excellent training videos available on-line, and welcome news on our website from members who have learnt about various topics and genera.

People have also been busy writing articles and there are several new handbooks in preparation, the first of which is on Broomrapes and available very soon. Since the first edition of EBN we have 2 new staff members, Sarah Woods, Fundraising Manager, and Julia Hanmer, our Chief Executive Officer. Both of them have contributed to this newsletter and I hope you enjoy reading more about them and their roles.

Best wishes to you all from Lynne Farrell

News from the Chair: Jonathan Shanklin

For many the last year has been a trial, though I have been comparatively fortunate. managed a botanical holiday in Shropshire last September and have been able to visit my sister in Cheshire as we form a support bubble. In my local area around Cambridge cycling and walking for exercise have been possible within a 10 km radius, which has led to a lot of local recording. Historically this area has been well covered. but it seems that there are still plenty of unvisited nooks and crannies. Even during the first



Jonathan Shanklin at a local group meeting in Cambridge (Peter Leonard)

three months of 2021 there have been nearly 400 new tetrad records.

On the science front I've been honoured by having a glacier in Antarctica named after me. Shanklin Glacier lies on the east side of the Antarctic Peninsula near its junction with the Ronne Ice-shelf. It will ultimately succumb to climate



Colobanthus quitensis at Rothera, Antarctica

change and become Shanklin Valley, but that is going to be a long time off. For the moment at any rate it is devoid of life, though further north two flowering plants do grow: Deschampsia antarctica (Antarctic Hairgrass) and Colobanthus *quitensis* (Antarctic Pearlwort).

BSBI tasks have kept me pretty busy. The Committee for England work is outlined in the report on page 17. In addition, as Hon. Field Meetings Secretary I collate and format the meetings organised by the four country field meetings secretaries for the Yearbook. The reports of field meetings also need editing into standard format, but this year there was only one report to collate and that was quite straightforward as I wrote it! I've been helping B&IB with proof-reading of papers and making some suggestions on their scientific content. Then there is also the role of VCR for Cambridgeshire (v.c.29). A VCR has many calls on their time and these will vary from county to county. Things that I have done include:

- Answering questions on plants from members and the public
- Commissions to carry out plant surveys
- Updating the county Rare Plant Register and Register of Plants of Conservation Concern
- Recording (rather more than anyone else as I discovered when I queried the DDb)
- Checking and entering records from other county botanists
- Sitting on county panels on designated sites
- Organising and leading local group meetings

- Mentoring Wildlife Trust staff on botanical identification
- Providing botanical information to planners and objectors

Many counties are now taking a team approach to the role, for example having an IT expert, a botanical expert and a PR expert.

A sad item of recent news is to report the death of Philip Oswald on May 5. He was a long time stalwart of the BSBI, particularly known for his Latin descriptions of new taxa and as editor of the BSBI Handbooks. A full obituary will appear in BSBI News. Obituaries and notices of the decease of several other England members have been reported in BSBI News.

Thanks are due to all those who have contributed to this newsletter. I would particularly like to acknowledge the VCRs, who make such a big contribution to the work of the BSBI. There are also the many photographers, whose images of plants in England, submitted to the BSBI photographic competition, are scattered throughout the newsletter, often near a mention of the relevant county.

Do let us have feedback on EBN as this will help improve content. It might also provide interest to have a letters page, so do send in controversial viewpoints for publication.

News from the England Field Meetings Secretary: Mary Dean

We are hoping to resume field meetings in May and I'm sure that many of you are longing to get out on a 'proper' field meeting with fellow botanists again. Although we are hoping for glorious weather and finding interesting plants, please keep in mind that all BSBI meetings must follow the latest Government guidance. Additional information can be found on the meetings page.

The first England meeting is Jonathan's Beginners meeting on 22 May and he tells me there are provisionally 10 participants. During lockdown there were many reports of people becoming interested in nature and BSBI is well placed to welcome new botanists and I think field meetings for beginners will be popular.



Valerianella sp. (Cornsalad). (Mary Dean)

Becoming familiar variation within a species was something I found a challenge as a beginner, and sometimes I still find surprises. I first came across Valerianella locusta (Common Cornsalad) in its dwarf form on coastal Therefore this dunes. recent find (see photo) of a much larger and

branched specimen in the tree pit of a recent street tree planting was a gorgeous sight. [The question is, which of two very similar species was it – the fruits will give the answer. Ed.]

Have you got a fabulous site in your area that you want to show to members? It's never too early to think about organising a meeting for next year and the organiser doesn't have to be the vice-county recorder, everyone is welcome to organise. If you are unsure about leading on the day, we might be able to persuade someone to do this for you, if you can do the meeting organisation.

News from the England Officer: Pete Stroh

Pete produces a regular England roundup for BSBI News, so there is no need to duplicate that here. What may be useful is providing some of the hyperlinks given there so that you can simply click and follow them.

A report about *Lythrum hyssopifolium* (Grass-poly) appearing from the seed bank at a pond in Heydon, East Norfolk following restoration works, after being absent (above ground) from the county for over 100 years appeared in <u>BBC Science News</u>.

John Richards produces regular Newsletters for South Northumberland detailing outstanding finds in the county.

Geoffrey Kitchener has an annual Kent newsletter and is compiling an online Rare Plant Register.

The Somerset Rare Plant Group have a host of meticulously compiled species accounts in their Rare Plant Register.



Ophrys fuciflora (Late Spider Orchid), Folkestone Downs (David Steere)

Tony Mundell and Martin Rand compile a Newsletter for Hampshire that is published twice a year.

John Durkin has produced a short Flora of Deepdale Wood (v.c.66), a beautiful site located on a side valley of the River

Tees that joins the Tees at Barnard Castle. It is, as John describes, one of "the four Teesdale Great Woods".

Finally, editions of Ken Adams' always excellent and informative <u>Essex Botany</u> are regularly snapped up at BSBI recorders meetings, and it's now possible to receive back issues for free (except for p&p). The newsletters are a goldmine of information, as are <u>Ken's Keys</u>.



Centaurium pulchellum (Lesser Centaury), Braunton (Mary Breeds)

New BSBI Staff

BSBI has welcomed two new members of staff in the last few months and I've asked them to introduce themselves.

Sarah Woods: Fundraising Manager



It's a pleasure to be asked to introduce myself in the England Newsletter, and I hope to meet and get to know a great many of you at events, or through our now ubiquitous digital channels, over the course of the year. New faces will certainly be a thing of joy for a while yet!

In this same vein, one of the highlights of my time at BSBI so far has been hearing from so

many quarters that one of the things membership is valued for is the inclusion in a community of friendly, welcoming and helpful peers. I hope to enjoy the journey of many followers of our work in starting out with little other than a child's working knowledge, and growing it through our resources and training opportunities (which we will continue to build upon).

My remit at BSBI is essentially to encourage people to support our mission and vision; recognising the value and importance of the work that is done by the staff, members and volunteers, and the necessity of this work in insuring the future of wild plants. Easily said; hopefully with your support and the support of a new host of botanical and conservation enthusiasts, it will be also easily enough done.

I am keen to support not only the strategic work of BSBI, but also local groups and networks in projects and activities that enrich their members – including earmarking local grant pots that could be applied to. John and I hope that some of

these could support and subsidise local events, work and training, so do get in touch if you know of any resources local to you that BSBI could apply to.

Thank you for your membership and support of BSBI, whether you've been with us for over 70 years or for just 5 minutes. It's a pleasure to work for such an organisation and I look forward to seeing us go from strength to strength with you.

Julia Hanmer: Chief Executive

Hello! I hope to meet many of you at BSBI events in future, but in the meantime it's very good to be able to say hello to you in this newsletter.

I've been really enjoying getting to know BSBI people and am hugely impressed by what a dedicated and committed group of people you all are. It is fascinating to hear about your many different journeys into botany and BSBI



and the great number of ideas and activities going on.

So, to introduce myself, let me start by telling you about my journey into wildlife conservation. Some of my earliest memories are of visits to my grandparents in Dorset and wandering country lanes with my grandmother telling me about the wild flowers and my grandfather pointing out the birds. I remember chalk lanes filled with flowers and butterflies and an amazing glimpse of a goldcrest's nest.

Later on, pond dipping was my favourite activity in school and I was lucky enough to go to Oxford to study zoology. We went through the entire animal kingdom, including all the invertebrate groups, but if I could have studied the plant, fungi and other kingdoms too that would have been even more amazing.

My first graduate job was unrelated to conservation, with a big company in Cheshire with a beautiful site. I joined the natural history society at work and was introduced to bat watching by Cheshire Bat Group. I was fascinated to learn more about bats. They live so close to people, yet we know so little about them, and so there is much opportunity to learn more. I trained up to become a volunteer roost visitor on behalf of English Nature (as it was at that time), visiting people to explain more about their bats. This inspired me to return to my conservation roots by studying an MSc in Conservation at UCL. This was in 1992 at the time of the Rio Earth Summit which set up the Convention on Biodiversity, so when we went to Jersey for our MSc group project, we had the amazing opportunity of writing an early Biodiversity Action Plan for Jersey. Then, when I was choosing my dissertation topic, I was inspired by other botanists on the course to try to improve my botanical skills by studying Jersey's wet meadows.

From my volunteering roots I went on to work for the Mammal Society, CPRE and then the Bat Conservation Trust (BCT) who I joined to run their London Bat Project. At that time BCT had seven staff and the trustees decided it was time to recruit their first Chief Executive. I applied and was offered that role. Leading BCT was a huge privilege, working with the many people involved in the bat conservation world who do so much for bat science, conservation and education. I was also fortunate to have flexibility, to both lead alone, and do two CEO job shares,

allowing me to have time with my two girls when they were small. In my time there, BCT's membership grew from about 3,500 to 6,300 and our staff team grew from seven to around 25, always working closely with the network of county bat groups across the UK. I also was founding chair of BatLife Europe, the network of bat conservation NGOs across Europe. I worked with a wide range of people and partners, from ecologists to goths, academics to church wardens, and arboriculturalists to buildings industry professionals. All of them tended to have strong feelings about bats, either positive or negative, rarely in the middle!

More recently, I've been on a career break, to return to my roots in conservation as a volunteer and to introduce others to wildlife. I've been volunteering with EcoACTIVE, an environmental education charity in North London, which I'm also a trustee for. I also trained as a forest school leader and have been leading forest school programmes with Hackney primary school children introducing them to the wildlife in their local parks.

I'm delighted to now have the privilege of leading BSBI. I'm very impressed by BSBI's pioneering recording work over the decades and your plant distribution Atlases and, more recently, your citizen science and outreach activities; I will be working to make sure our amazing data makes a real difference for wild plants. I also aim to use my experience in building programmes and collaborations to find ways to address botanical skills gaps and to grow our capacity and build a diverse community of botanists. Finally, I will be working closely with trustees and using my experience of governance, finance and fundraising to ensure BSBI achieves long term financial stability.

I will look forward to meeting you at future events, and also sharpening my botanical skills and knowledge along the way.

The Committee for England 2021 – 2022

The following members were elected to the Committee at the AGM. The posts of Secretary and Newsletter Editor are currently vacant.

<u>Jonathan Shanklin</u> (Chair, Hon. Field Meetings Secretary and VCR for Cambridgeshire)

Mary Dean (Trustee, England Field Meetings Secretary) Ian Denholm (Trustee, Editor-in-Chief *British & Irish Botany*, VCR for Hertfordshire)

Mark Duffell (Botanical consultant and tutor) (co-opted) Anne Haden (VCR for

Jersey)

Martin Godfrey (Referee for Urticaceae)

Chris Metherell (VCR for North Northumberland)

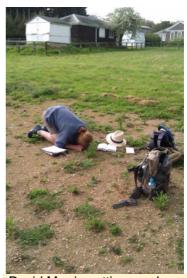
David Morris (VCR for

Oxfordshire)

Jo Parmenter (Secretary of S&D) (co-opted) Fred Rumsey (Referee, Natural History Museum)

John Swindells (Wild Flower Society)

With the dissolution of Council there have been some minor changes in the Constitution, but not such that it needs to be repeated in



David Morris getting up close to *Crassula tillaea* (Mossy Stonecrop) at Cambridge Observatory in 2014

EBN. The Trustees will be producing a Governance Handbook and material relevant to the CfE that is in it will be published in EBN when available.

If you would like to get involved with the committee do get in touch with the Chair, who currently acts as Secretary and Editor as well. The Committee has to hold at least two meetings a year, but they can take place by Zoom. If and when we resume in person meetings we will endeavour to hold one on the day of the Annual Meeting.



Inula helenium (Elecampane), Hook Norton, Oxfordshire (Terry Swainbank)

The Committee minutes on the password are protected **BSBI** Governance pages, which are accessible to all BSBI Members. The next CfE meeting will be held on October 18, and if you have any suggestions for the Committee to consider do get in touch with the Chair.

One of the subjects discussed at the most recent meeting was a possible project for England. Quite a few suggestions were put forward, but in the end the Committee decided that it wasn't the time to progress any of them. We would however welcome Member input and if there is enthusiasm across England we will draw up details for a project. Equally counties might like to consider any of them on a local basis. These were the suggestions, along with a few pro's and con's.

Potential England projects

- Best county site(s).
 - a. Survey provides a baseline for change at a site

- b. Not all sites are as well recorded as might be thought
- c. Might allow comparison of sites across the country is the situation the same everywhere?
- d. Nice site, so likely to encourage a wide variety of participants
- e. Might be used to test methodology being developed
- f. Element of competition which county has the most species rich site?

Brownfield sites

- a. Often species rich
- b. A declining habitat due to development
- c. All counties likely to have such sites
- d. Often difficult to get access



Geranium pratense (Meadow Crane's-bill), Lewes Railway Land, Sussex (Sylvia Davidson)

Caravan sites

- a. Heads up on potential invasive species
- b. Potential for outreach with Caravan Club
- c. All counties likely to have such sites
- d. Would need liaison to get access
- e. Interesting aliens

Churchyard survey

- a. Scope to involve local people
- b. Often good remnants of surrounding countryside
- c. Partnership potential with Wildlife Trusts, <u>Caring for God's Acre</u> etc
- d. Might duplicate effort already underway by the above
- e. Publicity opportunity

Declining native species

- a. Expand on Atlas 2020 baseline
- b. Potential for partnership with Plantlife
- c. Arable weeds could involve farmers
- d. An original project
- e. Possibly difficult to get public engagement at the moment
- f. Possibly aligns with BSBI goal 2

Habitat management projects

- a. Provide high quality data for some of the projects currently underway
- b. Provide advice on where and what management is needed



Heracleum mantegazzianum (Giant Hogweed), Ilfracombe (Mary Breeds)

Invasive species

a. Expand on Atlas 2020 baseline

- b. Potential for partnership with DEFRA
- c. Possibly look at new urban neophytes in southern England that are starting to increase
- d. Could focus on native invasive species, which may be easier to identify
- e. Compile county lists. E.g. Appendix 2 of the <u>Cambridgeshire</u> Register of Plants of Conservation Concern.

Null project

- a. Some counties want a holiday
- b. Doesn't require any organisation

Orchid survey

- a. Orchids are a draw to participation
- b. Species are expanding their range
- c. Found in urban and rural locations
- d. Some counties are doing projects anyway
- e. Aligns with BSBI goal 3

Road verge survey

- a. Remnants of wider countryside
- b. Potential for partnership with Plantlife
- c. All counties likely to have such sites
- d. Not always a popular or particularly safe habitat
- e. Can be used to monitor change if earlier surveys are available. E.g. Jonathan Shanklin on <u>Cambridgeshire Protected Road Verges</u>.

Seed dispersal

- a. How do plants get to new locations?
- b. Could involve other specialist groups, eg Mammal Society
- c. Seed collection for UK Seed Banking

Urban survey

- a. Takes the plants to the people
- b. Urban locations often have the most diverse flora
- BSS have a methodology (mostly recording abundance and habitat)
- d. Key BSBI priority
- e. Potential for partnership with BBS and local groups
- f. Not everybody lives in towns
- g. Perhaps more important for northern England (faster change?), but new plants would appear in the south first
- h. Repeat transects can provide interesting results. E.g. Chris Preston on The phenology of an urban street flora.
- i. General surveys can also be interesting. E.g. Mark Hill et al. on Geographical patterns in the flora of Cambridgeshire.

j. Potential safety issues for solo recorders

Verification

- Check on post 2000 isolated records of interesting species that need full confirmation
- b. Look for species on the edge of their distribution range



Gamlingay Cemetery, Cambridgeshire. Cemeteries often provide refuges for species lost in the wider urban environment.

Annual Report for 2020 from the Chair of the Committee for England: Jonathan Shanklin

The first England Annual Meeting was held at the Natural History Museum in February, but was poorly attended because of the lack of advertising. A regional meeting for recorders had been planned for the end of March, however Covid put paid to it, and instead several Zoom meetings were held. The Annual Meeting had suggested that the CfE should produce a Newsletter as its top priority and this was duly published in May. It included a report of the Annual Meeting and the Zoom meetings. Contributions for the next newsletter would be welcome. The CfE met in October, again by Zoom. Following the dissolution of Council, some amendments would be needed to the England Constitution



CfE put and the some suggestions to the Trustees. poster describing Committee was produced for the AEM and can be seen on the AEM web page. The Committee put together a "shopping list" of potential England-wide field projects and these were discussed at the CfE January meeting. The conclusion was that this is not yet the time to put forward such a project. Vicecounties are free to use the shopping list for local projects and the committee would be pleased to support any that become of more widespread interest. The list is available

in the CfE minutes on the BSBI Governance page. For the moment I remain as Secretary and Bulletin Editor, pending recruitment of additional committee members.

Annual Report for 2020 from the England Officer: Pete Stroh

I have been heavily committed to Atlas 2020 work, particularly the validation of distribution maps, alongside Kevin Walker. Those for native species are now completed, and we have moved on to aliens, which we hope to finish by June. Over 40 caption editors volunteered to assist with updating the text that was published in the New Atlas (Preston et al., 2002), and the vast majority have completed their tasks. Since January I have been editing the native

captions, of which there are about 1600, and will turn to the alien captions when the natives have had a first check. All captions will need to be checked at least three times, so it's likely that this task will not be completed until early 2022. Work on the online Atlas in conjunction with CEH is going well, and the design of the main maps page almost finalised. The other main chunk of work I've been involved in this year concerns SSSIs. Natural England have asked us to



Ajuga chamaepitys (Ground-pine), Ranscombe Kent, (David Steere)

look at all SSSIs that have plant assemblages or individual species named in their respective citations, and investigate the latest record for each taxon, with a view to designing a methodology to monitor these taxa, built on the design used for the Threatened Plant Project (TPP).

Annual Report for 2020 from the England Field Meetings Secretary: Mary Dean

We were unable to hold any field meetings in 2020 due to covid-19 restrictions. We thank all the organisers who offered to organise and lead meetings in 2020 for the time they had spent planning the meeting and their willingness to roll meetings over to 2021.

Field meetings in 2021 will be subject to government guidance on social distancing and covid-19 prevention measures and BSBI guidance, therefore they are subject to

amendment or cancellation. The good news is that of the eleven meetings planned for 2020, nine are in the Yearbook for 2021. These show a spread around the country: Middlesex, Norfolk (2 day), Cambridgeshire (3 meetings), Warwickshire, Nottinghamshire, SW Yorkshire and Cumbria and consist of a range of general, beginners, recording and specialist training meetings.



Gentianella germanica (Chiltern Gentian), Totternhoe, Beds (Terry Swainbank)

Two of the 2020 meetings could not be re-organised within the timeframe for the Yearbook as they involved third party permissions which could not be obtained due to covid-19 restrictions (Wiltshire and Kent), however both organisers are keen to hold the meeting when it is possible.

The 2021 Yearbook entries have been tailored to the current situation. Firstly members who booked for 2020 will be given priority for re-booking, with the onus on the member to rebook by the

date given. Secondly, the meeting place and time will not be published to prevent members turning up without a booking.

A short item looking for expressions of interest from potential field meeting organisers was included in the November 2020 Recorder eNewsletter, but did not receive any responses for England.

England Annual Meeting 2021

Draft Minutes of the 2nd AGM



- The Chair, Jonathan Shanklin, welcomed those present to the second England AGM, which was taking place via Zoom because of the coronavirus lockdown. The meeting was quorate with 68 participants.
- 2. Apologies were received from Anne Haden.
- 3. The minutes of the first AGM were approved as being correct.
- 4. There were no matters arising.
- The nominations to the Committee for England: Chair: Jonathan Shanklin, Field Meetings Secretary: Mary Dean, Committee Members: Ian Denholm, Martin Godfrey, Anne Haden, Chris Metherell, David Morris, Fred Rumsey, John Swindells were confirmed.
- 6. England Officer Report. Pete Stroh see page 18 (note that this is a slightly amended version of the one presented at the meeting). Pete noted that he

- had been kept very busy with Atlas 2020 work. There were no questions
- 7. Chair's Report. Jonathan Shanklin see page 17. Jonathan noted that there had been a further series of Zoom meetings with recorders earlier in the month. There were no questions.
- 8. Field Meetings report. Mary Dean - see page 19 There were questions. Mary reiterated that she would welcome offers meetings from members as well as from VCRs. Jonathan added (wearing his Hon. Field Meetings Secretary hat) that he hoped that limited local field meetings might he possible from the end of March and that there would he slow а relaxation until full



Veronica chamaedrys (Germander Speedwell), Warwickshire (Angelika Smith)

- meetings were again possible. It was essential that participants followed all the safety advice given by leaders, including that on the coronavirus.
- No AOB had been notified and no matters were raised.
- 10. It was proposed that the 2022 Annual Meeting would again take place by Zoom with a preliminary date of 2022 February 27.
- 11. The Business Meeting was closed at 14:25 giving extra time for the talks.

Three short talks on road verges were presented; by Kate Petty (Plantlife), Jonathan Shanklin (BSBI recorder for v.c.29) and Mark Schofield (Lincolnshire Wildlife Trust). These were followed by a keynote talk from Sandy Knapp on the Solanaceae. All the talks can be seen on the BSBI YouTube channel with summaries given here.



Kate Petty is the Plantlife Road Verge Campaign manager and works with Councils, Highways Agencies and others to encourage more wildlife friendly management of road verges. The Plantlife campaign started in 2013, largely in response to the public outcry about destruction of flower rich verges. The campaign aims to convince managers that verges don't need to be short mown swards or neglected litter strewn scrub. They have organised a petition, now signed by over 120,000 people and produced several informative pamphlets. The Good Verge Guide is an introduction for all those interested, whilst Managing Grassland Road Verges is a practical "how to" guide. Over 700 different species have been recorded on road verges, some 45% of the native British flora. An important point was

that where wild flowers lead, wild life follows, so getting verges right is important for biodiversity.



Road verges have suffered from a perfect storm – climate change, increased nitrogen emissions, increased frequency of cutting preventing seed-set and cuttings left to smother more delicate plants. Plantlife aims to restore the diversity, whilst maintaining road safety. Done properly this can make management sustainable in the long term and hence reduce management burdens in the long term.

Kate then took us through the principles of good management, showing that a regular management cycle was necessary to maintain floristic diversity. Too frequent cutting and no cutting both acted to reduce this. A second principle is the timing – plants need time to set seed. If only one cut is possible then this should take place in August/September, but if two can be funded then an additional early spring cut is beneficial. The next principle is to remove cuttings, which will reduce soil fertility, benefit wild flowers and in the long term reduce costs by reducing growth. The process also opens up the sward, providing space for the flowers to come through and for seedlings to grow. A fourth principle is to provide variety, with verges cut

short near the road, having patches of different height along them, and with a bit of scrub and woody areas. This variety will increase the diversity of species that the verge can support.



Trifolium ochroleucon (Sulphur Clover) on Ermine Street PRV. Here it did much better near a pavement where there had been an amenity cut.

There were three top tips to follow if you want to get involved. The first is "Biodiversity buzzcut" where a verge is cut relatively short, but clovers, trefoils etc are allowed to flower and provide food for pollinators. This type of cut would be good for amenity verges and junction approaches. The second is to "frame verges", so that a metre or so next to the road is cut, but the rest left to flower. This shows that the verge is managed, is good for safety considerations and can provide more diverse habitat. The third is "communicate and engage". This can involve working with

local groups and also arranging for signs to be put up explaining why the verge isn't being cut.

Kate finished by saying how wonderful it was to see so many initiatives coming to fruition. She is working directly with around 30 Councils and 70% of all Councils are showing an interest. Highways England have a new policy of establishing wild flower rich meadows along all new major road projects. Public engagement is good and the future of road verges is promising.

Several questions were asked, with Dorset being mentioned as being one of the most enlightened Councils.

A technical glitch meant that Mark Schofield had to delay his talk, so the planned order of the next two talks was changed. Jonathan Shanklin had been visiting many of his county's protected road verges during 2020 because these were rarely popular places during the coronavirus pandemic. Many of the verges had records going back over 30 years following a designation programme in 1989, though there were some that had been identified in the 1970s. The impression from these visits was that the quality of the verges must have declined, to the extent that for some there was no obvious reason why they should be designated. Those designated today are shown on the online Cambridgeshire County Council My Cambridgeshire map under "Transport and Streets". This map includes verges that are in neighbouring vice-counties as the modern administrative county has different boundaries to those used historically. It also shows permissive paths that are often missing from OS maps.

In order to demonstrate whether there was evidence for decline, records were downloaded from the DDb, which also allowed listing of their Ellenberg indicator values. The species distribution on the verges was different to that for the wider countryside. For example *Centaurea nigra* (Common Knapweed) was the most commonly recorded

road verge species, but 84th on the county list. Urtica Nettle) (Common dioica occurs most frequently in the county, but is 13th on the road verae list. The Ellenberg values showed that the drier. less were verges shaded, less nitrogen rich and with shorter vegetation than the county as a whole. The number of RPR species declined whilst number of invasive species had increased. However when split into two date groups the verges had clearly become more nitrogen rich and with longer vegetation, mostly in the form of trees.



Melampyrum cristatum (Crested Cow-wheat) growing in profusion with some Trifolium ochroleucon (Sulphur Clover).

Looking forward the Council is becoming proactive and is planning to change its cutting regimes to help improve the quality of the verges. It will also consider designating additional verges. To help this process I produced a two-sided pamphlet showing 12 readily recognisable indicator species that are relatively frequent on county road verges. This could be used by local parish groups to suggest verges that might deserve designation. The work has been written

up in a paper in the local natural history journal *Nature in Cambridgeshire* and will be published in the summer.

Jonathan concluded with an "extra" showing that it wasn't just protected road verges that had interesting species. This was prompted by an article by Andy Amphlett in the January BSBI News that showed a cluster of records of Sagina maritima (Sea Pearlwort) in Cambridgeshire but not in surrounding counties. This was very much a recorder effect as both he and Alan Leslie were quite content to wander along dual carriageways (actually safer than winding country lanes, but a lot noisier). Jonathan showed that several other scarce halophyte species were also



present on major roads, **Parapholis** with incurva (Curved Hard-grass) being nearly exclusive to Cambridgeshire an as inland plant. Its distribution map, shown left, includes another inland dot Flintshire where also ı record. Hordeum marinum (Sea Barley), red-listed as Vulnerable in England, is present also on county

roads – so should those dual carriageway verges where it is present become protected road verges?

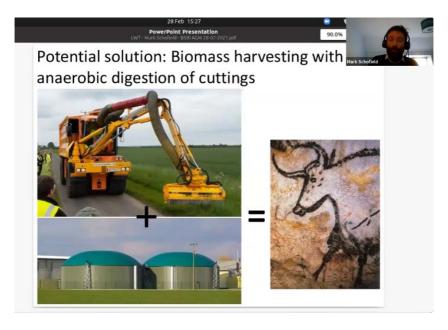
As a postscript, in March 2021 Cambridgeshire County Council revised its management policy on protected, rural and urban road verges. The work described here was used by the County Ecology Officer in preparing the briefing document for the Councillors who made the decision.

This talk was followed by a short tea-break and then Mark Schofield presented his quickly reformatted talk.



To complement the other talks, Mark focussed on the work that the Lincolnshire Wildlife Trust (LWT) carried out towards roadside verge maintenance in support of grassland flora. They have had a close partnership with the local Highways Authority, Lincolnshire County Council, to maintain 64 Roadside Nature Reserves. They do this by cutting and collecting hay, working with subcontractors and local farmers. They have a budget from the Council of £25,000 per year, with amounts to some £150 per kilometre of verge. They also get some funding from Natural England for those verges that are also SSSIs. Generally there is a hay cut between July and September, with an autumn flail.

They have a small fleet of hand tractors, which can be fitted with cutter bars to give a long cut, or a flail to give a shorter cut. The flail is more robust and has less down time. Cutting is followed by a powered rake that can produce windrows for bailing using a mini-bailer, or discharge into the hedgerow base. All the equipment can be transported on a flatbed trailer and securely stored inside a standard shipping container. A larger tractor can operate more efficiently, but is less suitable for smaller or sloping verges and exerts greater ground pressure, hence more soil compaction. A hybrid system works best.



Hay making is however time consuming, expensive and weather dependent, so they wondered if it might be possible to use a technological equivalent of Aurochs (the prehistoric bovines) – a suction flail biomass harvester and anaerobic digestion (AD). This could also potentially help recover some costs through a combined heat & power system. Doing nothing would lead to continuing degradation of road verges grassland, whilst the system might lead to ecological benefits, including helping local authorities to deliver their

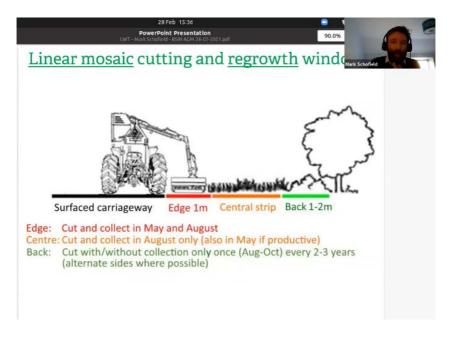
biodiversity duties and helping to reduce their carbon footprints. A common criticism of bioenergy is that land is taken out of food production, but in this case only marginal land is 'cropped.' This enables land that would be used for AD feedstock production to be returned to food production or environmental stewardship.



DEFRA has a very ambitious 25 year plan to restore 500,000 hectares of land outside that with current designations. In principle 40% of that target could be delivered by restoring road verges across England (and Scotland & Wales) into favourable condition. Developers will also be required to deliver a 10% biodiversity net gain. If they can't do that on their site, the income could be used to help with biomass harvesting on road verges. There are risks – removal of invertebrates and seeds and potentially creating a market for intensive harvesting of road verges. The LWT considers the first step is to create map of verge quality and opportunity for improvement across each county

or local highways area. The management of the best of the verges should be optimised, with rotational management of the remainder to slowly improve them.

The LWT started the process by recruiting around 250 citizen science volunteers and trained them up to recognise indicator species. Between 2009 and 2015 they covered some 3900 km of roads, focussing on those on the chalk or limestone. This led to the designation of 159 new roadside Local Wildlife Sites covering some 250 km, which are now all in a GIS system so that they can be identified before any works are carried out that might damage them. The Roman Road, Ermine Street, forms a corridor linking those sites in the north and south of the county.



When they did an audit of all the sites, they found that those of SSSI standard only comprised about 1% of the network. 10% had high potential and the remainder were not especially interesting, though some had limited potential. It

was this majority of verges that could best be targeted by biomass harvesting, with the smaller number of high quality sites receiving more intensive management. A literature survey showed that species richness increases if verges are mown each year, if they are mown twice each year and if hay is removed after each cutting. Unfortunately there is nothing sufficient in the literature to say anything about the impact on invertebrates. The LWT experience was that 10-12 weeks should be left between cuttings and avoiding cutting in June and July. They planned not use the suction flail on designated verges, not run the machinery on the verge and only harvest one in three years from the hedgerow base, which acts as a sanctuary strip. In addition the two cut strategy seemed to give the best returns for energy recovery from the digester. In general the best model was to cut a 1 m strip along the edge of the verge twice a year, the middle once or twice depending productivity and a late cut at the back every two to three years.

Montgomery Wildlife Trust had carried out a trial in 2005 and proved that the bio-harvest concept worked. In 2016 the LWT borrowed a harvester from Holland and showed that the collected material was all suitable for anaerobic digestion and that the harvesting cost was less than the benchmark value for similar AD feedstock. In 2018 they built their own harvester in partnership with Lincolnshire County Council and other organisations. They improved the efficiency by developing a novel trailer coupling and found that they could collect more than 30 tonnes per day at 3 – 5 km per hour. In future it might be possible to power the tractor with bio-methane, making it self-sustaining.

Kent Wildlife Trust are working with the Environment Agency (EA) to demonstrate that spreading the anaerobic digester residue onto agricultural land is not harmful, as this is currently not permitted. Hopefully once suitable guidance and regulations are in place it will become possible for the technique to be brought into operational use. We can hopefully look forward to seeing a new way of managing road verge vegetation that might in turn enable conservation on a landscape scale beyond just the roadside nature reserves.

Pete Stroh asked what become of the hay bales? Mark responded saying that contamination was one of the EA concerns. Options were litter picking before harvesting, or finding some way of filtering it out by mechanical means – experimental work was being carried out on this. It was also possible to construct heat maps showing where litter deposition was most likely. Current litter might decrease as the scheme became operational, and it would also be possible to incinerate badly contaminated material. The bales themselves, particularly if they were from the more rural roads, could be fed to stock or used as bedding.



Sandy Knapp is a BSBI Trustee, President of the Linnean Society and a merit researcher at the Natural History

Museum, where she specialises in the Nightshade family – the Solanaceae. Many people think of Potatoes or Deadly Nightshade when the family is mentioned, but it is more than that. It is a medium sized family, of 103 genera and around 4000 species. Over half the diversity is contained within a single genus – *Solanum*. A few genera have only a single species.

Solanaceae grow in a wide range of habitats – deserts, high altitude, dry temperate forests, savannahs etc but the peak occurs in the eastern slopes of the Andes between 1000 and 2500 m where there are rich volcanic soils and high rainfall. Many are understory shrubs, but they also grow in the open and can range in size from tiny plants to small trees.



Sandy regarded herself as an old fashioned taxonomist – one who worked on naming plants and working out what taxa they are. She also worked on evolutionary relationships and Solanaceae are really interesting in this respect in part because some are weeds and some are used by humans. She then took us through the evolutionary

tree, beginning with *Schizanthus grahamii* a plant from coastal Chile and Argentina, which had Snap-dragon like flowers. Another early branch are the Petunias, also from southern South America, suggesting that the family possibly originated in Gondwanaland. Petunias are also important because much of what we know about colour in flowers comes from research on them.



Most of the European Solanaceae are pretty evil, including plants such as *Atropa bella-donna* (Deadly Nightshade) and *Hyoscyamus niger* (Henbane). Old World people were therefore not that keen on potatoes and tomatoes when they were first introduced. The plants were also associated with witchcraft, which almost always involved people flying. This is because they contain psycho-active tropane alkaloids that affect the brain. The same effect is created when a non-smoker smokes a cigar! Leaves of *Nicotiana tabacum* (Tobacco), which comes from the Andes, are one of the most commonly used drugs. She showed that *N. tabacum* is an allopolyploid (ie with doubled chromosomes)

arising from the hybridisation of *N. sylvestris* and *N. tomentosiformis*. The chromosomes suggest that the species is around 200,000 years old, and that after about 10 million years the two sets of chromosomes will become indistinguishable.

Sandy then moved on to discuss the *Solanum* branch of the family. It has always been a big genus, but has been steadily growing. One problem is synonymy and in *Solanum* there are 6168 names of which 4934 are synonyms. Part of this problem arises in northern Europe, where splitters name tiny variations as new species. Her group keeps track of all these names through a database called <u>Solanaceae Source</u>. *Solanum* species all have similar flower forms and whilst some had previously been split into separate genera, DNA work showed that they all belonged in one large genus. She noted that whilst changing names can be upsetting in the short term, in the long term it shows that we have learnt something about that group of organisms.



Within *Solanum* there is a large variation in size, ranging from tiny thumbnail sized plants to 6 m tall trees. They can be split into two groups (clades) – those with spines (prickles) and those without. The spiny species are a monophyletic group (ie all descended from a common ancestor), whilst the non-spiny species are paraphyletic. Species richness is greatest in a ring around the Amazon, however greatest diversification is taking place in southern Africa and Australia, particularly in arid habitats. Most new species are being discovered in South America and she showed one newly found species, *S. medusae*, that was restricted to a single granitic outcrop in São Paulo in Brazil.

Field work is really important in looking for new taxa and understanding plant distributions. It is particularly useful to go to places where people haven't been before and you gain more by doing so. [Something that applies in England too. Ed]. Quite a lot of new discoveries have come from work in herbaria, particularly small local herbaria. Eight of the last ten Solanum species that she had described had come from such collections rather than current field work.



In 2004 the Solanum group had received a large grant from the US National Science Foundation to create a world monograph. They decided not only to publish it in a series of books, but also on the internet so that the work would be more widely accessible. A new feature on Solanaceae Source is a multi-access key that should allow identification at least to genus, and in some cases to species.



Sandy was particularly interested in the "M clade", which is the last big group that has a monograph in preparation, and went on to describe this. It was a group that emerged from conventional DNA sequencing, but it wasn't always clear exactly what the relationships between species were. They therefore looked at the genome of the chloroplasts, which represent the maternal lineage, but this didn't really make things any clearer. The clade has two main groups that include familiar plants: the Morelloid group with *Solanum nigrum* (Black Nightshade) and the Dulcamaroid group with *Solanum dulcamara* (Bittersweet).

The Dulcamaroid clade has 45 species (shrubs and vines) in two big groups, one from Eurasia and North America and the other, with some weird plants, in South America. An

easy distinguishing feature was that the pedicels were always inserted into a little cup.

A new group that has emerged from the sequencing work, which is presently called the VANans clade, is an early branch of the M clade. An Australian member of this group is the S. laciniatum (Kangaroo-apple), which is sometimes found as a casual on London streets. Finally the Morelloid clade is one that she is currently working on. It is one that has the most synonyms and is globally distributed, often as agricultural weeds, often all called S. nigrum. She pointed out that S. americanum, which looks very similar to S. *nigrum*, but has anthers that are less than a millimetre long. is sometimes found as a casual in southern England. The calvx lobes are also important in identification, for example S. americanum has strongly reflexed calyx lobes, whilst other species have enlarged lobes. The fruits, in addition to the seeds, have smaller sclerified bodies (stone cells) and the number of these is constant within a species. In general the plants that people eat don't have the stone cells.



It is a difficult group as there is polyploidy with varying degrees of allopolyploidy or autopolyploidy in the origins of many of the species. They decided that it would be most sensible to write the monograph on a geographical basis, as for example there are only three or four to consider in Europe, of which most are introduced. The case is similar in most other regions, with a few natives and many introduced species, except South America where all 63 species are native. In Africa they were often thought to be weeds, but it turned out that local people actively cultivated them. S. villosum (which sometimes occurs in southern England) usually has five or six orange fruits to the inflorescence, but more productive plants are selected by children as they taste like strawberries. Even S. nigrum berries are edible. In North America some distributions follow the track of transcontinental railways.



Sandy finished with a run through of some of the highly diverse South American Morelloid species, which were amongst her favourites. There was even high variability within species and plants, which was enough to drive a botanist mad. Dissecting out all this variation has been

quite time consuming, but quite fun, working both in the field and in herbaria. Field work didn't necessarily mean going to beautiful places, as many of the species liked anthropogenic habitats. Some of these habitats (and hence the plants that grow in them) are endangered due to changes in land use.

She concluded by noting that botanical collections held valuable data for understanding long-term change and supporting conservation. Her work had taken her to some amazing places, and showed that the small amount of diversity that we can see here is actually just part of something much bigger. She particularly thanked all of her colleagues who together made up an essential team.



Solanum pseudocapsicum (Winter-cherry) a street casual in Cambridge (Chris Preston)

There were a few questions. Sandy didn't really want any more specimens of *S. nigrum* sent to her – leaves could be quite variable and with differing degrees of glandularity, however a key point was the anther length. The best thing was to take an image that clearly showed the anthers and calyx lobes.

Historically many of the North American species had come to Britain in wool waste, so might well occur as casuals. She commented that the two sub-species of *S. nigrum* don't show up in the DNA data. Fossil seeds like those of *S. nigrum* are found in the London Clay, but it is impossible to tell whether these were really *S. nigrum*. Looking at fossils was important for dating the phylogeny and a recent find in Argentina pushes the date of the family back, and also pushes the date of the angiosperms back.

In response to a question about hybridisation Sandy said that there were two ways of looking at the world. You could regard all variation as simply being variation, or regard variation as a problem and due to hybridisation. Alloploidy probably goes on a lot, but is hard to document – it is probably going on in the African species, but the chromosomes are really small and difficult to measure. There certainly is some hybridisation, for example Alan Leslie described *S. x procurrens* which is the hybrid between *S. nigrum* and *S. nitidibaccatum* (Green Nightshade). *S. nigrum* might be an Asian plant that has moved west, whilst *S. villosum* (Red Nightshade) might have gone the other way.



Lagurus ovatus (Hare's-tail), Devon (Daphne Osmond)

Before the meeting closed the chair announced that there was a suggestion from Ian Denholm at E&C that BSBI should hold a series of evening Zoom lectures over the

winter months. These might cover the flora of a site as a virtual field meeting, a plant family such as in Sandy's talk, or focus on plants of a specific habitat. The chair then enabled video and unmuted all participants to allow some informal chat before ending the meeting.

After the meeting had ended the chair discovered that whilst all those who had registered had been emailed another link to join the meeting, this appeared very similar to the link for registration, differing by one letter. This may have confused some people as 89 had registered and some attempted to register again. The need to join via the confirmatory email link will be made clear for future meetings. He also discovered that Jo Parmenter should have been included in the Committee nominations, but that he had omitted her due to an oversight on his part. She will instead be co-opted onto the Committee.

Jonathan Shanklin Acting Secretary

Regional Recorders' Zoom Meetings

Jonathan Shanklin as Chair of CfE organised four Zoom meetings for recorders in February, broadly divided between northern, southern, western and eastern areas to make groups of around 20-25; around half of those invited participated. The southern group was potentially the smallest, so additional invitations were sent to all those who had contributed over 9000 records to the DDb in 2020. The meetings started with some general chat for early arrivals followed by a round of introductions and hellos. Earlier correspondence had identified several areas for discussion. This version of the meeting report has been edited down from the full version circulated to the participants. A

supporting document was drawn up as an executive summary for the other Committees and Board. Everyone thought that another round of meetings in the autumn was a good idea and this will include one evening session.

General. Jeremy Roberts (v.cc.69, 70 and referee) would welcome Deergrass specimens for determination as he received relatively few, though Irish recorders were making a good number of records. Chris Metherell (v.c.68) was writing a new Euphrasia monograph. There is a Yorkshire wide initiative on producing a list of rare and scarce plants in the region. Some years ago Chris Metherell had produced an RPR template and this might be useful for those intending to produce one. Jonathan Shanklin used a



thaliana mural

different approach for v.c.29 and had simply queried the DDb to produce a list of candidate species, and did not provide detailed records of each one. He had also much longer produced a Register of Plants of Conservation Concern. Dave Barlow has produced an RPR for v.c.62 and is working on a site flora for South Gair a small and very interesting site with a big

range of species. He also collaborated with an art project in central Middlesbrough, recording 130 species in an urban monad. The artist settled on Arabidopsis thaliana (Thale Cress) and used this as a motif in an underpass mural. Dave would like to receive more records from the York area. The Devon Flora is now available online from the Devonshire Association website. The Eastern group recorders were in competition to decide who had the most boring vice-county! Warwickshire and Leicestershire claimed to be boring, whilst Hertfordshire claimed to be the most interesting.

Records. Most of the discussions revolved around issues associated with plant records and getting them into the DDb. MapMate, the software that BSBI provides to VCRs and to major recorders, is aging, is often incompatible with new versions of Windows and does not support Stace 4 names. Some recorders have had it fail for six months, then suddenly start working again when a new Windows update was installed. In addition, it, the DDb and NBN do not support Stace 4 or Sell & Murrell names. Replacing MapMate is therefore a priority and the Board has agreed to progress it. It is hoped that a beta test version for record input only, will be under trial by the end of the year.

Other data entry systems are being developed and iRecord is rapidly becoming a standard. One big advantage of iRecord is that images can be attached, which often help when it comes to verification of records. It is also possible to give feedback to the recorder, but in practice there was rarely any response. Some VCRs act as verifiers for iRecord, but many do not have time to do so and would welcome a competent local recorder to take on this role to do preliminary filtering. A concern for many VCRs was the volume and poor quality of records that are received through it.

Unfortunately, many original identifications are often poor, have incorrect grid references or use a pseudonym for the recorder. Some records are of garden plants and some are not of plants at all (eg Painted Lady, Redshank). Some users follow best practice and are trusted; some other records are of interest however these may get submerged in the rubbish. Members need to be aware of how to use

iRecord to generate valuable records and in order to provide some guidance on some of the problems I wrote the (controversial) piece which appears in "Hints and tips".

Many VCRs also run their own local databases in parallel to the DDb and value receiving records directly from their local recorders. Indeed it is essential that records should go to the VCR first, as the VCRs are expected to be gatekeepers of DDb quality. One suggestion is that iRecord users should extract their own records and pass them on to their VCR. This is easy to do, though a potential problem with this approach is duplication and perhaps divergence if one dataset has been verified and corrected whilst the other has not. The best practice would be for the user to correct at source after receiving feedback from the VCR.

With the phase-out of MapMate, additional software may be needed for analysis and mapping, with QGIS being freeware that is good for mapping. It does take a bit of learning to take full advantage of its facilities and I have been experimenting with some maps for my own county.

Mentoring. Jeremy Roberts has a Flora Group of Cumbria consisting of around 60 members and most do some recording. They allocate hectads to individuals to record and have a Facebook



Coincidence map showing some Cambridgeshire wash-land species

group of about 500 members. It is possible to use Facebook on the fly for identification – for example Dave Barlow had

used it on a moorland excursion to identify a caterpillar whilst the group were still on the moor. Twitter is also a useful medium to promote to gain potential new members. BSBI has made really good use of social media for promoting botany, eg Wildflower Hour. Virtual mentoring, eg through iRecord or Facebook, will be needed in future.

Identiplant had been a big help in recruitment to local groups and a few local groups are prepared to continue providing it. One difficulty was a lack of tutors as it requires a lot of work for little financial reward. The cost (£100) is however off-putting to people who might not be sure about starting the course. One possibility would be to make it more modular and target entry level only, which could be done more cheaply. BSBI taking on the administration would be a welcome possibility.

Most leaders act as mentors at meetings, and local group meetings work well in this respect. The idea of holding more joint county meetings as a way of reducing differences in recording between counties is a possibility. The level of interest in an area does depend on the habitat and terrain – many counties have rough terrain (steep or uneven), boring habitat (moorland or fenland) or areas difficult to access (both in terms of distance required to walk and difficulty in obtaining permission). In Somerset the Rare Plant Group



Lathyrus hirsutus (Hairy Vetchling) Alhampton (v.c.6) Daphne Osmond

(which does record common plants) brings in people, so perhaps the name of a local group does matter. There seems to be an age gap in participation between younger members (up to recent postgrad students) and older retired members, which probably equates to

those with parenting responsibilities. There was a thought that the lack of university teaching might be having an impact on recruitment and young consultants are often recruited to local groups. Many young people are keen on promoting nature, but less familiar with plants. Older VCRs had often become interested through nature tables at primary school, but these were rare features these days. Perhaps parents could influence their local schools.

Chris Metherell had produced videos for his local society, which were very popular. He noted that outdoor recording did require a good directional microphone and normal smartphones were not up to the job. As an aside I did a radio interview for a BBC journalist a year or so ago, who had been provided with a special mike that did attach to his smartphone and provided broadcast quality.

VCRs need mentoring too! Much work is now computer based and dealing with large, differently formatted datasets makes the task harder, particularly as many members have their own preferred format. There was much to be said for having a VCR team with complementary skills. The British Lichen Society has 'lichen apprentices' who act as trainee VCRs and a similar BSBI scheme could run at county level. Once the apprentice has some experience they would be promoted to being co-VCR. A new VCR in a county where the previous VCR worked by themselves may find starting out particularly difficult. Some new VCRs are being paired with emeritus VCRs and the Country Officer provides support to all VCRs as needed. It is very helpful to go out with an existing VCR, so adjacent counties could team together for support.

Part of the VCR role is making contact with other local organisations such as Natural England, National Trust, RSPB, Wildlife Trust, county ecologist etc. We need to be

proactive with this as they won't necessarily come to us. The Zoom meetings suggested that it would be an idea to have a network of regional representatives who could be active in making such contacts as part of the VCR team. If you would like to become a regional representative do get in touch with me.

How VCRs should deal with new (eg Sell & Murrell) taxa is a problematic question. Some taxa are almost impossible to find, for example Geum aleppicum (Eastern Avens) and G. molle (Soft-leaved Avens) are described as being common in Cambridgeshire by Peter Sell, but as Alan Leslie says in the Flora of Cambridgeshire "there is no evidence for this, all specimens so labelled being G. urbanum (Wood Avens)". An interesting comment was that the distribution of some of the more difficult species matches the area of recording of those who know them well (eg Rosa obtusifolia (Round-leaved Dog-rose)). Having access to herbaria helps to confirm identifications and once they are open again visitors will be welcome. Online resources are also useful, eg David Earl's bramble key. We hope that a residential Recorders Conference will be possible once such events are permitted.

Vice-county reports for 2020

Thanks to Tom Humphrey for providing these reports, which have been edited into a common format by the Editor. Individual styles have been retained in some cases. Any mistakes arising as a consequence of the editing are the Editor's fault. Lists of interesting species, which were provided with some reports, are in the next section. Illustrations come from the VCRs, their web pages, entries to the BSBI photographic competition and myself.

v.c.1, West Cornwall & Scilly, Colin French

Becalmed by Covid-19, I was able to finish writing the new Flora of Cornwall during the first lockdown and get it printed as restrictions eased. Sales were brisk when the restrictions eased. It has been well received by those that have purchased a copy to judge by the many emailed comments. The number of plant records added to the ERICA database during 2020 was about half the long-term

48,683 average (only records) with the database holding 2,310,792 now flowering plant and fern records for Cornwall. Interesting finds for v.cc.1 and 2 include: Lysimachia thyrsiflora (Tufted Loosestrife) was found along the margins of a lake in East Cornwall. Lavandula (Garden angustifolia Lavender) was reported in Saltash. Sedum pallidum (Turkish Stonecrop) was noted in a cemetery in East Cornwall. Salvia hispanica (Chia) appeared in rough ground in Falmouth. Betula (the hybrid of x aurata



Dactylorhiza praetermissa (Southern Marsh orchid) Bodmin, Cornwall (Billy Fullwood)

Downy and Silver Birch) has been confirmed for Cornwall and it may be the case that the majority of *Betula pendula* (Silver Birch) records for Cornwall are actually mistakes for the hybrid. A garden centre owner in East Cornwall, who purchased the Flora of Cornwall, then reported the presence of *Jubaea chilensis* (Chilean Wine Palm) which is spreading in the vicinity of his home in East Cornwall,

Crataegus laevigata (Midland Hawthorn) Cornish on а nearby and Musa hedge basjoo (Hardy Banana) which does not appear to have been planted. Another person who purchased the book then reported Erodium manescavii (Garden Stork's-bill) growing on a road verge and the appearance of Bidens pilosa (Black-jack) in her garden, not having planted. been Tradescantia fluminensis (Wandering-jew) and Dittrichia viscosa (Woody Fleabane) were discovered in 2020 on the Isles of Scilly. Also on Scilly a 2005 record



Orobanche crenata (Broad Bean Broomrape) Holly Hill, Kent (David Steere)

for the endemic hybrid Catapodium marinum x rigidum (the hybrid of Sea Fern-grass and Fern-grass) came to light, as did a 2014 record for Apium graveolens var. dulce (Celery) and a 2018 sighting of Linum perenne (Perennial Flax). Records of Orobanche plants (Broomrapes) parasitising Brachyglottis x jubar (Shrub Ragwort) have been assigned to the newly described Orobanche minor var. heliophila and similarly those parasitising *Eryngium maritimum* (Sea Holly) assigned to Orobanche pseudoamethystea. Two plants which have long been rejected for Cornwall have also proven to be genuine A single Cryptogramma crispa (Parsley Fern) appeared on a tor on Bodmin Moor, albeit briefly, as it appears to have been grazed off since. Secondly herbarium material in the British Museum collection has been determined as Phelipanche purpurea (Yarrow Broomrape). It was collected in Penzance by N. Tyacke pre-1867.

v.c.2, East Cornwall, Ian Bennallick

Only one Botanical Cornwall Group field meeting was organised in 2020 - the BSBI New Year Plant Hunt on the North Cornish coast at Perranporth. Fifteen people attended in damp but mild conditions and recorded 72 plants in flower, but even on the 1st January we added six species new to SW75 including Spergularia bocconei (Greek Sea-spurrey). With uncertainty due to the Covid-19 virus, only 17 people attended the indoor annual meeting on 14th March. With the cut-off date for records for the new Flora of Cornwall the end of 2019, recording in 2020 was less urgent. Though travel was limited, several recorders surveyed their local area, and in many cases, these were areas that had not had the attention of further flung parts of Cornwall. Some people had some surprising finds including - David Pearman who found a small abandoned horsegrazed field dominated by Oenanthe pimpinelloides (Corkyfruited Water-dropwort) – new to SW74 (in West Cornwall) and one of only eight sites for it in Cornwall - Ian Bennallick found a large population of Eleocharis acicularis (Needle Spike-rush) around the margin of a balancing pond on the A30 dual carriageway at Victoria, new for SW96. This is the first record for East Cornwall since 1996 and one of only two sites known for Cornwall since 1999. Phil Hunt recorded 18 species new to SX05, in an already well-botanized area. The best record for East Cornwall in 2020 was from a visiting botanist, George Tordoff who discovered one plant of Cryptogramma crispa on a granite outcrop at Showery Tor. This is a new native fern to Cornwall.

v.c.4, North Devon, Bob Hodgson and Jeremy Ison

have managed two socially distanced meetings one to a very good culm grassland site near Okehampton where after years of trying we finally obtained permission, and the second to a farm in mid Devon where the owners actively were verv encouraging wildlife and creating culm more grassland. Otherwise I had two trips to Exmoor to check on odd *Hieracium* records with mixed results and some recording on old railways and



Cardamine pratensis 'Flore Pleno' (Cuckooflower), Devon (Daphne Osmond)

the Bude canal. Due to travel restrictions most of my botanising has been in the Exeter area (v.c.3) with some interesting finds. Bob Kirby has been busy in his local patch at Bideford again with some interesting records - mostly aliens. The New Flora of Devon sold out soon after its publication in 2016. Roger Smith and John Maltby of The Devonshire Association have now made this available on line through the Devonshire Association website and this should enable updates to be added.

v.c.5, South Somerset, Stephen Parker

Despite the lockdowns caused by the Covid-19 pandemic recording in v.c.5 still went ahead all be it in somewhat reduced from previous years. Unfortunately the Somerset Rare Plants Group, the main recording group in Somerset did not hold any formal field meetings. They initiated several projects for members during the year, these included recording the date for First Flowering, this was organised

and coordinated by Simon Leach. We have also launched an online Mistletoe recording project. Individual members submitted record to Stephen Parker and these are now being entered on to MapMate and then sent to the BSBI distribution database.

v.c.6, North Somerset, Helena Crouch and Liz McDonnell

In 2020, despite all restrictions, and cancelled field programmes, nearly 35,000 records were made in v.c.6,



Stachys annua (Annual Yellow-woundwort) Radstock Railway Sidings (v.c.6)

input to MapMate and sent to the BSBI. Somerset Rare Plants Group (SRPG) held 2 indoor meetings early in 2020, but the entire summer programme was cancelled. To keep members united, Simon Leach organised First Flowering weekly weekly challenges. with feedback, kindly sent out by our Membership Secretary

Ellen, and posted on the website. A WhatsApp Group was established for members to share their finds. Members were invited to enter a photography competition, and as winter arrived a Mistletoe Survey was begun. Details are on the SRPG website. Somerset Botany Group (SBG), Bath Natural History Society and Bristol Naturalists' Society also cancelled their field programmes, but members of SBG went out recording in small groups through the summer. Cam Valley Wildlife Group (CVWG) held four botany walks in August, for six members each week. One member of CVWG went out recording alone almost daily, making over 5000 records. The VCRs responded to survey requests from three landowners keen to develop their land for the benefit of wildlife. HJC also undertook surveys of a LWS

and a golf course. HJC updated the Somerset Rare Plant Register list of species to Stace Ed 4 in early 2020, after the SRPG website was relaunched. All species accounts already written were reviewed and updated; SRPG member Karen Andrews kindly devoted several weeks to reloading all the accounts and streamlining the RPR section of the website. 18 new accounts were written in the autumn.

v.c.10, Wight, Colin Pope

We were unable to hold any group meetings this year, so botanical recording was principally a solo activity or in groups of two or three. We have all been surprised by how much of interest we have found, previously overlooked,



Centaurea solstitialis (Yellow Star-thistle) Brook (v.c.10)

close at hand but trips further afield have been productive. The Isle of Wight is small enough that we have felt comfortable covering the whole of the county. Wahlenbergia hederacea (Ivy-leaved Bellflower), Salix repens (Creeping Willow), Jasione montana (Sheep's-

bit) and *Phleum arenarium* (Sand Cat's-tail) were native species believed to have been lost from the county that were refound in 2020. Cover crops have proved to be particularly interesting in supporting adventive species. Crops of *Trifolium alexandrinum* (Egyptian Clover) have been particularly productive in this respect. Several couples and individuals were able to take part in the 2021 New Year Plant Hunt.

v.c.11, South Hampshire, Martin Rand



Hammarbya paludosa (Bog Orchid), New Forest, Hants (Terry Swainbank)

This year I was expecting a relaxation in recording, but to tally we've managed 14,000 vice-county nearly and add 25,000 records records to the DDb. Many included) people (myself discovered things they didn't know about their immediate area. I am building a VCR support team that is less formal than ioint recordership, but I'm hoping that a successor emerges in the next couple of years. Team member Bob Wardell has systematically recorded around Portsmouth city, an rather neglected area

recent recording, while Phil Collier has made good records farther west; the most extraordinary must be the first mainland record of Dianthus gallicus (Jersey Pink) in a small coastal dune. The interval between lockdowns let us do some recording together on the coast and in the New Forest, improving records for Atriplex x gustafssoniana and Salicornia (Glasswort) species. I was pleased to find Spartina maritima (Small Cord-grass) in a spot where it was last recorded 60 years ago; it is nearly extinct elsewhere in the county. Formal field meetings were cancelled but I ran a Zoom workshop on plant families, and this was popular; three more, and one on conifers, are planned for 2021. I'm also hosting Zoom social sessions for local botanists to keep in touch every month or two. I am developing the Hants Plants web site to enhance participation and cater for new projects, and with the team's collaboration, developing

analysis and GIS for the county database. Via Hampshire Cultural Trust we are also hoping for resources to digitise the Winchester herbarium.

v.c.12, North Hampshire, Tony Mundell

As I am currently aged 76 and sometimes asthmatic, I rarely ventured out during the lockdown periods. However, I did some recording in my nearest 1km squares. On one of those walks, in suburbia and close to shops, I looked at a pond dug to catch flash-floods. Here I added many species and was delighted to find a colony of *Alopecurus aequalis*

(Orange Foxtail), a rarity in Hampshire. A new site for it had been found elsewhere in 2019, but within a few months that site was destroyed when large WW2 bomb was discovered and had to be exploded in-situ! I did venture out during July and August. I was with one other botanist doing surveys requested by the Hampshire & IoW Wildlife Trust on army training land that they manage. This included a splendid complex of wet meadows at Foxlease with Stellaria palustris (Marsh



Mentha pulegium (Pennyroyal), Hampshire (Tristan Norton)

Stitchwort). Early in 2020 several of us were involved in a study of Polypodiums in Hampshire. We made a lot of progress in understanding the genus. See page 17 of Flora News No.59. That study added both Polypodium cambricum (Southern Polypody) and P. x shivasiae (its hybrid with P. interjectum) new to v.c.12. Others have contributed records. These included Tephroseris integrifolia (Field Fleawort) refound at its three known v.c.12

sites, Medicago polymorpha (Toothed Medick), Mentha pulegium (Pennyroyal) and Epilobium lanceolatum (Spearleaved Willowherb) in new sites, and Dryopteris affinis subsp. paleaceolobata new to v.c.12. The Phelipanche purpurea (Yarrow Broomrape) that was found on a road verge in 2019 (and promptly mown off) reappeared in 2020 and was not mown.

v.cc.15, 16, Kent, Geoffrey Kitchener & Sue Buckingham

Kent's field meetings were discontinued after our February winter twigs session (John Poland), and subsequent botanising was largely on an individual basis, and very



Vicia pannonica subsp. pannonica (Hungarian Vetch) Dartford, Kent (David Steere)

successful. Seventeen taxa were noted as new to v.c.15 and ten new to v.c.16. Kent Botany 2019 was issued in January and a newsletter in October. The latter featured historic field meetings accounts from 1632 to 1861. Also issued were further species accounts bringing the RPR to halfway through Part S, and a superbly illustrated Salicornia cribsheet from Lliam Rooney. The county recording group was appointed champion for the new Kent Biodiversity Strategy species Orchis

purpurea (Lady Orchid or Fair Maid of Kent), Polygala amarella (Dwarf or Kentish Milkwort) and Carex vulpina (True Fox-sedge). We have begun their monitoring and study as a special subset of RPR species, where new counts enabled recognition in 2020 of the second largest

Kent populations of Himantoglossum hircinum (Lizard Orchid) and Ophrys sphegodes (Early Spiderorchid). Sites studied included remarkable а brownfield site on colliery shale at Betteshanger with Lythrum hyssopifolia (Grasspulegium poly), Mentha (Pennyroyal) and numerous other RPR species, as well as the first Kent record of



Smyrnium olusatrum (Alexanders), Isle of Grain, Kent (Laura Kor)

Apera interrupta (Dense Silky-bent). This is threatened by a current planning application. We have also reviewed some distributions which appeared under-recorded for Atlas 2020 including *Agrostis vinealis* (Brown Bent) and *Polygala calcarea* (Chalk Milkwort). All 2020 developments are reviewed in Kent Botany 2020.

v.c.17, Surrey, Ann Sankey Some key points about botanical life in Surrey:

The only scheduled meeting to take place this year was the now annual New Year's Day Plant Hunt in TQ15. 22 members took part which is an excellent number. This was probably due to combination of sunny weather, the chance to meet friends again plus the



Knautia arvensis (Field Scabious), North Downs, Surrey (Helen Bennett)

traditional pub lunch afterwards. The range of habitats resulted in 33 species recorded in flower.

Some members recorded the wild plants in their gardens.

- One member recorded his local golf courses during the first lockdown and was able to record some notable species, including some not seen since the 1960s.
- Others explored their local areas more intensively than usual and also had some significant finds.
- When first lockdown ended, we recorded more widely in ones, twos or threes, again making some good records and finds. The focus remains one of recording on a 1 km plus basis for a New Flora of Surrey.
- The ending of this first lockdown resulted in some major heathland fires, including those on two NNRs. Other parts of the VC were over-visited such that significant damage was done to important sites. This included excessive trampling of both calcareous and dry acid grasslands, widening of paths and excessive amounts of litter, some very undesirable.
- Because we only went out in small groups, we had very limited contact many members. This is of some concern many as are recorders uncertain and teaching in the field is a major part of what we do.
- The more limited November lockdown enabled us to



Hottonia palustris (Water Violet), Wedmore, Somerset (Karen Andrews)

- safely record more golf courses and to observe some harmful practices such as herbicide and fertiliser use plus excessive mowing.
- Over 300 new hectad records were made.
- Major problems experienced with MapMate.
- We have made a start on compiling an Inventory of Unimproved Grasslands in Surrey, with support and help from SWT and SBIC.
- Some of us continue to work with other conservation organisations in Surrey.

v.cc.18, 19, Essex, Ken Adams

Having had Covid-19 pneumonia in late January, the year got off to a late start, but we managed to get Essex Botany 10 and 11 out during the year, the former having an illustrated key to nine Sandmat Euphorbias either already in or likely to turn up shortly in Britain from France, and an analysis of the Crack and White Willows found in lowland Britain, while the latter highlighted the monad spread of 14 aliens across Essex over the last 40 years. Copies are available from ken.adams@virgin.net. Unable to do much botany myself, as my wife has been ill, Enid Barrie and I



Himantoglossum hircinum (Lizard Orchid) Horndon on the Hill (John Little)

concentrated on correcting the DDb and inputting the backlog of our Hieracium herbarium records, leaving our Chelmsford, Tendring and Colchester Groups to sally forth in the field on their own in small groups during lockdown, sending samples of anything critical in the post, - and they managed to generate around 5,400 new records. This compares with around 20,300 records in 2019. 2020 proved a further successful year for our two widely dispersed

Lizard Orchid plants in v.c.19 and a magnificent new plant occurred as a first for v.c.18 as well as a small colony of *Epipactis palustris* (Marsh Helleborine) now increased to 200 plants, and some *Chenopodium glaucum* (Oak-leaved Goosefoot). A critical look at our Sallows during the year generated two records of the Siberian *Salix gmelinii* for

v.c.18 and a record of the American *Salix prolixa* Anderson in Epping Forest - kindly determined by Irina Belyaeva.

v.c.20, Hertfordshire, Ian Denholm

The death of Trevor James in June 2020 was a huge loss for natural history recording in Hertfordshire and botanical recording for BSBI. Trevor succeeded John Dony as VCR for Herts in the 1980s and led the production of a new county Flora in 2009. Ian Denholm (ID) has since taken on sole recordership but it is hoped to appoint at least one other joint recorder in 2021. During early 2020, work to input a

final tranche of data relevant to the new atlas project was competed, although imposition of lockdown complicated transfer of data from iRecord to the DDB. Restrictions precluded joint field events but individuals undertook survevs and contributed important Notable findinas. records include the first occurrence of Himantoglossum hircinum since the 1930s and rediscovery of the nationally



Euphorbia platyphyllos (Broad-leaved Spurge) Coton, Cambridgeshire

declining *Epipactis leptochila* (Narrow-lipped Helleborine) at a former location after a 40 year absence from the county. The hybrid *Verbascum speciosum* x *nigrum* (conf. F. Rumsey) was new to Herts and only the second confirmed record for Britain. Material of a puzzling spurge from a field margin submitted to ID proved to be the first sighting of *Euphorbia platyphyllos* (Broad-leaved Spurge) in the country this century. It may be over-looked and will be the focus of a more targeted survey in 2021.

v.c.21, Middlesex, Mark Spencer

For once, I'm lost for words, almost. Fieldwork was a total washout as I, and many others, were shielding for most of 2020. I was able to undertake some data management on the Middlesex data in the DDb in preparation for the next Atlas. I also submitted several hundred thousand records extracted from various 'historic' literature sources, including county floras. This was an enormous undertaking that was almost entirely done by Clive Schofield, I am hugely grateful to him.

v.c.22, Berkshire, Mick Crawley

Berkshire's rarest plant, *Bituminaria bituminosa*, continues to flourish. It was first recorded in June 2014 in gravel at the base of an east-facing wall at Silwood Park, probably



Echium vulgare (Viper's Bugloss) Braunton, Devon (Mary Breeds)

introduced on a car arriving from Spain. It struggled along for two years, then decided to perennate properly, and grow to full size. Now, in January 2021, we have a plant with 10 stems, 1m tall, that retains some of its leaves right through the winter and magnificently flowers throughout the summer. Perhaps unsurprisingly, there

were no additions to the flora recorded during 2020, though doubtless several occurred but went unwitnessed.

v.c.29, Cambridgeshire, Jonathan Shanklin

Covid-19 only prevented us holding from two meetings. The Cambridgeshire Flora Group just managed to hold a meeting visiting churchyards before the first lockdown was imposed, then resumed subject to the "rule of six" from June to October. In addition, the <u>Cambridge Natural History</u>

Society field meetings, when they were permitted, invariably included botanical recording. The combination of Covid-19 restrictions and a new date class encouraged a lot of recording, particularly in the area around Cambridge. Across the county over 48,000 records were logged in MapMate. Alan Leslie compiled a report on the more interesting finds for the local journal Nature in Cambridgeshire. He highlights the re-finding of Prunus cerasus (Dwarf Cherry) in Gamlingay Wood SSSI where it was last reported around 100 years ago. The real surprise is the fact that it had not been spotted previously in what is a well-recorded site. The usual annual update of the RPR and Register of Plants of Conservation Concern (RPCC)

was made at the beginning of the year. with an appendix of invasive species added to the RPCC in mid year. Historical research by Chris Preston has pushed back the date of first record for few а species and added Osmunda regalis (Royal Fern) to the species list for the County, although it



Left: Erodium cicutarium subsp. cicutarium (Common Stork's-bill). Right: Erodium cicutarium subsp. dunense (Dune Stork's-bill). Mepal, Cambridgeshire.

has been long extinct. Covid meant that thorough surveys were only made of three sites: Mepal Outdoor Centre (contract work), which produced the notable record of *Erodium cicutarium* subsp. *dunense* (Dune Stork's-bill); Emmanuel College, where I found *Cystopteris fragilis* (Brittle Bladder-fern) and a protected road verge in Knapwell. This encouraged visits to many other such verges and a paper on the results was written for Nature in

Cambridgeshire. It has also brought closer links with the County ecological team. Work for a book on the Natural History of Cambridge encouraged Mark Hill to use Atlas 2020 data for the county to produce a novel analysis of plant clusters that was published in B&IB. One aim of the work was to put the City records into a County context. The 2020 county newsletter circulated news, meeting reports and excursion plans to the local botanical community. A county web page was maintained, and emails were sent to local botanists in advance of meetings. I gave a talk to the Ely U3A botanical group via Zoom. I am now on the County Wildlife Sites panel as the botanical expert. I have made some progress with using QGIS for plotting plant distributions and have generated some example maps for the 2021 county newsletter.

v.c.31, Huntingdonshire, David Broughton

Huntingdonshire has quite a small recording community, so inevitably the challenges of 2020 have resulted in a bit of a 'rest' in botanical activity. Survey efforts bγ Owen Mountford and Jonathan Graham for the Flora of Fenland project, which contributed SO much updating and expanding knowledge of the local flora, also came to their planned conclusion this year. Their focus is now on interpreting the multitude of records collected. and I look forward to seeing the end result of this in print in due course. Despite the quiet year,



Anacamptis morio (Green-winged orchid), Huntingdonshire (Andy Symes)

a number of interesting finds were still made. Not least the excitement for many of the arrival of *Himantoglossum hircinum* in the county. The single plant still appeared in good health in late 2020 and promises another flowering this year. Other big news was the discovery by Sarah Lambert of *Cerastium brachypetalum* (Grey Mouse-ear) new to the county at a rail-side location already known for its exceptional list of flora, and the re-find by Alan Leslie of *Rosa micrantha* (Small-flowered Dog-rose) after a long absence.

v.c.34, West Gloucestershire, Clive Lovatt

Due to Covid-19 restrictions neither the Gloucestershire Naturalists' Society nor its Bristol equivalent could offer any



Hieracium cyathis (Chalice Hawkweed) Ubley Warren, Mendips (Margaret Webster)

field meetings in 2020 (2019, 13) and the more active recorders met only on a few occasions. 26,870 records were added to the BSBI database for 2020 (2019, 34,905) but this was still our third highest annual number in the last 20 years. predecessors as VCR, Clare and Mark Kitchen, were particularly active. with 18.542 records. of which 16,608 were within home hectad ST69, which they had not explored so this thoroughly century. Particularly interesting to the writer was their find of the increasingly elusive Pyrus pyraster (Wild Pear), on the outskirts of Thornbury

(ST6590), its historic centre in our vice-county. It used to be known as Choke-pigs nearby, after the Choke Pears in Gerard's Herbal. At the request of Clive Stace, we also resurveyed the county distribution of *x Elyhordeum langei* (*Elymus athericus x Hordeum secalinum*). Most of the world population is in v.c.34. At one of the sites (Cake Pill Gout, ST58) we found *Atriplex glabriuscula x A. longipes*, new to the county, and *Alopecurus bulbosus x A. geniculatus*, for which we had few records. The most surprising find of the year was a new vice-county site for *Stachys alpina* (Limestone Woundwort). It was discovered by David Hawkins of Bristol on the vice county boundary over 20 km from Wotton-under-Edge, where it had been found new to Britain in the late 19th Century. We hope to write up an account for *BSBI News* later in 2021. My own home area

of Stroud, SO80 is already well-covered in the field and following the completion of 2020 recording Atlas worked indoors on my Historical Flora of the Avon Gorge (now 282 pages of draft typescript). I spent some time compiling county RPR list, and now just need to deal with provisional status column of the spreadsheet and write an



Hornungia petraea (Hutchinsia), at Ubley Warren, Mendips (Margaret Webster)

introduction before it can be reviewed and released. It has a format and scope similar to the Somerset list accessible on the Somerset Rare Plants Group website. Hopefully, it will guide field work and encourage research and writing for some years. Tim Rich's commissioned 59-page illustrated 'Key to hawkweeds *Hieracium* in Gloucestershire (v.cc.33 and 34)' was issued locally in time for this year's flowering season, and several of us made collections mostly close to

home for expert identification. When possible, we will have a local workshop, and hope to progress towards a better understanding of the local species than there has been for several generations of Gloucestershire botanists. The annual lists of worthy Gloucestershire plant records for 2018 and 2019, written by Clare and Mark Kitchen and the undersigned were both published in 2020 in *The Gloucestershire Naturalist*. Online copies normally appear two years after publication. The *Bristol Naturalists' Society Bulletin* (10 issues) includes reports of the informal meetings held near Bristol in 2020, some new plant records, and notes on Bristol Botanists written by myself.

v.c.38, Warwickshire, John and Monika Walton



Nuphar lutea
(Yellow Water-Lily)
River Swift, Warwickshire
(Angelika Smith)

We held no field meetings this year, but a band of five of us visited 49 of our Wildlife Trust Reserves. In September we wrote condition report for the new decade, making suggestions improvements for in management. This will hopefully help to increase their knowledge of the plants within their reserves. We had excellent face-to-face meeting with the head and deputy of the

management team. The list of species lost during the last ten years is, not surprisingly, quite long. The Warwickshire Trust reserves are not well managed, with only a tenth of the trust employees involved in maintenance and management; they do not have a good botanist on their staff. We will be focusing on the remainder of the reserves in the new season. We have published two Newsletters and

delivered an update on recording for the year at our County Recorders Meeting which took place just before the lockdown. Eleven new species were added to the county list in 2020, only one of these, *Moenchia erecta* (Upright Chickweed), being native. This was found in short turf on a golf course closed during lockdown, where it had last been seen 121 years ago.

v.c.39, Staffordshire, John Hawksford and Ian Hopkins All records received have been entered into MapMate and. hence, the BSBI Distribution Database. There were 9,246 Covid-19 restrictions seriously reduced the amount of recording that could be undertaken. The previously three most prolific recorders were particularly affected by travel and/or health problems. Four individuals provided substantial lists; ten, shorter ones; and 24, a few records. The validation for Atlas 2020 was completed for the priority categories: boundary matches, singleton anomalies, rarities and altitude ranges. The Annual Plant Report has been prepared and posted on the Staffordshire page of the BSBI website. Plant identification and other queries received in e-mails and the post have all been answered fully and promptly. Detailed comparisons and collaboration has been undertaken with the work of Staffordshire Wildlife Trust's Survey Teams.

v.c.53, South Lincolnshire, Sarah Lambert

The first quarter of the year was spent entering and verifying data for the Atlas 2020 project. All South Lincolnshire Flora Group (SLFG) meetings were cancelled at the end of March, so botanical survey was limited, particularly as several older members were shielding. I spent much of April producing a draft RPR for the county which will be finished by spring 2021, and will then provide a focus for targeted surveys before hopefully being finalised by 2025. As

restrictions on travel eased during the summer, some recorders got back out into their local areas. Malcolm Pool and Richard O'Conner visited approximately 50 monads and updated records for several key species, particularly *Gentianella amarella* subsp. *amarella* (Autumn Gentian) which had a good year. Sarah Lambert found a very large population of *Verbena officinalis* (Vervain) at Twyford Wood, only the fifth site in the vice-county. The SLFG Facebook page provided a valuable means of



Galeopsis angustifolia (Red Hemp-nettle), Oxfordshire (Terry Swainbank)

communication for botanists during a difficult year, and allowed me to have some insight into what was going on in my vice-county, which I only visited a handful of times mid-summer! Several notable finds were reported including via this group, new Taraxacum several species from a Holbeach

garden. The spring lockdown did have the advantage of focusing botanists attention onto their local patch.

v.c.55, Leicestershire, Geoffrey Hall, Russell Parry and Stephen Woodward

We have done some fieldwork locally, focussing on the River Soar corridor (Geoffrey Hall and Russell Parry), and also in a few under-recorded regions of v.c.55 when we were briefly allowed out, sometimes with local botanists. No group meetings were arranged, but recording continued county-wide via the citizen science portal, NatureSpot. So far, 24,500 records have been added to the database with more to come from NatureSpot and the LRERC. Russell Parry reports that eighteen new garden escapes were found this year, and that fifteen species were recorded in at least three times as many tetrads as were recorded before 2018.

A draft revised RPR for v.c.55 using BSBI's analytical methods was made, which will be completed and published later this year. Geoffrey Hall has almost finished writing up of the 'Supplement to the Flora of Rutland 1990' begun by Guy Messenger in 1993, but which he never completed. Stephen Woodward has been writing up an extensive survey of the Grace Dieu estate in Charnwood. Geoffrey Hall produced online talks on Fern Identification and Urban Botany for NatureSpot. We have contributed to the Leicestershire & Rutland Wildlife Trust's Conservation Committee (Geoffrey Hall, Stephen Woodward), to a County Council-led project to improve the flora of roadside verges (Geoffrey Hall) and to the v.c.55 Genebank at the Botanic Gardens (Russell Parry).

v.c.56, Nottinghamshire, Mark Woods

Despite lockdown, surveys continued of under-recorded tetrads, but such activity was largely solo and the contributions from the Biological Records Centre were slightly less than previous years (but still a significant contribution). Now very close to complete county coverage at tetrad level. The updated RPR (3rd edition) is about to be issued and is a major revision on previous years. Of particular note is the decision to include species listed on the 2014 England Red List, which has included some species that are still relatively common in Nottinghamshire. Very few new species found in 2020, mostly neophytes and two native hybrids (Lolium x boucheanum and Dactylorhiza x venusta). Substantial help has been provided by v.c.56 BSBI members to prepare a county checklist and a list of first and last records for the county. The latter is proving to be a much less straightforward than anticipated, but has proved to be very useful and has identified new sources of information and prompted a re-visit of herbarium databases and biological records centre records. Progress with species re-introduction forum has stalled. Plans to collect

cuttings of Bilberry with students have had to be postponed, but desk-based work has continued and a list of species identified for further work is near to completion. The list will be submitted to Nottingham Trent University for dissertation research projects (post and under-grad).

v.c.57, Derbyshire, Alan Willmot

We had planned a full set of meetings outdoor to through the year to visit interesting sites and develop identification skills. Obviously due to the Covid-19 pandemic no meetings were held. In lieu meetings encouraged members of our local group



Typha laxmannii (Graceful Cattail) Bamford (v.c.57)

to take part in the BSBI Garden Plant survey and to record plants in their local areas when out for daily exercise. A number of people took me up on botanising in their local area and we ended up entering something like 20,000 new records for the year. This was almost half the number of records entered for 2019 which I consider a notable achievement given the limited opportunities for recording. I circulated our annual newsletter in January as usual with detail of notable finds in the previous year. I also sent out a number of briefer newsletters during the year with information about new species to look out for to keep in contact with members of the group. During the early part of the year, I spent some time verifying records for our vice county on the DDb.

v.c.58, Cheshire, Graeme Kay

It would be superfluous to comment on what an odd year 2020 was with all meetings cancelled. However, a few enterprising souls used their exercise rations to do a bit of

local monad recording. John Hawksford covered the border with v.c.57 from New Mills to Marple where he made 2544 records. There were several amenity planting areas one of which contained *Geum x intermedium*, the only record this century and a bit of a mystery. *Briza maxima* (Greater Quaking-grass) graced the odd gutter as did the inevitable *Polypogon viridis* (Water Bent). *Impatiens capensis* (Orange Balsam) has spread further east along the canal system. *Catapodium rigidum* (Fern-grass) was an unusual

find away from the coast. John's interest in Cotoneasters was illustrated by records for *C. dielsianus*, helmqvistii, horizontalis, rehderi and x suecicus. Saxifraga granulata (Meadow Saxifrage) was still flourishing in a long known site.



Salix repens (Creeping Willow) Afton Marsh (v.c.10)

Mary and Claire Smith very kindly looked at two half monads on the upland v.c.57 border at Errwood and recorded 485 including a welcome new site for *Phegopteris connectilis* (Beech Fern). *Cystopteris fragilis* (Brittle Bladder-fern) was on mortar in bricks. Even up there, aliens are inescapable with *Rhododendron luteum* (Yellow Azalea), *Juncus tenuis* (Slender Rush), *Castanea sativa* (Sweet Chestnut), *Papaver* (*Meconopsis*) *cambricum* (Welsh Poppy) and *Epilobium ciliatum* (American Willowherb) being noted. *Alchemilla conjuncta* (Silver Lady's-mantle) was a remarkable find in the middle of a footpath, only just beaten as a NCR by my record of it in Sale!

Julian Laidler tackled the monads S of the R. Mersey near Sale Water Park and got 506 records. *Crocus nudiflorus* (Autumn Crocus) will have brightened his day and *Dactylorhiza praetermissa* (Southern Marsh-orchid) only



Lobelia urens (Heath lobelia), Hampshire (Tristan Norton)

slightly less so. Galium album (Hedge Bedstraw) seems to be a popular "flower meadow" species that gets He found a native about. Black Poplar at Trafford, and Rhamnus cathartica (Buckthorn) (duly checked) at Kenworthy. Stellaria nemorum (Wood Stitchwort) seems fond of the Mersey round there as his sighting illustrates.

Dave Morgan and myself independently sampled midnorth v.c.58. Dave made

3662 records and was pleased by the quantity of Eriophorum vaginatum (Hare's-tail Cottongrass) in the Pennines where Huperzia selago (Fir Clubmoss) on Shining Tor was an excellent find; it seems to be firmly back from He was impressed by meadows full of the dead. Conopodium majus (Pignut) and Viola lutea (Mountain Carduus nutans (Musk Thistle) was seen Pansy). enlivening sheep-grazed pastures. Epipactis helleborine (Broad-leaved Helleborine) popped up in nearly every monad. My total was 8278. A nice bank of Cyclamen hederifolium (Sowbread) was one record of many seen by others. The old tip at Wilmslow, now a shadow of its former self, being mostly dull woodland, still produced a good crop of Epipactis helleborine in one area and Agrimonia eupatoria var major (Agrimony) which is bigger than normal. Stachys x ambigua was nearby. Elsewhere, a marshy field by the airport had Bromus commutatus (Meadow Brome) and plentiful Ervum (Vicia) tetraspermum (Smooth Tare). In a shady lane I spotted a beautifully marked Pulmonaria

officinalis (Lungwort) hiding under a tree, while *Spiraea* douglasii subsp. douglasii (Steeple-bush) and *S. x billardii* (Billiard's Bridewort) were more obviously visible. My *Alchemilla conjuncta* was 2 plants in willow scrub in Priory Gardens, Sale where any idea of a garden was long gone.

Pauline Grimshaw's patch was E of Manchester and yielded 162 records. Good natives were *Blechnum spicant* (Hardfern) and *Equisetum sylvaticum* (Wood Horsetail). *Polemonium caeruleum* (Jacob's-ladder) was presumably a throw-out but *Tellima grandiflora* (Fringecups) gets about by itself. *Rubus odoratus* (Purple-flowered Raspberry) in Great Wood is only the second record.



Persicaria pensylvanica (Pinkweed) Dodleston (Liz Shanklin)

The area around and south of Chester was well covered by Jonathan Shanklin, who has family in Dodleston, Martyn Stead who lives in Jonathan made Chester. 2495 records including Carex divulsa (Grey Sedge) and Selaginella kraussiana (Krauss's Clubmoss) in Aldford churchyard, rotundifolium Geranium (Round-leaved Crane's-bill) on a track by the A55. He Inula found convzae (Ploughman's-spikenard) in Eccleston and Lagarosiphon

major (Curly Waterweed) in a pond in Dodleston, where was also Hordeum secalinum (Meadow Barley). Persicaria pensylvanica (Pinkweed) was an NCR in Dodleston. Carduus acanthoides (Broad-winged Thistle) is another species from the area to look out for, though it hasn't been

seen again since 2009. Martyn made an amazing 15462 records including *Anthemis tinctoria* subsp. *australis* (Yellow Chamomile) on an A55 sliproad which was new to the UK! By the canal he found *Anthriscus caucalis* (Bur Chervil) and *Briza maxima* but they were later mown down. *Chaenorhinum minus* (Small Toadflax) was a pleasing find as was *Aira caryophyllea* (Silver Hair-grass) on a sandy bank at Barrymore. Dactylorhiza praetermissa, *D. x grandis*, and *Epilobium montanum x hirsutum* were good finds and *Cannabis sativa* (Hemp) was a surprise. *Galium parisiense* (Wall Bedstraw), seen in the Chester Roman amphitheatre, is only the second record and seems to be spreading.



Drosera intermedia (Oblong-leaved Sundew) New Forest, Hampshire (Leif Bersweden)

Julie Rose recorded further north and on the east of the Wirral. Among 1122 hits, she found Impatiens capensis and Senecio inaequidens (Narrowleaved Ragwort) at Stanlow in an area I was evicted from on a previous visit. What is the secret? Sherardia arvensis (Field Madder) and Anacamptis pyramidalis (Pyramidal Orchid) were goodies from Ellesmere. Carduus tenuiflorus (Slender **Polystichum** Thistle) and aculeatum (Hard Shield-fern) were other good natives. Hvdrocotvle ranunculoides (Floating Pennywort) was still in

the canal despite the authorities being warned of its nature several years ago.

Eric Greenwood directed his attention more to north and west Wirral with 630 records. A large bunch of snowdrops began his year, followed by Sanicula europaea (Sanicle) in Manor Wood, Crambe maritima (Sea-kale) at Heswall and Potentilla x mixta in Gayton. Aliens he found include Rubus loganobaccus (Loganberry) at Parkgate, Buddleja x weyeriana and Calendula officinalis (Pot Marigold) at Heswall. Cotula coronopifolia (Buttonweed) is still in a long known area at Heswall.



Anacamptis pyramidalis (Pyramidal Orchid) Noar Hill, Hampshire (Leif Bersweden)

Finally, Joshua Styles was inspired to visit Hoylake and found Catabrosa aquatica var. uniflora (Whorl-grass) in the area it was first described from and rarely seen since. Not content with that, he found the first records of longipes Atriplex (Longstalked Orache) and A. x gustafssoniana (A. longipes Salicornia x prostrata). (Purple ramosissima Glasswort) and S. dolichostachya (Long-spiked Glasswort) helped to make up for the meeting to study this genus that could not take place.

Overall, 35457 records were made in 300 monads which is probably more than a normal year might have produced. In fact, it is a record total, though considering that monads potentially give 4 times the equivalent tetrad, it might not be quite so spectacular. Still, congratulations to those who contributed are in order, especially Martyn. Keep up the

good work in 2021. I doubt we will be able to have many/any meetings, but if we can, they will mirror 2020's proposals.

v.cc.59 and 60, Lancashire, David Earl

Although field excursions were cancelled botanical observations continued particularly via the iNaturalist website with a <u>Greater Lancashire</u> project kindly being created by SJ McWilliam for which we had over 60,000 plant observations, 2100 species, 1681 observers and 1072 identifiers for 2020. In addition to records from iNaturalist



Scabiosa columbaria (Small Scabious), Bishop Middleham, Durham (Heather Kelly)

we continue to receive a significant number of plant records from iRecord, emails and spreadsheets. 2020 records entered thus far to Mapmate are 25,059, 1225 species for v.c.59 and 7,648, 981 species for v.c.60. There is still a considerable backlog of 2020 records to process especially coastal records from v.c.60 and we are still awaiting records from the

other LERCs within v.c.59 which may include around 30,000+ records from iNaturalist, iRecord, local recorders and consultants. The South Lancashire Flora Committee decided that vascular plant sections of the flora are to be released as a series of downloadable pdfs via the North Western Naturalists Union website and it is hoped that the initial sections covering Clubmosses, Horsetails and Ferns will be available before March 2021. In the meantime the vascular species accounts are being regularly reviewed and extended with the addition of images and updated maps. The provision of the species accounts via downloadable pdfs gives us the flexibility to make and provide updates and

we have already had some exciting finds during January 2021.

v.c.63, S.W. Yorkshire, Kay McDowell

We were due to visit Magdale Fields near Holmfirth for a wildflower walk in early July for the charity River Holme Connections but we postponed the event due to Covid-19. Peter Burton and I met there instead to take photos to send to the group. We're planning to reorganise the event when lockdown ends. In July four members of the Bradford Botany Group and I went to see Hypopitys monotropa (Yellow Bird's-nest) found by Alan Schofield at Southern Washlands Nature Reserve near Wakefield. We formed a small group of four on our first v.c.63 trip on 26th August to Wessenden Moor. Our notable finds were D. aemula and Osmunda regalis [See article on page 95]. We plant to join up with local fern groups for meetings. In early October Louise, Tim, my husband Neil and I made an exploratory recording trip to the southern boundary of v.c.63 an area previously recorded due to its inaccessibility. In September we had a trip to King's Wood, south of Wakefield for four of us to get out of the house! I went to Bradford for walks to get to know the area better. I have plans to record in the Forest of Trawdon area of v.c.63 as there's been no recording there since 1995 and also to find out whether there are more hay-scented buckler-ferns and royal ferns. I will tell Bradford Botany Group members I'm planning to record in Forest of Trawdon to gain interest and people to help me record. I hope to start a v.c.63 newsletter/blog. After the Forest of Trawdon project I will start on an RPR.

v.c.64, Mid-west Yorkshire, David Broughton

2020 was not a notable year for botanical recording, with relatively few records generated. Instead for most people it seems to have been a year of not going far, taking stock (with Nicky Vernon continuing mammoth efforts to digitise historic records by the Wharfedale Naturalists), and looking more closely. Perhaps even, as in my case, giving some more challenging plant groups more attention because of the extra time available to invest in them. Consequently, March and April were about daffodil cultivars (Narcissus agg.), June and July about hawkweeds (Hieracium agg.), high pondering goosefoots summer about (Chenopodium album agg.) and roses (Rosa spp.). I can't



Carlina vulgaris (Carline Thistle), Bishop Middleham, Durham (Heather Kelly)

think of many footpaths within a 5 km radius of my house that did not benefit from being walked on at least a fortnightly basis through the year, with regular new finds as a result. Highlights included my first encounter with *Barbarea stricta* (Smallflowered Wintercress) on a fortuitous work trip, the first

record since 1975 and guaranteeing that I will look more closely at wintercress this year. Examinations of local ivy populations have revealed occasional stands of wild type *Hedera hibernica* (Atlantic Ivy), in addition to forms of the widely established Hibernica Group. I also had some minor successes with hawkweeds, with the star find of the year being *Hieracium prominentidens* (Large-toothed Hawkweed) at its second site in the county. Meanwhile, Mike Wilcox's willingness to investigate habitats most people would avoid was rewarded with *Triticum turgidum* (Rivet Wheat) along the margins of the Leeds ring road.

v.c.67, South Northumberland, John Richards



Betula nana (Dwarf Birch) (v.c.67)

As would be expected, lockdown prevented group activities. However, a very active email group was set up for local Botanists through the Botanical Group of the Natural History Society for Northumbria, and through this many records were received and logged, some

of very considerable interest (see below). During the summer, relaxed constraints permitted some individual field surveying which helped Northumberland Wildlife Trust with their Revitalising Redesdale project, and a new initiative set up habitat recording with members of Northumbria Natural History Society in their Gosforth Park reserve. Well over 50 new species and a number of re-finds have been recorded there so far. A large number of missing hectad/tetrad

records of common species were successfully chased up and the erroneous allocation of some records to v.c.67 corrected. Recording continued in some underworked areas of the county, particularly post-industrial sections of the coast, and the Otterburn Ranges. Two of our rarest and most nationally significant species, *Crepis mollis*



Alopecurus aequalis (Orange Foxtail) (v.c.67)

(Northern Hawk's-beard) and *Myosotis stolonifera* (Pale Forget-me-not) were the targets of detailed surveys, resulting in the discovery of several new sites for each. Previous locations for the nationally rare alchemillas *A. subcrenata* and *A. acutiloba* were successfully rediscovered, and a lost population of *A. glomerulans* was

re-established, using propagated material from the original site.

v.cc.69, 70, Westmorland and Cumberland, Mike Porter, Jeremy Roberts and Phill Brown

The year started well with a very successful New Year Plant Hunt, our total number of species topping 100 for the first time and 43 people participating. Later, in March, we held our indoor meeting where reports were given and excellent illustrated talks delivered about Mardale and Sandscale Haws. Plans were made for field visits to some of Cumbria's best botanical sites. Then came lockdown. After this, most recording was done by individuals rather than groups. Our Facebook site Cumbria Botany kept us in touch with each other and also enabled us to publicise a serious concernthe planting of trees in botanically rich or valuable sites in several parts of Cumbria. The planting was undertaken sometimes with good intentions but with an almost total lack of knowledge of the potential botanical damage. Remedial action by those responsible has now been started.

Meanwhile, suggestions by Richard Lansdown. Fred Rumsey, and others that gibba Lemna (Fat Duckweed) is being widely minor overlooked (as L. Duckweed)) (Common in areas led to investigations of duckweeds in parts of north Cumbria. one From just previous record in v.c.70 we now have 29 sites for Lemna gibba (22 tetrads), whereas L. minor was located in only 13 sites (10 tetrads) in the same area!



Dryopteris affinis subsp. kerryensis near Rydal Water

L. minuta (Least Duckweed) was in 5 sites (no previous records), and Spirodela polyrhiza (Greater Duckweed) was in 3 (previously 1). Finally, in November, members of the Recording Group submitted their best botanical memories of the year to the Newsletter.

v.c.113, Channel Islands (Jersey), Anne Haden

The most interesting find in 2020 in Jersey was Epipactus palustris (Marsh Helleborine) in our Orchid Field. There were about 50 spikes of this plant not recorded in the island since 1960. Also added to our list of new finds was Ficaria verna subsp. verna (Lesser Celandine). An interesting alien that turned up on the North Coast was Persicaria nepalensis (Nepal Persicaria). **Finally** Laphangium luteoalbum (Jersey Cudweed), not recorded since 1969 in the island that bears its name was found after many years Jersey was of searching.



Persicaria nepalensis (Nepal Persicaria). (v.c.113)

fortunate in that after lockdown our Botany group was allowed to meet up outside in groups of up to 20, so we continued with outings around the island and we were able to record our 2 NPMS squares and start one new square. Volunteers helped local government with habitat monitoring, seed collecting for a native wildflower garden at the Botanic Garden and one of our botanists made local television news

by chalking wildflower names along the road during lockdown.

New and interesting County Records

This section aims to provide reports of new county records of native species, re-finds of species thought to be extinct for at least 50 years and finds of alien species that illustrate a significant range expansion or identification feature. Most



Scleranthus annuus (Annual Knawel) headland (v.c.10)

accounts were taken from the county reports, whilst others were written as separate articles. Information on other county records, of local hectad records etc will be available from vice-county recorders or through the DDb. Contributions with images are welcome.

v.c.4, North Devon

Euphrasia scottica. Found on Exmoor by Alex Worsley, confirmed by Chris Metherell. W. P. Hiern labelled some specimens in his herbarium (now in RAMM) as this species, but Keble Martin and Fraser in the 1939 Devon Flora said they were *Euphrasia micrantha*. When we have access again it is planned to re-examine Hiern's specimens at RAMM.

Polycarpon tetraphyllum (Four-leaved Allseed). Northam, found by Bob Kirby - 2ndCR

Cotula sessilis (Jo-jo Weed). Croyde. NCR

Orobanche rapum-genistae (Greater Broomrape). Near Knowle, found by Mary Breeds.

Polypodium cambricum (Southern Polypody). Abbotsham, found by Bob Kirby. Very rare in North Devon.

Isolepis cernua (Slender Club-rush). Lundy, found by Sam Bosanget. First record since 1950.

Trichomanes speciosum (Killarney Fern). Lundy, found by Sam Bosanquet, gametophyte form. First Lundy record.

v.c.5, South Somerset

Eleocharis palustris x uniglumis. Minehead, Lower Marsh Farm (SS99344607), 29 May 2020, in large depression of some 50 x 20 m in surrounding marsh/grazing land just behind golf course. Found by Graham Lavender.

Guizotia scabra. Found by Jeanne Webb at Old Cleeve (ST04164178), 26 Dec 2020, one large plant appeared in garden, probably from birdseed, JW (det. Stefano Doglio)

Lamprocapnos spectabilis (Asian Bleeding-heart). At Hawkcombe (SS87584577), 26 Apr 2020, an escape from the garden of 'The Stables' onto bridleway, finder Graham Lavender and determined by Ro FitzGerald.

Poa infirma x annua. Taunton, Silver Street (ST23152442), 29 Mar 2020, on small traffic island collected by Graham Lavender and determined with the help of Clive Lovett.

Spergularia bocconei (Greek Sea-spurrey)

First record for Somerset discovered by Sharon Pilkinton at the Holnicote Estate (SS91134624), 2 Jul 2020, in a corner of the National Trust car park. Then at Porlock Weir (SS86354801), 9 July 2020 by Graham Lavender.

Cotula coronopifolia (Buttonweed)

Reported to Natural England at West Sedgemoor SSSI and RSPB reserve (ST35182550), 9 July 2020, growing in a shallow gutter (ST35132550), records confirmed by Stephen Parker 17 July, approx. 500 plants, in shallow gutter (ST35182550), bare ground in gateway (ST35322549). Site will be monitored to assess any impacts on native habitats and species.

Huperzia selago (Fir Clubmoss)

The Warren (SS78644096), 16 Oct 2020, several plants on irrigated rock face on slope, Andrew Branson & Sharon Pilkington. First record for this site since 1990.

v.c.6, North Somerset

Baldellia ranunculoides (Lesser Water-plantain). Found in a ditch at Shapwick Heath NNR by Helena Crouch and Fred Rumsey, the first record for this hectad and the Avalon Marshes since 1992. This species has declined in Somerset.

Hieracium acuminatum (Tall Hawkweed). Found stonework of disused а railway bridge at Clutton by Helena Crouch a few years ago, but a specimen finally collected in 2020, inspired by Mike Shaw's interest in Hawkweeds of the SW. Mike very kindly confirmed my identification: it is new to Somerset. The specimen was almost as tall as me not easy to fit into my press!



Hieracium acuminatum

Lathyrus hirsutus (Hairy Vetchling). Found by new BSBI member, Daphne Osmond, on the bank of wildlife pond at Alhampton, the first record for v.c.6 and Somerset since 1971. The bank had been sown with a wildflower mix in 2014, but this would be an unusual component of a seed mix?

Stachys annua (Annual Yellow-woundwort). Found by Helena Crouch on former railway sidings at Radstock, second record for v.c.6 and first since 1908. The only previous record was at Portishead Station-yard – a pretty Railway Alien in Somerset!

v.c.10, Wight

Wahlenbergia hederacea (Ivy-leaved Bellflower). Refound for the first time since 1918 in a small acidic bog.

Scleranthus annuus (Annual Knawel). Huge population of many thousands of plants in a field edge on sandy ground.

Salix repens (Creeping Willow). A few relict plants growing in the middle of a previously herb-rich reedbed.

Weklanka wais ka da ra a a a

Wahlenbergia hederacea (Ivy-leaved Bellflower) Bohemia Bog (v.c.10)

Thought to have become extinct.

Centaurea solstitialis (Yellow Star-thistle). Three or four plants growing in a field of Kale. Last seen in v.c.10 in 1956.

v.cc.15, 16, Kent

Serapias vomeracea (Long-lipped Tongue-orchid) was discovered in East Kent, the first wild find in the British Isles.

Fallopia dumetorum (Copse-bindweed) was last seen in the 1970s. It was recorded, not only in its 1970s location, but also, extraordinarily, in other sites where last seen in 1948 and 1875. We believe we also have Fallopia x convolvuloides.

Persicaria mitis (Tasteless Water-pepper) was last seen in 1955.

Spartina maritima (Small Cord-grass) was found at a classic location by the Swale where it was last seen in 1990.

v.c.29, Cambridgeshire

Dryopteris cycadina self-sown in a drainage ditch at the Cambridge Science Park (NCR).

Prunus cerasus (Dwarf Cherry) refound in Gamlingay Wood after more than 100 years. The plant was in clear view by a path in this well-botanised wood.

Prunus cerasus (Dwarf Cherry)

Rosa agrestis (Small-leaved Sweet-briar) in an old farmyard at Knapwell (NCR).

Stellaria alsine (Bog Stitchwort) on Sheep's Green, Cambridge. First City record for 70 years for this plant, which is on the county RPR.

v.c.38, Warwickshire

Cardamine occulta. Found in Warwick Road, Stratfordupon-Avon, SP22415519, on 22 November by Bastiaan Brak growing in a pavement crack. It was identified by a selection of photos by Tim Rich on Facebook. It has since also appeared in Warwick.

v.c.53, South Lincolnshire

Crataegus pentagyna (Small-flowered Black-hawthorn). Three bushes were recorded in a hedgerow near Donington by J. Bodimead on 19th October 2020, the first record for v.c.53. They were presumably planted nursery stock, possibly sourced from eastern Europe.



v.c.55, Leicestershire

Monotropa hypopitys (Yellow Bird's-

nest). A fairly extensive colony found in light woodland on a former ironworks near Ashby by Isabel Raval. The first record for Leicestershire and the second population found in v.c.55.

Polycarpon tetraphyllum (Four-leaved Allseed). A NCR, found on a pavement in the suburbs of Leicester City by Geoffrey Hall.

Galium parisiense (Wall Bedstraw). A NCR found in the verges of an industrial estate in Coalville by Geoffrey Hall.

Carex vesicaria (Bladder Sedge). A rare plant in v.c.55, found by Jean Emeny on the edge of Saddington Reservoir, although not previously recorded at this well-surveyed site.

v.c.56, Nottinghamshire

Aesculus indica (Indian Horse-chestnut). Mark Woods, 2nd record, 5 June 2020, SK550733, Welbeck Woodland. Neophyte. Planted and regenerating.

Anemone coronaria (Crown Anemone)
Graeme Coles, NCR, 8th March 2020, SK58027880, A57
Roadside Verge. Neophyte. 3 plants along a 10 m section.

Bromus hordeaceus subsp. molliformis (Soft-brome) Mark Woods, 2nd record, 1st August 2020, SK837636, Collingham Arable Field. Neophyte

Cardamine corymbosa (New Zealand Bitter-cress)
Rob Johnson, 2nd record, 14 March 2020, SK70295429,
Byron Gardens, Southwell. Neophyte. Several plants
growing at base of wall with Cardamine hirsuta (Hairy Bittercress).

Cotoneaster astrophoros (Starry Cotoneaster) Mark Woods, NCR, 13 June 2020, SK575610, Mansfield Golf Course. Neophyte. Self-seeded along track

Crepis tectorum (Narrow-leaved Hawk's-beard)
Mark Woods, 2nd & 3rd records, 25 September 2020,
SK51884706 & SK51854699, Watnall Road, Hucknall.
Neophyte. Large patch on a verge recently disturbed by
construction work on opposite side of road

Dactylorhiza x venusta (D. fuchsii x purpurella) Mark Woods, NCR, 20 June 2020, SK592627, Vicar Water Country Park. Native. Single plant in close proximity to both parents.

Erysimum linifolium (Alpine Wallflower)
Jerry Clough, NCR, 7 May 2020, SK545399. University of Nottingham, Jubilee Campus. Neophyte. Escape from cultivation.

Euphorbia corallioides (Coral Spurge)

Mark Woods, 2nd record, 9 November 2020, SK542613, Rock Valley, Mansfield. Neophyte. Possibly a relic of cultivation, but seedlings also present.

Lolium x boucheanum (L. perenne x multiflorum) Rob Johnson, 2nd record, 2020, SK674531, Southwell, neonative hybrid. Intermediate between parents on edge of arable field.

Sedum kimnachii (Mexican Stonecrop)

Rob Johnson, NCR, 17 July 2020, SK738525, Rolleston Railway Station. Neophyte. Plant growing under scrub by path to westbound platform

v.c.57, Derbyshire

Modiola caroliniana (Carolina Bristle-mallow). This was

provisionally found and determined by Mick Lacey on a new housing development at Clay Cross (SK388679) in February 2020 and confirmed by growing on material to flowering in May. This appears to be only the second British record.

Typha laxmannii. (Graceful Cattail). This was found growing abundantly in a ditch on the site site of the Maquis demolished of Granby pub at Bamford (SK207822) in November



Modiola caroliniana

2020 by Mick Lacey. This is a NCR but now we know the plant we suspect we will find it elsewhere in the county.

v.c.59, Lancashire

Crassula tillaea (Mossy Stonecrop). Found in abundance at Altcar by Joshua Styles. Joshua has also found two species of *Taraxacum* (Dandelion) assumed to be new to v.c.59.

v.c.63, South & West Yorkshire

Finding Dryopteris aemula (Hay-scented Buckler-fern) was a personal highlight of 2020. It was our first v.c.63 outing of the year and we'd decided to record Wessenden Moor. а previously unrecorded area between Holmfirth and Manchester. lt's an partly unrecorded area because of its reputation of having only 5 plant species per monad. A small group of four of us met at Marsden Moor car park on Saturday 26th September 2020. exposed site, there was cold wind blowing straight across us at the top of the Moor, which is situated over 400 m above sea level.



Dryopteris aemula on Wessenden Moor

After a morning's plant hunting, we looked for a sheltered place to have lunch. Finding a few rocks to perch on, we ate our sandwiches and looked at the surrounding vegetation. I had noticed an interesting looking Buckler-fern when we sat down so I crawled up to get a closer look with Pete. Louise thought it looked interesting too and examined the

scales and suggested Hay-scented Buckler-fern. The scales have a darkened stripe across where the scale is attached to the stipe. Louise recognized this feature whilst looking at ferns on walking trips in Scotland. I looked at the pinnules which had a crinkly look and were distinctly curled up at the edges, a feature I'd seen whilst on the Fern Guide course in 2019 at Blencathra Field Studies Centre in the Lake District. I couldn't believe my eyes! I had dreamed of being a plant hunter since I was young. We didn't expect to see this species in v.c.63. A couple of days later Mike Canaway, a Yorkshire Fern Group and Northwest Fern Group member confirmed our identification. We discovered it was the first record for the Peak District National Park, v.c.63, Derbyshire and Cheshire.



Osmunda regalis on Wessenden Moor

Later that day on top of the I found small moor а (Royal Osmunda regalis Fern). Royal ferns have unexpectedly been found in the Dark Peak moorlands recently but nobody really knows why. It may be due to reduced sheep-grazing pressure.

Another good find was spotted by Bradford Botany Group member Alan Schofield. He discovered at least a hundred *Hypopitys monotropa* (Yellow Bird'snest) at a new site in the Southern Washlands Nature Reserve near Wakefield in July. We formed a small

group of five and went to see the pale yellow saprophytic perennials which are usually found on leaf litter in woods. We found the site which was a mosquito-infested low-lying area. The plants were about 20 cm in height with their flowers hanging to one side and were under birch and willow scrub. We wondered whether the mosquitoes were feeding on the dead bodies of botanists attempting to photograph the plants.

A new site in v.c.63 for *Nepeta cataria* (Cat-mint) was found by Paul and Joyce Simmons whilst out exploring new footpaths near Kirk Smeaton near Pontefract in early August. An archaeophyte found on dry calcareous soils, the grey-white pubescent perennial was found in a hedge bottom.

Kay McDowell, joint VCR

v.c.67, South Northumberland

Betula nana (Dwarf Birch). The third site for the county was discovered (fifth for England), and is much more accessible and more extensive than the others. It was accompanied by a single individual of *B. x intermedia*, new to England.

Limonium x neumanii. A large clump of a sea-lavender, together with two seedlings, was discovered amongst coastal defences. Neither *L. vulgare* or *L. humile* have been recorded in the v.c. previously. It is apparently self-fertile and



Limonium x neumanii

was first recorded as *L. humile*, but is now regarded as probably being the hybrid.

Alopecurus aequalis (Orange Foxtail). A large population was found on a reservoir drawdown, new to the county. Bidens cernua (Nodding Bur-marigold), a second county site, was also present.

Saxifraga hypnoides (Mossy Saxifrage). A population was found close to the Cumbrian border growing in apparently unremarkable upland grassland next to a grouse butt, but with Chrysosplenium alternifolium (Alternate-leaved Goldensaxifrage) as an unexpected



Saxifraga hypnoides

neighbour. Apart from old records of garden escapes this is the first county record, and the first record east of the Pennines this far north.

v.cc.69, 70, Westmorland and Cumberland

Dryopteris affinis subsp. *kerryensis* (Scaly Male-fern). The second British colony of this rare subspecies, found near Rydal Water by Roger Golding.

Euphrasia officinalis subsp. monticola × E. confusa. The first record for Cumbria and the third for Britain, found by Rob Dixon near Loweswater and confirmed by Chris Metherell



Euphrasia officinalis subsp. monticola × E. confusa Loweswater. Cumbria



Pyrola rotundifolia subsp. rotundifolia (Round-leaved Wintergreen) near Whitbarrow v.c.69 (Lynne Farrell)

Pyrola rotundifolia subsp. rotundifolia (Round-leaved Wintergreen) was the best Cumbria record for 2020, found by David Eastlick, an entomological friend of Lynne Farrell, in a botanically rich area near Whitbarrow and confirmed by Lynne. This subspecies is extremely rare in Cumbria; indeed this is the first record for the current century!

Genista anglica (Petty Whin). A species which is declining in Cumbria and much of England. Two healthy plants were found by Nigel and Lois Harbron and Linda Robinson on the steep banks of Hazelrigg Beck near Gamblesby on the western edge of the Pennines.

Hints & Tips

Submitting plant records

Jonathan Shanklin (a personal view)

Vice-county recorders (VCR) welcome receiving plant records from members. The records are particularly welcome when they are in a format that allows easy incorporation into the county database. The exact format will vary between vice-counties, but is usually in the form of a spreadsheet. This will include columns for what you saw, where you saw it, when you saw it and who you are. There will be variation between vice-counties as to the exact preferences and it is always a good idea to consult with your local VCR. For occasional records of interesting plants just send the details in a simple email.

Many members will be using apps such as iRecord under the impression that this will allow them easy entry of records and quick transfer to the VCR^{1,2}. Unfortunately, this is not always the case, though for some VCRs it will be the preferred system. Do ask your VCR what they would prefer. One concern for many VCRS is that iRecord and similar systems do not always produce the true "what", "where" and "who", though they usually get the "when" correct. In addition, your "good" records may be swamped by a plethora of "bad" records from other users. What are the problems?

"What" is not always the first thing that comes up, for example a Painted Lady is a plant as well as a butterfly and Redshank is a bird as well as a plant. Sometimes a non-botanical verifier will say that a record is certain, but the attached image does not show the verified plant. This is one big advantage of iRecord – the VCR can check the identification from the image.



Genista anglica (Petty Whin) Gamblesby v.c.70 (Linda Robinson)

"Where" is often given with high accuracy with a grid

reference of 10 figures. Unfortunately, this may not be the grid reference of the plant, as sometimes the records are not entered until the observer gets home. Even when it is the supposed location of the plant, smartphone GPS systems often get the position wrong by 100 metres or more until they have had time to stabilise. It is worth checking this whatever record entry system you use. The site name you give should aim to help confirm the GPS position by providing some cross-reference. VCRs will have local preferences on the site naming convention that they use.

"Who" needs to be a clear name and not a pseudonym. If a VCR has questions about the record they need to be able to contact the real person. If they have met you at a local field meeting they will have more confidence in your records.

The large number of "bad" records is off-putting to many VCRs as it takes considerable time and effort to go through

and fully check thousands of records. It can also take some time for records to get from iRecord to the BSBI database and thence to the VCR.



Oenanthe lachenalii (Parsley Water-dropwort). Shepreth, Cambridgeshire (Peter Leonard)

The next paragraph is controversial and Kevin Walker and Tom Humphrey would prefer the direct transfer from iRecord to the DDb. It may in any case become superfluous thanks to the plans for new BSBI recording software. Many VCRs would find it helpful if you can extract your records from iRecord into a spreadsheet and send them in an email. The VCR will then be able to provide immediate feedback and help you to provide even better records in future.

There can be problems with this approach, as iRecord will hold the original records and there will be a copy in a DDb holding area. In addition, the verified version in the VCR database will go to the main DDb area, potentially creating a lot of duplication and divergence of records. Of course, if all the records are "good" because you have followed the suggestions given here, the problems will never occur.

References

Walker, K.J., Humphrey, T. & Roy, D. 2017. Submitting and verifying plant records using iRecord. BSBI News 135: 83–84.

Kevin Walker, Tom Humphrey & David Roy, 2019. iRecord for botanists – entering records online and using smartphones. BSBI News 140: 22-24.

Footnote: the following is taken from the Huntingdonshire Fauna & Flora Society Lepidoptera Report for 2020.

I [The Lepidoptera recorder] would ask that anyone who adds their records to iRecord, or any of the other online data storing programmes, could they also send me a copy. I do not have time to extract records from the many online recording programmes that are available, so records sent to these programmes are potentially lost.

Please be aware that Butterfly Conservation does not extract records from any of these databases [iRecord etc] or those sent into any of their recording schemes. They are not added to the National Database, but are repatriated to the county recorders for checking. Once the relevant county recorder has accepted them as accurate they are stored in the local County Database until Butterfly Conservation asks for them to be forwarded to them for adding to the National Database. The only way records get into the National Database is direct from the county recorders.

Lemna gibba and Lemna minor Jonathan Shanklin

In Cambridgeshire *Lemna gibba* (Fat Duckweed) often expands to live up to its name, particularly in slowly flowing rivers and ditches. This doesn't always happen however, so that it can look very similar to *Lemna minor* (Common Duckweed). To distinguish them you need to look carefully at the central cells. Those of *L. gibba* are large and elongated, whilst those of *L. minor* are small and rounder.



Above: Lemna gibba Right: Lemna minor (Jonny Hughes)



Some frequent abbreviations:

B&IB	British & Irish Botany
CEH	Centre for Ecology & Hydrology
DDb	BSBI Distribution Data-base
E&C	BSBI Events & Communications Committee
LRC	Local (Environmental) Records Centre
LNR	Local Nature Reserve
LWS	Local (or County) Wildlife Site
NCR	New County Record
NPMS	National Plant Monitoring Scheme
RPR	Rare Plant Register
S&D	BSBI Science & Data Committee (formerly
	Records & Recording)
S&T	BSBI Skills & Training Committee (formerly
	Training & Education)
VCR	Vice-county Recorder

Picture Gallery



Clematis flammula (Virgin's Bower), Braunton, Devon



Carex ericetorum (Rare Spring-sedge) Derbyshire (Mick Lacey)

David Broughton reports that Kevin Walker refound Carex ericetorum (Rare Spring-sedge) at Hetchell Wood Nature Reserve last year, and that Kevin with Kay McDowell found it this year at Ledsham Banks on May 5.



Norfolk (Jo Parmenter)

Jo Parmenter was shown Mibora minima (Early Sand-grass) on May 5 this year, found by lan Woodward on a lawn, and pavement gutters cracks at а Norfolk location. It was probably introduced there by a Although campervan. often no more than a few centimetres tall, these plants were 15cm high.



Allium vineale var. vineale (Wild Onion). The flowering form is occasionally found in v.c.29 with scattered records across England.



Carex digitata (Fingered Sedge) (Lynne Farrell)



Herniaria glabra (Smooth Rupturewort) growing in a Corbridge pavement v.c.67



A stand of Senecio sarracenicus (Broad-leaved Ragwort) at Crosby Garrett v.c.69 (Lynne Farrell)