Botanical Society of Britain & Ireland

# BSBI

## SCOTTISH NEWSLETTER

47 Spring 2025

Contents BSBI Scottish Newsletter No 47. Spring 2025

This online version of the newsletter includes all the content listed below. The print version comprises only those items shown on a green background.


| | | |
|---|---|---|
| 1 | The Scottish Botanists' Conference: a view from the then-President…….. | *Micheline Sheehy Skeffington* |
| 2 | The Scotland Officer's Year 2024…….. | *Matt Harding* |
| 9 | New site for *Carex salina* (Saltmarsh Sedge)…….. | *Lewis Donaghy* |
| 12 | Scottish Outreach 2024…….. | *Aileen Meek* |
| 14 | Sticky Catchfly on Dumyat……... | *Lindsay Mackinlay* |
| 20 | Glenshee *Alchemilla* Weekend…….. | *Mark Lynes* |
| 24 | Wild Plants in Dundee Car Parks…….. | *Brian Ballinger* |
| 26 | Recovery of Small Cow-wheat…….. | *Max Coleman* |
| 31 | A 20-year re-survey of *Ononis reclinata* (Small Restharrow) at Port Kemin, Mull of Galloway……. | *Matt Harding, Michael Jeeves & Jim McCleary* |
| 37 | Recording grasses……... | *Mike Wilcox* |
| 38 | Summarising Hectad-scale Changes to the Flora of Individual Vice Counties ……... | *David Elston* |
| 42 | Notable species recorded in the Nevis Nature Network project area, Westerness (v.c.97) in 2023-2024 | *Jim McIntosh (author), Ian Strachan & Gus Routledge* |
| 51 | West Central Scotland Botany Network…….. | *Michael Philip* |
| 54 | In memory of Fiona Macfarlane……... | *Michael Philip* |
| 55 | VCR Reports 2024 | |
| 100 | BSBI Scottish AGM Minutes 2024 | |
| 104 | Crossword | |
| 105 | BSS Field Meetings 2025 | |
| Back cover | BSBI Field Meetings programme 2025 | |



Editor: John Crossley *flawsjohn@gmail.com* (with the help of Isabelle McAllister)


Cover photo : Members of the West Central Scotland Botany Network and a display of *Saxifraga hypnoides* (Mossy Saxifrage) on the Lang Craigs above Dumbarton
*Photo by Michael Philip*

# The Scottish Botanists' Conference: a view from the then -President

*Micheline Sheehy Skeffington*

This was my first visit to the Scottish Botanists' Conference at the Royal Botanic Garden Edinburgh (RBGE) and it was a real eye-opener. There was such a buzz throughout the building all day. I had heard it was a cracker of a meeting, but was not prepared for the large throng of people attending; there were over 200 present! Botanical books were on offer from Summerfield Books as well as some brought to share by members. Posters were on botanical research throughout Scotland – and even some from the Irish meeting, held in Northern Ireland in September. There was also a display of basket weaving using willows and some very attractive botanical art. Co-hosting with the Botanical Society of Scotland (BSS) and RBGE made many more things possible and added to the excitement and interest.

It was very nice to meet some BSBI members whose names – or Zoom faces – were familiar, but whom I now met in person, as well as so many new people to me. One surprise was the compiler of the Cruciada crossword. I had asked at the Annual General Meeting in Galway in 2011 that the threatened botanical crossword, a favourite of mine, be continued in BSBI News, but later it was dropped. However, when I picked up a copy of the Scottish Newsletter, there was a crossword – by Cruciada! I was delighted and immediately picked up a few back issues. I had asked to say a few words at the start, as President, so I mentioned this as a bonus find for me. To my surprise afterwards the compiler approached me, delighted, and in short, it looks like it might be reinstated in BSBI News, while keeping a separate one for the Scottish Newsletter. Thank you Cruciada!

The talks were impressively varied, from work restoring Small Cow-wheat (*Melampyrum sylvaticum*) in Scotland to controlling the invasive Giant Hogweed (*Heracleum mantegazzianum*) using sheep, or a year in the life of a mountain botanist. You can find lots of them on the BSBI YouTube channel. As in Ireland, the Scots have come up with regional projects that currently focus *inter alia* on urban flora (even bus stops!), something BSS is putting a lot of work into, as well as the obvious highland plant recording and monitoring.

And there was also time in the day for workshops – I very much welcomed Chris Metherell's one on *Euphrasia* (also now available online), complete with many herbarium specimens to pore over. And the Herbarium staff very kindly gave me a short personal tour as I mis-timed attending the scheduled one. But there were lots more for beginners (e.g. ferns) to specialist topics (e.g. brambles).

And it was all rounded off with a welcome and entertaining meal for those who were staying/ living locally – something the Irish don't usually manage to do!

So if, like me, you've long had an intention to attend but haven't yet, why not come along in 2025 to experience the warmth, fun and knowledge of this action-packed day?

## The Scotland Officer's Year: 2024 *Matt Harding*

A record number of Scottish botanists welcomed in 2024 with a New Year Plant Hunt, with 181 surveys carried out across the country, generating over a thousand plant records. In Stirlingshire, 'my' vice-county, nine of us braved the conditions on the 2nd of January to hunt for plants in flower in Stirling, and were rewarded with a list of 42 species, with *Trifolium arvense* (Hare's-foot Clover) the highlight – a great way to start the botanical year!

The early months of the year are often a time of planning and preparation for the field season ahead, but it is surprising how much can still be found by those botanists who resist the urge to hibernate. Inspired by other Scottish recorders, I took the opportunity to start recording Crocuses, several species of which had no previous records on the BSBI's Distribution Database (DDb) for Stirlingshire. Another vice-county first, this time for West Perthshire, soon emerged in the form of *Erophila glabrescens* (Glabrous Whitlowgrass) growing on my front doorstep (literally!), and a more bizarre find was *Bupleurum subovatum* (False Thorow-wax), a rare birdseed alien and not something I expected to discover growing in a pavement crack in Grangemouth.

February saw the start of Identiplant, BSBI's online course created to help near beginners develop their botanical skills. As a new tutor for the course, I was a little apprehensive about what was in store, but soon discovered that the excellent tutor notes (cheat sheets!) gave plenty of guidance, and it was fantastic to watch my students develop their observational skills and grow in confidence over the season. Although Identiplant is a remote learning course, students are always keen to get out in the field with other botanists, and it was very gratifying to find them turning up at BSBI meetings throughout the year, including an Identiplant training day I ran with the help of TCV Scotland, our Identiplant Hub partner. Many of them converged on Dumyat in May for the *Silene viscaria* (Sticky Catchfly) survey organised by Lindsay Mackinlay – a fantastic day counting plants together in the sunshine, made even better by the discovery that the population of this nationally rare plant had increased massively since 2013. In 2024 we were able to support 39 Identiplant students across Scotland, but although we more than doubled our tutor pool from 2023 we still had to turn away 27 applicants. You don't have to be an expert botanist to become an Identiplant tutor, and it is well supported and very rewarding – why not give it a go next year?

In March and April the botanical year really starts to gather pace, and I celebrated spring with a visit to the River Almond in Mid Perthshire to see the gorgeous *Gagea lutea* (Yellow Star-of-Bethlehem), a plant I had hunted for unsuccessfully at historic sites for several years. Another early flowerer worth celebrating is *Saxifraga oppositifolia* (Purple Saxifrage), and its bright pink flowers stood out beautifully from the still-brown vegetation on Ben More on my spring pilgrimage. April saw the opening up of Members' Access to the DDb, with all BSBI members now able to

*Gagea lutea* (Yellow Star-of-Bethlehem) *Saxifraga oppositifolia* (Purple Saxifrage)

request access to this incredible resource. If you are new to the DDb, or want to learn how to get the most out of it, then visit the BSBI Documentation website, launched in 2024 to bring advice on using our data, the DDb, the new BSBI Recording App and MapMate together in one handy place.

April also saw the launch of the Eco-museum of Scottish Mining Landscapes project, a Heritage Lottery funded collaboration with the University of Stirling, Scottish Geology Trust, the National Mining Museum of Scotland and others. This project aimed to engage ex-mining communities across central Scotland with the ecology, geology and history of their mining landscapes. Over the course of the year over 200 people, mostly non-botanists but with a keen interest in their local area and the wildlife it supports, attended guided walks and talks I gave, learning how to interpret these sites botanically and understand the value of brownfield sites for biodiversity. Being able to share the link between the mighty *Calamites* swamps of the Carboniferous, 330 million years ago, that formed the coal deposits their communities mined and which are still visible as fossils on the slag heaps, and the *Equisetum* horsetails growing there today, was a wonderful eye-opening moment. The project also had a nice botanical payoff, with five vice-county recorders joining me to survey the sites, generating over 1,000 plant records including *Descurainia sophia* (Flixweed), *Botrychium lunaria* (Moonwort), *Hipopitys monotropa* (Yellow Bird's-nest) and some weird and wonderful aliens.

Inspired by the superb work of the West Central Scotland Botany Network and other local groups, May saw the launch of the Stirlingshire Botany Group, bringing

*Lysimachia thyrsiflora* (Tufted Loosestrife)at the Kelpies

together botanists in Stirlingshire and West Perthshire to record and enjoy our flora. We ran ten field meetings across the summer, mostly evening excursions: visiting local specialities such as *Lysimachia thyrsiflora* (Tufted Loosestrife) and *Carex magellanica* (Tall Bog-sedge), counting orchid populations, and surveying unrecorded sites (my favourite bit), discovering local rarities such as *Scleranthus annuus* (Annual Knawel) and *Ornithopus perpusillus* (Bird's-foot). It was fantastic to see so many young botanists joining these events, and the age range of our group spanned over 60 years – a terrific opportunity for both learning and passing on of botanical knowledge.

A great programme of BSBI field meetings was held across Scotland in 2024, my only complaint being that I wasn't able to attend them all! My first 'proper' field meeting of the year was the Banffshire recording weekend run by vice-county recorder Flora Donald – a fantastic two days mixing recording along the delightful coastline with hunts for Scottish HectAd Rare Plant Project (SHARPP) target species – plants of conservation concern not recorded in a 10 $km^2$ since before 2000. My group managed to re-find one target, *Goodyera repens* (Creeping Lady's-tresses), but alas no sign of our other species. My standout from the weekend was *Mertensia maritima* (Oysterplant) growing on a shingle beach – what a plant!

Later that month, I convinced my family that a BSBI field meeting to Tiree could double as a camping holiday, so off we went to experience the incredible beaches and botany that Tiree has to offer! In between rock pooling, kite flying and sandcastling, I managed to squeeze in some botanising with organiser Lynne Farrell and her group, with *Baldellia ranunculoides* (Lesser Water-plantain), *Pilularia globulifera* (Pillwort) and *Juncus balticus* (Baltic Rush) being the highlights. I also had a side mission to gather pondweed samples for a genetic study at RBGE run by Connie Simon Nutbrown, and after my son's bedtime managed to sneak out and collect some lovely plants including *Potamogeton rutilus* (Shetland Pondweed) and *Stuckenia filiformis* (Slender-leaved Pondweed).

In July the BSBI field meetings come thick and fast! This year two of them involved the visit of skilled specialists: Tim Rich led the Glen Etive Hawkweed Hunt, a mission to find the enigmatic *Hieracium basicrinum* (Fionn Ghleann Hawkweed), last seen by John Raven in 1953, and Mark Lynes provided a two-day training meeting looking at *Alchemilla* in Glen Shee and the remote Fealar Estate,

ably supported by Martin Robinson and Les Tucker. The Hawkweed hunt drew botanists from across Britain, and it was Jamie Warren who made the remarkable rediscovery of this Scottish endemic, having become separated from the group and deciding to investigate the 'wrong' side of the mountain! The *Alchemilla* weekend was a tour-de-force, with attendees treated to seven species including *A. glomerulans* (Clustered Lady's-mantle), *A. wichurae* (Rock Lady's-mantle), and the recently described *A. sciura* (Cairnwell Lady's-mantle). Botanising this area of the Cairngorms is a joy, and by dint of camping high up in Glen Shee my colleague James Harding-Morris and I managed to pay homage to special plants such as *Astragalus alpinus* (Alpine Milk-vetch), *Veronica alpina* (Alpine Speedwell), *Carex rupestris* (Rock Sedge) and the recently discovered *Botrychium nordicum* (Nordic Moonwort), all before breakfast!

Mark Lynes examining *Alchemilla sciura*, Glen Shee

Back in Stirlingshire, I was delighted to welcome Angus Hannah, vice-county recorder for the Clyde Islands and BSBI's Scottish Brambles referee, to help update the *Rubus* (Bramble) record for the vice-county. Brambles have not been properly examined here since the 1980s, when George Ballantyne travelled around the vice-county batologising, and it was wonderful to have Angus visit and re-find so many of these records. Angus is working on a handbook of Scottish Brambles, and I and many others he has generously shared his expertise with look forward to its imminent publication.

I must also mention a remarkable, and probably never-to-be-repeated, day

SHARPP recording in my home hectad in West Perthshire with James Harding-Morris, where we re-found all five of our target species, including *Carex limosa* (Bog-sedge) and *C. diandra* (Lesser Tussock-sedge). The SHARPP project, started in 2021 by Jim McIntosh and now in its fourth year, has been a great initiative to focus recording effort on the most significant recent gaps in our knowledge of Scottish plant populations. A preliminary analysis of data in the DDb shows that 246 hectad re-finds were made for species of national and local conservation concern from 35 Scottish vice-counties between 2021-2023. Although not all these will be as a direct result of SHARPP surveys, the project has been hugely successful in throwing a spotlight on these recording gaps. Anyone can take part, using this SHARPP DDb search (remembering to change the vice-county to the one you want to record in).

SHARPP recording with James Harding-Morris

The start of August saw Lyn Jones and I hosting a BSBI field meeting in the Campsies, exploring an unrecorded area of limestone and chasing down records of local specialities such as *Sedum villosum* (Hairy Stonecrop) and *Cryptogramma crispa* (Parsley Fern). However, the highlight of the day was probably a population of *Rorippa islandica* (Northern Yellow-cress) discovered in a flowerbed – a vice-county first. BSBI events are usually organised by vice-county recorders, who do a fantastic job showcasing their patch and bringing in other recorders to help tackle remote or challenging areas and search for old records. However, anyone can organise a meeting, and many vice-county recorders would be delighted to have help putting one on! Myself and our friendly Scottish Field Meetings Secretary Beccy Middleton are also on hand to help guide you through the process, if you would like to contribute a meeting in the future.

Later that month, I travelled up to Inverness to tutor on Faith Anstey's excellent 'Identifying Composite Flowers' workshop – a great introduction to a tricky group of plants, with an impressive 19 attendees, many from the Inverness Botany Group. In 2024 the Scottish Outreach Committee put together a fantastic programme of training workshops, held across Scotland, including two on identifying wildflower families, an introduction to grass identification, an introduction to sedges and rushes, and ferns for complete and utter beginners! These workshops provide high quality training at an incredibly reasonable price, and are an amazing advertisement for the BSBI and its work. My thanks go to Faith, Aileen Meek, Michael Philip and Chris Miles for leading workshops in 2024, and to all the tutors who supported them. Tutoring on a workshop is a lot of fun (with none of the responsibility that leading the event entails!), and I can strongly recommend it. If you fancy giving it a go, please let Aileen Meek know.

As the field season winds down, many botanists take the opportunity to write up their field notes and send data into the DDb, usually via the vice-county recorder network. So far, nearly 250,000 records have been added for Scotland in 2024, with an impressive seven vice-counties submitting over 10,000 records, and a further eight submitting over 5,000 records – an amazing effort by Scottish recorders! I was fortunate enough to be able to record in 18 Scottish vice-counties this year, taking me a little closer to my personal goal of recording in all 41 whilst as Scotland Officer: 13 still to go!

The launch of the BSBI Recording App opened up a new pathway for data entry to the DDb this year, either using it as an app on your mobile device in the field, or as a data entry platform on your computer. There were nearly 23,000 records from 35 Scottish vice-counties submitted via the Recording App in 2024, a great start. So far, I have found it most useful for making casual records of plants that catch the eye whilst doing other things, and the ease of editing my records in the DDb's Recording App workspace means I can quickly record the taxon and grid reference in the field, before adding in more details later on. Another data innovation this year has been direct upload to the DDb, where vice-county recorders are able to add tabular data in a spreadsheet straight to the database. BSBI are continuing to support MapMate as a route for passing data to the DDb, but with the long-term sustainability of that platform now in doubt, we are working to develop and improve these alternative data pathways for members and recorders.

Another source of plant data are publicly available recording apps such as iRecord and iNaturalist. Although the data quality from these apps can be variable, verification is often possible as the records can include photos, and they are a great platform for new and casual botanists to make a contribution to recording our flora. BSBI are looking for botanists to act as iRecord verifiers, volunteers to check and verify these plant records in the iRecord app. I enrolled as verifier for Stirlingshire this autumn, and have discovered numerous important plant records

for the vice-county lurking amongst the data! iRecord verifiers are often also vice-county recorders, but any enthusiastic, competent botanist can do it, and recruiting other botanists to support the vice-county recorder in this way is a great idea. At present we have around half of all Scottish vice-counties with an assigned iRecord verifier, leaving plenty of gaps to fill.

Putting this data to use, to benefit plant conservation in Scotland, is an important next step. *Plant Atlas 2020* is a hugely important resource, freely available to the public, and its plant population trend analyses have been crucial in informing the upcoming revision of the Great Britain Red List for Vascular Plants. A soon-to-be published report by BSBI on Scotland's changing flora, commissioned by NatureScot, examines the key findings and drivers of change in Scotland. We have been working on a data gap analysis of Scottish Sites of Special Scientific Interest, to help identify where to focus future recording effort to benefit some of our most important plant populations. BSBI has also partnered with NatureScot to begin developing the botanical heatmapping initiative in Scotland, a tool that uses botanical data to help identify appropriate areas for tree planting, development and other land management change.

The Scottish Botanists' Conference in November saw a record 220 attendees converge on the Royal Botanic Garden Edinburgh, and the energised atmosphere of the meeting was genuinely inspirational. We were treated to a wide range of talks, including using conservation horticulture to help *Melampyrum sylvaticum* (Small Cow-wheat) and the innovative use of sheep as a biological control for *Heracleum mantegazzianum* (Giant Hogweed), alongside eight training workshops on plant identification, data collection and even botanical photography, and a great display of posters and exhibits. A huge thank you to everyone who contributed to this terrific event, and if you haven't been yet, do come along next year!

To bring my 2024 as BSBI Scotland Officer to a close, I want to thank the vice-county recorder network, who are responsible for so much of the recording, conservation and engagement work that goes on across Scotland. This year we welcomed two new vice-county recorders to the group: Jan Davidson in Kirkcudbrightshire and Lyn Jones in Fife & Kinross, and we are actively looking to recruit more recorders in a number of vice-counties, including the Clyde Islands and Kintyre. As the volume of plant data and number of data pathways we handle continues to increase, I believe that developing teams of recorders for each vice-county can be a great way to spread the load and bring on board a range of skills and experience to help support local botanical activities. If you would like to find out more, or want to recruit assistants for your vice-county, then let me know.

Happy botanising in 2025!

## New Site for *Carex salina* (Saltmarsh Sedge) in Westerness v.c.97

*Lewis Donaghy*

On the 31st August 2024, I was on the west coast of Scotland close to the village of Arisaig, walking back to my car after a night spent camped by a bothy. I was actually on my way to look for another very rare sedge *Carex buxbaumii* (Club Sedge) a species I had never seen before. I wasn't planning on doing any botanising on the way back to my car; however, a few small patches of saltmarsh caught my eye and required investigation. In one of these patches I spotted a colony of sedges which looked distinctive. Growing at the edge of the saltmarsh facing the sea was a small population (6 m x 3 m) of *Carex salina* (Saltmarsh Sedge).

Figure 1. *Carex salina* habitat looking inland. Plants in foreground *L. Donaghy*

*Carex salina* is a Nationally Rare species also classified as Vulnerable on the UK Red Data List (BSBI, 2021; JNCC, 2023). In Britain it is found only on the west coast of Scotland, in just five 10 km squares. It was found new to Britain in 2004 at the head

of Loch Duich, Morvich (Wester Ross), so it is one of the more recent additions to the British flora. It rarely flowers and if it does it is usually early in the year. This combined with its vegetative character not being particularly distinctive means that it is easy to overlook in saltmarsh vegetation, which may explain its recent discovery in Britain. It is believed to be a stabilised hybrid from parents *Carex. paleacea* and *Carex subspathacea*, neither of which has been recorded in Britain. *C. salina* is native to northern and north-eastern Europe, and subarctic North America to eastern Canada. It is a rhizomatous perennial sedge of the mid-lower region of saltmarshes, growing in silt along creeks or in the saltmarsh sward in situations where it is often inundated by high tides (Porter, 2023).

Figure 2. Plants *in situ* *L. Donaghy*

The main reason I took an interest in the sedges at this location was the fact that they were growing in a saltmarsh with brown seaweeds/algae present and where they would obviously be inundated by high tides. This environment would be unsuitable for other *Carices* recorded in Britain and Ireland. Other features in the field which spiked my curiosity were the overall stiff habit and the lack of flowering spikes. I had seen the species for the first time that year at three of its sites, which also helped as I had my eye in for it. However, a species like this can be quite difficult to identify and I wasn't fully confident so I decided to take some samples and send them to one of the BSBI *Carex* referees, Mike Porter. Mike kindly had a look at my specimens and confirmed them as *C. salina*. He then sent them on to Mary Dean, a national expert on the species, for a second opinion. She too confirmed them as *C. salina*.

This new site for *C. salina* is a small area of saltmarsh with a small burn running through part of it. There is nothing particularly distinctive about it, and other nearby areas which looked similar did not have the species. However, one feature is that it is in quite a sheltered area and well protected from rough seas. The other sites where I have seen the species are similarly sheltered. I lacked time to thoroughly search the area around the site, so there could well be more populations of the species nearby.

To summarise, the key to searching for this species is habitat - saltmarsh, particularly the lower-mid sections where plants would be inundated at high tide. It can grow directly out of the saltmarsh but also likes crevices and holes within it. It is a very shy flowerer so one mainly has to rely on looking for vegetative growth, which is usually stiff in habit. Other identifying features, some of which may need the use of a microscope, are an acute ligule, leaves on vegetative shoots up to 30 cm x 2-3 mm and stomata on both leaf surfaces. The species has so far only been found on the west coast of Scotland so it is most likely to be seen in this region.

*Carex salina* is certainly a difficult species to spot, I very nearly walked past it! It is also undoubtedly rare, but I do believe there may be more populations to be found on our coasts and it is a species well worth getting familiarized with.

## References


BSBI, 2021. *The Vascular Plant Red Data List for Great Britain, updated 2018*. [Online]. Available at: https://bsbipublicity.blogspot.com/2021/02/updated-vascular-plant-red-list-for.html

JNCC, 2023. *Consolidated list of Red listed species*. [Online]. Available at: https://hub.jncc.gov.uk/assets/478f7160-967b-4366-acdf-8941fd33850b

Porter, M.S. 2023. *Carex salina* Saltmarsh Sedge, in Stroh, P.A., Walker, J., Humphrey, T.A., Pescott, O.L. & Burkmar, R.J. (eds.) *Plant Atlas 2020.* Vol 2. . Available at: https://plantatlas2020.org/atlas/2cd4p9h.r00

## Scottish Outreach 2024 *Aileen Meek*

Fourteen Outreach Events were held in ten vice-counties in 2024. Each event helps to support one of the BSBI's Mission Statements: *"Training the next generation of botanists through courses, field meetings, grants and educational materials".*

At least 14 tutors supported over 150 students, guiding, encouraging and enthusing during sessions, held in and outdoors. Students spent time scrutinising entire plants, using a hand lens to search for the tiny but important often diagnostic features of different species and everything in-between! These wonderful tutors are crucial to the success of the Workshops, not to mention that we couldn't hold these events without them!

Figure 1. Plant ID workshop at Aberdeen University *A. Salway*

The events comprised eight Training Workshops, five Training Field Meetings and one Wildflower Walk. Workshop training subjects were: 'Identifying Grasses' and 'Ferns for Complete & Utter Beginners' both led by Michael Philip, 'Sedges and Rushes' led by Chris Miles, 'Identifying Composites' led by Faith Anstey, 'Plant Identification for Habitat Surveys' led by Lindsay Mackinlay and 'Plant Families' and 'Beginners' Plant Identification' led by Aileen Meek. A 'Training for Trainers Workshop' was designed and led by Faith Anstey at RBGE. Training Field Meetings

comprised tackling 'Graminoids' (the now famous yearly Ben Lawers meeting) led by Faith Anstey & Dan Watson; 'Plant Families' led by Faith Anstey; three 'General Beginners' meetings, two led by Matt Harding and one by Sandy Edwards, and a 'Wildflower Walk' led by Aileen Meek. All were well supported and much enjoyed by students and tutors alike.

To say that these events were 'led by' is understating the effort that a leader offers in providing such an opportunity for learning and teaching! Each leader finds a suitable venue for their event, books if necessary (it is necessary for Workshops which take place partly indoors and partly 'in the field'), makes sure that a description is submitted for the Events calendar to publicise the event and make it bookable, finds local tutors to support them, informs participants (once booked) and tutors of all arrangements and requirements to ensure a safe, successful and thoroughly worthwhile 'learning about botany' experience. Materials are also gathered and brought to the meetings and tutors also help with this and are a huge resource in themselves. This is also an excellent opportunity for me to sincerely thank all leaders and tutors for their time and effort generously given; they are an amazing source of skills, knowledge and experience which they freely share.

The workshops are designed specifically for people who are interested in plants and want to learn but on a more general Field Meeting might feel intimidated by lots of experts and lots of plants that they cannot put a name to. Beginners who need to find a way to benefit from the structured and supportive environment, with an introduction to the subject, and plenty of time to spend on building a foundation of knowledge and skills, a toolkit to progress with. The collaborative nature of working in small groups is reassuring; we find that everyone has questions, usually many, including tutors! Problem solving, sharing questions, answers, being curious and having fun are mandatory. Feedback from participants, tutors and leaders taking part in Workshops and Training Meetings in Scotland is important and will help shape our future actions.

Faith Anstey's Guide Booklets form the basis for many of the Workshops, providing a strategy for learning and a starting point to begin to identify common members of a group of subjects such as 'Wildflower Families', 'Grasses' or' Composites'. They proved extremely popular with many copies being snapped up at the Scottish Botanists' Conference on the 'Outreach' display table.


So far, five Training Workshops or Field Meetings are bookable on the

Field Meetings and Events page in Scotland for 2025. https://bsbi.org/field-meetings-and-indoor-events. Almost certainly as in previous years, this list will grow, and more enthusiastic botanists will flourish in Scotland due to the nurturing influence of keen practising botanists at every level.

Currently we have a committee of eight BSBI members. We have two meetings per year of the Outreach Committee, held in February and November via Zoom. We definitely have room for more keen members! But even if you don't have the time to commit that far, we invite suggestions for training topics and locations, and we really hope that you might volunteer to lead or tutor at an Outreach meeting near you. It's fun and hugely rewarding to engage with new botanists: inspiring, teaching, encouraging and progressing.

Email me aileenammeek@gmail.com with suggestions or questions, offers of help or feedback.

## Sticky Catchfly on Dumyat: A Local Conservation Success Story?

***Lindsay Mackinlay***

*Silene viscaria* (formerly *Lychnis viscaria*) (Sticky Catchfly) is now one of Scotland's (and the UK's) rarest flowering plants. In its pomp, its often tall, flowering stems bring regular splashes of pink to rocky outcrops, cliffs and steep dry slopes, often between mid-May and end of June each year. At first sight, it can be confused with *Silene dioica* (Red campion), also a member of the *Caryophyllaceae* and also a frequently tufted, perennial evergreen, but at closer inspection, it is easily identifiable by its sticky stems and clumps of narrow, often shiny-looking leaves.

This Nationally Rare species is classified as 'Near Threatened' by the International Union for Conservation of Nature (IUCN), and native populations are now restricted to only 18 locations across the UK (Source: BSBI Atlas 2020), with the majority of wild populations in Scotland supporting less than 1000 flowering stems, and often much less than this number (Sexton, R. 2016). Several of these populations are found within the central, eastern part of Scotland. Its most notable sites include Holyrood Park (where it was first recorded some 400 years ago (Lusby, P. & Wright, J. 1996) and Castle Rock in Edinburgh, mainly due to the high-profile work, assisted by the Royal Botanic Gardens Edinburgh (RBGE), to

Figure 1. Flowers in May 2024

reinforce its population in the 1990s from four plants to the many you can see today. For visitors to the city, it can be easily spotted as you walk or cycle along the road on the lower parts of Samson's Ribs beside Arthur's Seat.

One of its last strongholds can be found in the Hillfoots (Ochil Hills), at Dumyat, where it mainly grows between 150 m and 340 m on the south-facing cliffs and rocky outcrops that dominate Blairlogie and the Forth plain below. These cliffs sit

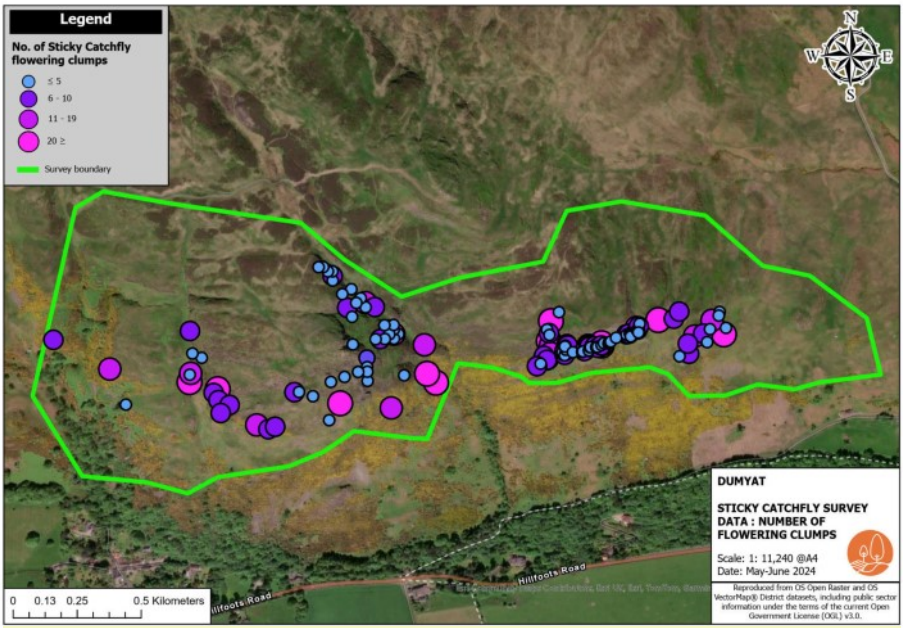



Figure 2. Overview map of Stick Catchfly survey May -June 2024

within the Sheriffmuir Road to Menstrie Burn Geological Conservation Review Site, noted for its volcanic and volcaniclastic rocks. This makes for ideal conditions for Sticky Catchfly plants, which seem to prefer mildly acidic to moderately basic soils, often being found around basalt areas (Source: BSBI Atlas 2020).

One of the surprises of the Dumyat outcrops, however, are that they are actually relatively botanically limited, except for a few spots, suggestive of more acidic than basic conditions, and the Dumyat cliffs are certainly not the 'Ben Lawers' of the central belt. At Dumyat, typical species that grow nearby colonies of Sticky Catchfly include Polypody (*Polypodium*) ferns, *Sedum* spp. (Stonecrops), *Rumex acetosella* (Sheep's Sorrel), *Teucrium scorodonia* (Wood Sage) as well as very occasional patches of *Asplenium adiantum-nigrum* (Black Spleenwort), *Helictochloa pratensis* (Meadow Oat-grass), *Thymus drucei* (Wild Thyme),

*Umbilicus ruprestris* (Pennywort) and rare *Helianthemum nummularium* (Common Rock-rose). However, both *Cytisus scoparius* (Broom) and *Ulex europaeus* (Gorse) are often commonly growing nearby in large, dense patches and form a threat to its future. Sticky Catchfly is very attractive to herbivores, with accessible flowering stems a favourite for both sheep and roe deer on the Dumyat slopes.

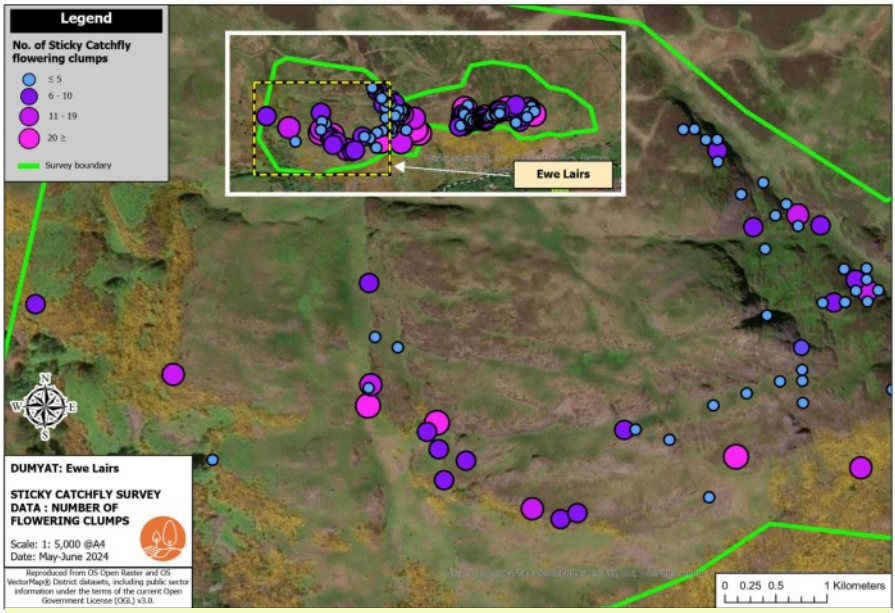



Figure 3. Ewe Lairs Sticky Catchfly map May -June 2024

The Dumyat populations of Sticky Catchfly have been the subject of much attention by 'Forth Naturalists' over the years, with a good summary of the previous surveys described in Bence & Blackmore (2016). They along with fellow University of Stirling students, carried out the last major survey of Sticky Catchfly on 10th-20th June 2013, which included detailed counts across much of the Dumyat cliffs using telescopes. This estimated 3516 flowering stems (*aka* spikes) on the Dumyat crags. Where the plants could be reached, it was established that there were approximately three flower spikes per clump (therefore about 1172 flowering clumps) and, for each flowering clump recorded, there were often between two and three unrecorded non-flowering plants, potentially making an overall population of 4688 clumps and plants. At this point, it is important to note that because of the nature of how Sticky Catchfly grows, past recording has mixed the terms 'clump' (a collection of plants) with 'plants' (possibly equivalent to a clump depending on the interpretation of the surveyor). Therefore, it is suggested that the most reliable monitoring method going forward is to count the number of flowering stems (*aka* spikes) to avoid any confusion.

Most of the key areas for the species within the Hillfoots lie within the Future Forest Company's (FFC) land at Dumyat. The Future Forest Company is a new private company, trying to reverse both the climate and nature crises on land using blended public and private finance. FFC took on management of the southern Dumyat crags and slopes, along with areas around Blairlogie and west of Menstrie Glen, in June 2021 and have since implemented a native woodland and nature restoration programme on the site. As part of their management, all sheep were taken off the Dumyat crags in 2021 whilst a significant reduction in roe deer numbers has taken place to support the native woodland planting. For information, accurate thermal image drone surveys within the 'Sticky Catchfly zone' and immediately adjacent areas counted 30 roe deer in November 2022 and 19 in October 2023.

On 25th May 2024, following a careful risk assessment, 16 volunteer surveyors scrambled around the crags south of Dumyat summit to count the number of flowering stems, flowering clumps and plants and, where possible, non-flowering plants. Lindsay Mackinlay, FFC, returned on 31st May and 5th June 2024 to survey areas not covered on the day.

The surveyors split into four groups and counted all the Sticky Catchfly they could find across their designated areas of search, which were based on Stuart Bence's previous mapping and invaluable data from 2013. This involved scrambling up to the base of crags to count plants as well as using binoculars where the plants were on inaccessible crags. The results are set out in the attached maps.

Many of the volunteer surveyors are currently enrolled on the Identiplant distance learning plant identification course in Scotland, run in partnership with the Botanical Society of Britain and Ireland (BSBI) and TCV Scotland. They were also joined by BSBI's own Scottish Officer, Matt Harding, National Trust for Scotland staff from Ben Lawers, Butterfly Conservation and University of Edinburgh's ranger (UoE own part of the upper ground at Dumyat, at Drumbrae).

The survey counted an estimated 2000 flowering clumps (group of plants) and 9687 flowering stems of Sticky Catchfly. This is viewed as a minimum count, as many plants and flowers were also spotted in highly inaccessible crags below the main survey area, and many plants were hidden from view in some places, whilst non-flowering plants were difficult to detect from a distance. Compared to the 2013 survey, the 2024 survey represents between a doubling and a trebling of flowering stems within the population and probably makes the Dumyat site home to the biggest population of this species in the UK. Interestingly, there was evidence of many flowering plants being present away from the crags and in adjacent tall grassland for the first time.

The results of the survey were beyond expectations and demonstrate that nature can respond positively when given some breathing space; on this occasion, a

significant break from grazing pressure (it was estimated that only 10% of the accessible plants showed signs of browsing). The large increase in flowering stems does not necessarily imply an increase in the overall population of plants from 2013, but rather, that more plants were able to flower in 2024 due to a reduction in grazing pressure. This should also result in much more seed fall in the area and hopefully an upward trend in the population.

Figure 5. Flowering plants at base of crag due to reduction in grazing pressure

Whilst many of the Sticky Catchfly colonies at Dumyat are on rocky outcrops away from the mouths of roe deer, they remain locally vulnerable to broom/gorse spread on these outcrops, both through shading and also indirectly, through increased risk of wildfire as both scrub species are prone to extensive fire events. Any fire on the front of Dumyat will be impossible to control due to the steep nature of the terrain and would likely easily spread along it. However, the terraced nature of the outcrops may be a saving grace in places as fire could bypass some colonies. The steep terrain also makes anything other than very localised scrub control practically impossible. Whilst roe deer remain and the possibility of a return of some sheep to the slopes is possible, experience shows that herbivores are adept at finding the most tasty plants, even when few and far between, over the desired target (scrub in this case).

Therefore, the future for the Sticky Catchfly population at Dumyat is looking good in the short term (0-10 years), but, like many species, there are uncertainties about what will happen in the medium to longer term. Climate change is bringing its own unpredictable pressures from year to year. Scrub will likely spread into current grassy areas but it is not expected to take over all the rocky outcrops, so it is considered there will always be some space for the species on the site.

FFC are committed to continued annual and biennial monitoring of the species, via sub-sampling. Where possible, very localised scrub control will take place where it is felt to protect key colonies and also to 'nip in the bud' new saplings in an area. However, this is not seen as a sustainable management tool. New colonies will be planted as per the existing work of Roy Sexton, at appropriate locations on the lower Dumyat slopes by Blairlogie, in order to assist the expansion of the species and create more colonies, and thus refuges. This should aid the likely chance of survival in light of potential future threats.

## Acknowledgements

The survey work in 2024 would not have been possible without the help of a great many people, who scrambled across steep terrain and gave their time and expertise enthusiastically. However, special thanks go to Roy Sexton and Stuart Bence, whose work and local knowledge of Sticky Catchfly in the Hillfoots very much helped inform the survey in 2024.

Figure 5. The surveyors

## References

Bence, S and Blackmore, M.L. 2016. Plant Report 2016 Sticky Catchfly Silene viscaria. *Forth Naturalist and Historian* 39: 117-121.

Lusby, P. and Wright, J. 1996. *Scottish Wild Plants. Their History, Ecology and Conservation*. The Stationery Office Ltd. Edinburgh

Sexton, R. 2016. Plant Report 2016 (Part 2). How important are the Hillfoots' Populations of Sticky Catchfly (Silene viscaria) in a UK Context?' *Forth Naturalist and Historian* 39: 123-128.

Stroh, P.A. and Lusby, P.S. 2023. *Silene viscaria* (L.) Jess. in Stroh, P.A., Walker, J., Humphrey, T.A., Pescott, O.L. & Burkmar, R.J. (eds.) *Plant Atlas 2020*. Available at: https://plantatlas2020.org/atlas/2cd4p9h.7mm5vk [Accessed: 16/01/2025

*All photos and figures by the author*

## Glen Shee *Alchemilla* weekend: 20-21 July 2024

***Mark Lynes***

The Highlands of Scotland are exceptional when it comes to *Alchemilla* (Lady's-mantles). Nowhere else is it possible to spend a day in the field and all but guarantee encountering a relative abundance of *Alchemilla* species. With this relative smorgasbord there comes an additional bonus: the distinct possibility of finding a plant or plants which seemingly do not fit well with any currently described species. Working through herbarium material – as I did for the BSBI Alchemilla Handbook – you will frequently encounter such material. The problem is that much of it was collected 70 or 80 years ago, at least. In more recent times widespread collecting has very much gone out of fashion and with it much opportunity for new discoveries. Ticking a newly described species is seemingly now far more exciting. It was thus with considerable anticipation that 12 of us gathered in the ski centre car park at Glen Shee on the Saturday.

The usual suspects were quickly encountered, with a bewildering variety of flavours of *A. glabra* (Smooth Lady's-mantle). Plants with fine teeth, some with very broad teeth; glabrous petioles versus very hairy ones. Where to draw the line? *A. xanthochlora* (Intermediate Lady's-mantle) is another variable species that has in the past been mooted as a potential candidate for splitting. Again, we encountered a typical range of variation and found that this species is equally at home at higher altitudes, provoking some speculation that it may be being mis-recorded as *A. filicaulis* var. *filicaulis* (Slender Lady's-mantle) as a consequence. Of *A. filicaulis* itself, all encountered proved reliably representative of var. *vestita* (Hairy Lady's-mantle).

Glen Shee is probably one of the best places in the UK to see *A. glomerulans* (Clustered Lady's-mantle); it is certainly one of the easiest, and as such we found plenty for people to study. The relative abundance of both *A. glomerulans* and *A. glabra* meant that when we eventually encountered candidate *A. sciura* (Cairnwell Lady's-mantle) the differences between the three species – both subtle and otherwise – were more readily understood. In recent years *A. sciura* has become much harder to find and is seemingly becoming a somewhat ephemeral component of the roadside flora. Does the main population perhaps lie elsewhere, with seed carried in on vehicles and perhaps the boots of skiers? It really should be actively looked for elsewhere in the Highlands.

Figure 1. *Alchemilla sciura* (Cairnwell Lady's-mantle), Glen Shee, showing the contorted, sickly-looking leaves typical of this species, with essentially glabrous leaves, spiky (but not hunchbacked) leaf teeth and hair tufts standing out from the teeth tips

Day two, based at the Fealar estate, was planned specifically so that we could study *A. wichurae* (Rock Lady's-mantle) and the target was soon acquired. We were spoilt in having so many plants to study – many typical but not all – and all were much more confident with this one by the end of the day. Would that the same could be said of *A. glomerulans*? Growing alongside more typical material, we soon found a form which is being encountered increasingly frequently high in the hills, glabrous '*glomerulans'*. Whether such plants are simply a denuded form of *A. glomerulans*, the somewhat nebulous var. *glabrior*, or something else entirely is yet to be understood. What is clear is that such plants represent a potential bear trap for recorders, wary or otherwise. Confusion with – and mis-recording for – *A. glabra* is eminently possible and appears to have already occurred in at least one corrie.

Figure 2. A rather broad-toothed example of *A. wichurae* (Rock Lady's-mantle) from Fealar. The sharp leaf teeth, deep slits in the sinuses between the leaf lobes, typically glabrous leaves and thin, papery feel to the leaf are all indicative of this species.

*A. filicaulis* was far less frequent at Fealar than Glen Shee; however the range of variation was greater and there was soon debate as to where to draw the line. One of the ways *A. filicaulis* var. *vestita* seemingly responds to changing conditions is in its degree of hairiness – early and late season material is often far less hairy for example – and there is some evidence that var. *filicaulis* is being over-recorded in Scotland.

Figure 3. Glabrous *Alchemilla 'glomerulans'* (with *A. glabra*). In line with typical *A. glomerulans*, this plant has pale green leaves with large teeth, and a pleated look caused by concave leaf lobes. However, it is essentially glabrous, the whole plant largely lacking the covering of adpressed hairs so characteristic of typical *glomerulans.*

With the addition of *A. alpina* (Alpine Lady's-mantle) we recorded a total of eight recognised and at least one 'unrecognised' taxon. So, finally, a plea: look critically at that *A. glabra* with its overly hairy petioles; could it be glabrous '*glomerulans*'? The candidate *A. wichurae* which doesn't look quite right or the odd-looking thing which seemingly fits none of the usual suspects. Such things are out there – I am currently working on a further two potential new species from Scotland – so collect some and send it to me. It doesn't have to be much: removing a couple of leaves (with petioles attached) and an inflorescence or a single shoot carefully detached from the main rootstock will not harm the plant. That there are further undescribed *Alchemilla* taxa out there is not in doubt. Hopefully this weekend (and article) will act as a catalyst for people to boldly go where few botanists have gone before, and find them!

*All photos by the author*

## Wild Plants in Dundee Car Parks

*Brian Ballinger*

Car parks are everywhere in this era of the automobile and most of us use them regularly. They are not usually regarded as wildlife sites, and may perhaps be seen as arising from a botanical cross between pavements and roads. This study reports on ten Dundee car parks in 2021 and 2024 and compares them with previous data from small town car parks in Easter Ross.

Car parks present a challenging habitat for plants, as they are subject to management in the form of herbicides and cutting, as well as crushing, trampling and pollution by vehicles and feet.

**Method**

Two visits were made to ten car parks in Dundee city in 2021 and again in 2024. One visit was made in summer and one in winter on each occasion, four visits in all. I walked around the edge and round any central reservations, noting any plants growing on the hard surfaces or within one metre of the parking area. All vascular plants that were identifiable and had not been planted were recorded. Some immature plants could only be identified to genus level.

**Results**

Table 1. Winter and Summer species

| | Winter mean | Summer mean | Summer increase |
|---|---|---|---|
| 2021 mean species per site | 12.3 | 27.7 | 125% |
| 2024 mean species per site | 13.9 | 26.6 | 91% |

The Dundee car parks yielded an average of 12.3 species recorded in winter, rising to 27.7 in summer in 2021. In 2024 an average of 12.9 species per site were recorded in winter, rising to a mean of 26.6 in summer (Table 1). There was evidence of active management of most car parks.

A total of 121 species was recorded in all, 100 in 2021 and 91 in 2024. 25 of the 2021 species were not seen again in 2024 and in 2024 16 extra species were noted.

Taking both years together, the most common species were *Cerastium* (Mouse-ear) species, *Epilobium (*Willowherb) species, *Galium aparine* (Cleavers*), Poa annua* (Annual Meadow-grass) and *Rumex obtusifolius* (Broad-leaved Dock), which were found in all 10 car parks.

Table 2 Lists the commonest species recorded

| | |
|---|---|
| 10 sites | *Cerastium, Epilobium, Galium aparine, Poa annua, Rumex obtusifolius* |
| 9 sites | *Buddleja davidii, Rubus fruticosus, Senecio vulgaris, Stellaria media, Taraxacum, Dactylis glomerata, Jacobaea vulgaris, Trifolium repens* |
| 8 sites | *Hedera helix, Geum urbanum, Plantago major, Ranunculus repens, Urtica dioica* |

Only 11 neophyte (alien) species were recorded, 9% of the species total. The most common were *Buddleja davidii* (9 sites), *Acer pseudoplatanus* (7 sites), *Cotoneaste*r species (6 sites) and *Linaria purpurea* (4 sites).

**Commen**t

This study shows that some wild plants manage to survive in the challenging habitats of car parks.

I would conclude that there is some botanical interest to be found in car parks, although no rarities were recorded in this survey. The change between the two surveys no doubt reflects the disturbed nature of these car parks, and we do not know how many individual plants survived for these three years, if any.

The species list is not long, but the proportion of neophytes (aliens) is perhaps lower than might be expected in disturbed big city sites and was slightly lower than in my previous small-town survey in Easter Ross, where aliens represented 14% of the species (Ballinger 2022), though the numbers are too low to allow any definite conclusion.

In the Easter Ross study, there was an increase in counts of species from a mean of 14.5 per site in winter to 19.9 in summer, a rise of 37%. This may reflect different herbicide policies or other local factors. The flora of rural car parks was different, being more influenced by surrounding vegetation.

In conclusion, Dundee car parks cannot be regarded as botanical hotspots, but the presence of wild flowers can add a little colour to otherwise often drab locations and it is good if management is not too energetic.

**Reference**

Ballinger B. (2022*).* Are There Wild Plants on Car Parks*? BSS News* 18: 25-26

## Recovery of Small Cow-wheat

*Max Coleman*
*(Science Communicator, Scottish Plant Recovery project )*

Figure 1. Small Cow-wheat at the RBGE nursery Scott Arlow

Knowing the difference between *Melampyrum sylvaticum* (Small Cow-wheat) and *Melampyrum pratense* (Common Cow-wheat) is a potential trap for the unwary botanist. Having fallen into the trap myself, I can say from experience that this attractive, yellow-flowered hemiparasite is superficially very similar to Common Cow-wheat. Added to this, a lot of the published descriptions of the two species are rather confusing. However, the two are 'good' species with consistent, clear differences and hybrids are unknown. The eureka moment comes when you appreciate that the calyx, the green leafy part at the base of the flower, is the most reliable distinguishing character. This is handy as the calyx persists long after the flowers have withered.

The distinction between the two matters as Common Cow-wheat is, as the name suggests, quite common, while Small Cow-wheat is rare and possibly declining. The 2020 Plant Atlas has records of Small Cow-wheat in 22 hectads since the year 2000. All the surviving populations are in Scotland, apart from populations in Northern Ireland from a single hectad. Being an annual plant, that may not have a long-lived seed bank, Small Cow-wheat is vulnerable to changes that interrupt the annual cycle of flowering and seed production. For example, heavy grazing sustained over several years may not bother a perennial plant but could easily wipe out an annual.

As Small Cow-wheat has been lost from both England and Wales, and survives in relatively few places in Scotland, it seemed a good choice for the Scottish Plant

Recovery programme. The programme is being run by the Royal Botanic Garden Edinburgh (RBGE) with support from the Nature Restoration Fund. The three-year project is working to secure the future of ten threatened Scottish native plants.

One problem we have run into with the conservation of Small Cow-wheat is that there are still a lot of unknowns about its ecology and biology. On the plus side, we have a tried and tested method of cultivation. The Garden's conservation horticulturists sow seeds in pots with *Sorbus aucuparia* (Rowan) saplings and the hemiparasitic Small Cow-wheat grows vigorously on this host. In nature it seems that Cow-wheat has many potential hosts, and some may be better than others. *Picea abies* (Norway Spruce) is a host in Scandinavia, where this plant is doing well. There is circumstantial evidence that woody hosts are important, as Small Cow-wheat has been observed to come through drought periods unharmed, presumably because of the hosts' deep roots.

Figure 3. Fresh seed of small cow-wheat with the elaiosome still attached
*Max Coleman*

Another area of intrigue is how important Wood Ants (*Formica* species) are for the dispersal of Small Cow-wheat seeds. The seeds have a fatty structure, called an elaiosome, at one end and wood ants have been observed moving small cow-wheat seeds about. The elaiosome is the basis of a mutualism with ants that appears in all sorts of unrelated plants. It seems that natural selection has driven the repeated, independent evolution of the elaiosome. By acting as a food incentive for the ants the elaiosome turns them into vectors of seed dispersal. The trouble is that this ant behaviour has never been observed in Scotland and remaining populations of Small Cow-wheat are not even found near wood ants. Even more curiously, some recent fieldwork by the Scottish Plant Recovery team in Norway, to learn about Small Cow-wheat ecology and collect seed, found that *Formica polyctena,* a Wood Ant not present in Britain, was always associated with Small Cow-wheat.

We have been left rather unsure about what ecological role, if any, Wood Ants play for this plant in Britain. It is possible that the apparent mutualism seen in Norway is not functioning with British Wood Ants and that Small Cow-wheat is reliant on other means of dispersal. If this is true, and having the right ants results in much more effective seed dispersal, it might explain why Small Cow-wheat is doing much better in Norway.

Figure 4. The hoverfly *Meliscaeva cinctella* in Norway. *Max Coleman*

Pollination is another interaction between Small Cow-wheat and insects that is likely to be important for survival. Here, yet again, very little is known. The bright yellow, tubular flower has bilateral symmetry and, in many ways, exhibits characteristics seen in flowers adapted to insect pollination. But, as with the ants, no pollinators have been observed visiting Small Cow-wheat flowers in Scotland. This is despite observations made under ideal sunny, warm conditions. So it was with great excitement that we observed the hoverfly *Meliscaeva cinctella* visiting the flowers in Norway. The hoverflies appeared to be feeding on pollen, and by flying from flower to flower in search of food they acted as effective pollinators.

The relatively long tongued *Bombus pascuorum* (Common Carder bee) is known to pollinate Common Cow-wheat. It can reach the nectar at the bottom of the floral tube. However, bumblebees with shorter tongues will resort to nectar robbing and will bite holes at the base of the flower to access nectar. In this way they no longer provide pollination services, so the mutualism is broken. So, it was interesting to see *Bombus monticola* (Blaeberry Bumblebees) engaged in nectar robbing flowers of Common Cow-wheat during our fieldtrip in Norway. Whether they were primary robbers, making holes, or secondary robbers taking advantage of pre-existing holes was not clear. This bumblebee is also found in Britain in the upland habitats favoured by Small Cow-wheat. I wonder if the shorter floral tube of small cow-wheat (8-10 mm as opposed to 11-20 mm [Tennant, 2008]) would mean that Blaeberry Bumblebees could access the nectar without having to engage in robbery. Due to their overlapping ecological preferences, the two species must coexist. Perhaps the Blaeberry Bumblebee is another potential pollinator of Small Cow-wheat.

The two Cow-wheat species (Common and Small) exhibit different habitat preferences and are only rarely found growing together. Common Cow-wheat favours acidic soils and is found growing with ericaceous plants like *Calluna vulgaris* (Heather) and *Vaccinium myrtillus* (Blaeberry). Small Cow-wheat is a plant of soils that benefit from some nutrient enrichment due to flushing. The soils are still relatively nutrient poor, just not as poor as those where Common Cow-wheat grows. Consequently, the vegetation community that Small Cow-wheat is a part of is richer in both grasses and herbs while ericaceous shrubs are absent or play a minor role. Small Cow-wheat is also often found near water and seems to require more humid conditions than Common Cow-wheat.

Figure 5. Yellow tubular flowers with bilateral symmetry - classic for insect pollination

*Francis Principe-Gillespie*

The relative rarity of Small Cow-wheat means that few people have attempted to define what its typical habitat looks like. For us this means that working out where we should plant seeds to assist recovery becomes much harder. Adding to existing populations is an obvious safe bet. However, we don't necessarily have permission from landowners to do this. In some instances, landowners may even wish to preserve the 'natural' genetic makeup of a population and actively decide against any such augmentation with genetic stock from other places. Our own studies into the genetics of Small Cow-wheat have shown that isolated populations are genetically distinct, meaning that reproduction and gene flow is not happening over long distances and populations have diverged from each other. This genetic isolation can lead to problems that arise from insufficient diversity, and this could be contributing to decline and limiting adaptability to change, making populations even more vulnerable.

The general approach of the Scottish Plant Recovery project is to assemble genetically diverse mixes of plants drawn from Scottish, and in some cases European, populations. Decisions are guided by assessing diversity levels and the likelihood of genetic problems existing. Augmentation with genetically diverse material is sometimes described as 'genetic rescue' and in some cases it may be the only way to give threatened plants a secure future. The Small Cow-wheat in

cultivation at RBGE that originated from several Scottish populations has undergone a lot of mingling over the years and this vigorous stock is now nicknamed the 'super mix'. It was estimated that in the 2024 harvest an incredible 50,000 seeds were stored in preparation for sowing. The seeds from the next generation of plants, grown at the Garden in 2025, will then be used to establish new populations at sites matched for habitat suitability. There are also stocks of seed from European sites that are being maintained separately. Some of the translocations will mix Scottish and European seeds.

The unknowns outlined in this article mean that some aspects of the recovery work will necessarily have to take a more experimental approach. A good example of this will be testing the possible role of our native wood ants by introducing Small Cow-wheat to sites with ants. *Formica lugubris* (Hairy Wood Ant) seems most promising as this species is the closest ecological match in terms of habitat preferences. This work is being carried out in collaboration with staff at the James Hutton Institute who are working on conservation of wood ants. Loch Arkaig offers an opportunity to test the role wood ants might play. The Woodland Trust land at Loch Arkaig has Hairy Wood Ant as well as apparently suitable habitat for Small Cow-wheat and several other plants in the Scottish Plant Recovery programme.

Collaboration is key to learning about the ten plant species in our plant recovery programme. Partners at the Millennium Seed Bank at Wakehurst Place are testing Small Cow-wheat seed for viability and potential for storage in the seed bank. Discoveries from this work will help us to design the best approach to translocation. Some small-scale translocation trials conducted at RBGE have already ruled out the idea of using plants attached to hosts in favour of direct sowing near wild hosts. As well as being simpler and quicker, this approach reduces the biosecurity risks associated with the movement of compost. Biosecurity underpins all aspects of the work as without it there is a danger we could do more harm than good.

The science behind conservation translocations and the associated specialist horticultural skills are still developing. The movement of plants in this way for conservation purposes will always be viewed as radical by some. But, guided by the science, there are enormous opportunities for us to learn about some of our most threatened plants and begin to assist in their recovery.

**References:**

Tennant, D.J. 2008. Small Cow-wheat *Melampyrum sylvaticum* L.; Scrophulariaceae in England. *Watsonia* 27: 23-36.

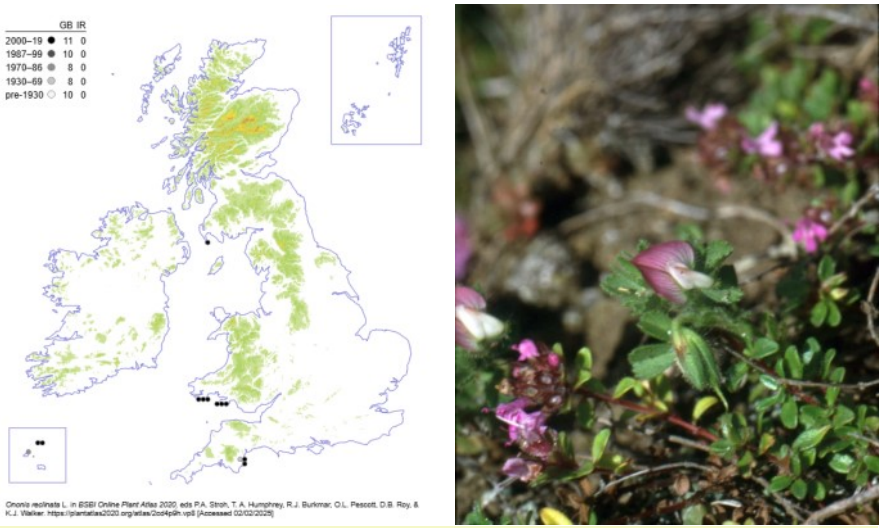
# A 20-year re-survey of the nationally rare *Ononis reclinata* (Small Restharrow) at Port Kemin, Mull of Galloway, in Wigtownshire

*Matt Harding, Michael Jeeves & Jim McCleary*

## Introduction

*Ononis reclinata* (Small Restharrow) was first discovered on the Mull of Galloway, in Wigtownshire (v.c.74) in 1835 by R. D. Graham, representing a remarkable range extension northwards from its nearest known population at the time, on the coast of Glamorganshire in South Wales, where it was first recorded in 1828. It was subsequently found marginally closer to its Scottish station, on the south coast of Pembrokeshire in 1958. *Ononis reclinata* is nationally rare, being known from just 13 hectads in Britain and Ireland, and only recorded in 11 hectads post-2000.[1]

It is a small, annual herb of shallow calcareous soils with low organic content, especially on south- or southwest-facing coastal cliffs on limestone and, in Wigtownshire, greywacke. Populations often fluctuate in size, sometimes very markedly, and its overall 10 km square distribution has not changed significantly since the 1960s. New sites have been discovered near to known colonies, but the species was lost in Guernsey in 1956 through the growth of rank vegetation (Stroh *et al*., 2023).




Figures 1 & 2. *Ononis reclinata* (Small Restharrow) distribution map, from *Plant Atlas 2020* (Stroh *et al.* 2023), and the plant flowering at Port Kemin in July 1996
*Photo by Jim McCleary*

1. For details see the BSBI Distribution Database: records where taxon Ononis reclinata, accessed 31/01/2025

On the Mull of Galloway, *Ononis reclinata* is known from sea cliffs at Port Kemin, which remains its only Scottish site. It had been 20 years since the plant was last seen, by local botanist Jim McCleary in 2004, with the access gully used to descend to the base of the cliffs now choked with *Ulex europaeus* (Gorse), *Prunus spinosa* (Blackthorn) and *Rubus fruticosus* agg. (Bramble), and impassable.

Figures 3 & 4. Jackie Muscott and the late Hugh Lang descending the now overgrown gully to reach the bay in July 1996 (left, photo by Jim McCleary). Matt Harding about to abseil down to the bay in July 2024 (right, photo by Michael Jeeves)

**Site designation and condition**

The Mull of Galloway is a well-known botanical hotspot, designated a Site of Special Scientific Interest (SSSI) for its vascular plant assemblage (including *Ononis reclinata*) and maritime cliff habitats, as well as for ornithological features. The SSSI extends over 11 km of coastline and includes the southernmost point of the Scottish mainland. It comprises maritime cliffs rising to some 85 m above sea level, topped by coastal heath and grassland, and with predominantly rocky shore habitat at their base.[2]

2. Mull of Galloway SSSI Citation and Management Statement: SiteLink - Mull of Galloway SSSI

It is also designated a Special Area of Conservation (SAC) for the Annex I habitat 'Vegetated sea cliffs of the Atlantic and Baltic Coasts', although curiously this designation does not mention the *Ononis reclinata* population while two other plants at the northern edge of their range, *Limbarda crithmoides* (Golden-samphire) and *Limonium binervosum* agg. (Rock Sea-lavender agg.) are included.

The SSSI was last assessed by NatureScot's Site Condition Monitoring programme in 2002, which found the vascular plant assemblage feature to be in an 'unfavourable, declining' condition, although the maritime cliff feature was assessed as 'favourable, maintained'. This unfavourable assessment was based at least in part on the status of *Ononis reclinata*, with the Site Management Statement[3] concluding the following:

> "The most noteworthy plant is small restharrow, a Mediterranean species recorded at only three other sites within the UK, this location being the most northerly and the only recorded site in Scotland. Currently it is not known if this plant is still present on the site. It is susceptible to marked population fluctuations and to competition from more vigorous plants. Given the nature and the scale of the site, it may well still exist in some of the more inaccessible parts of the sea cliffs. Similarly, the inaccessibility of parts of the site means that many of the target species in the plant assemblage may still be present, but not recorded, leading to the apparent unfavourable status. In addition, there is some scrub encroachment in these inaccessible parts of the site."

The Mull of Galloway SAC was assessed as 'favourable'[4] in 2013; however as noted this designation makes no mention of the presence of *Ononis reclinata*.

**Site survey in 2024**

Given the unfavourable status assessment, the 20-year gap since the plant was last seen, and the evident increase in scrub cover on the cliffs since 2004, resurveying the site for *Ononis reclinata* was considered a high priority.

On 3rd July 2024, Michael Jeeves, BSBI Vice-county Recorder for Wigtownshire, Jim McCleary and Matt Harding (BSBI Scotland Officer) set out to re-find the species, with Matt approaching the base of the sea cliffs by abseil and Michael and Jim providing a safety back-up from the cliff top and directing Matt towards the location of the colonies. Abseil stakes were required due to a lack of natural anchors at the cliff top, with the steep slopes to the west of the descent gully providing a reasonable point of abseil access.

The area surveyed extended from NX12303147 to approximately NX12613133, with the surveyor scrambling up from below to access areas of suitable habitat.

3. Mull of Galloway SSSI Site Management Statement: site-management-statement.pdf
4. See the 'Scotland's Environment – Feature Condition' database, available here: Protected Nature Sites

Four potentially suitable rocky ribs were checked, with a fifth inaccessible due to scrub encroachment. Fruiting plants were found on two of the ribs, each with eight plants in a small area, growing on very thin, eroding soils in an open sward. These are marked on the site photograph below, along with photographs of the two sub-populations showing the steep ground and limited extent of the colonies. In both locations, potentially suitable habitat surrounding and above the colonies were checked for additional plants, with no success.

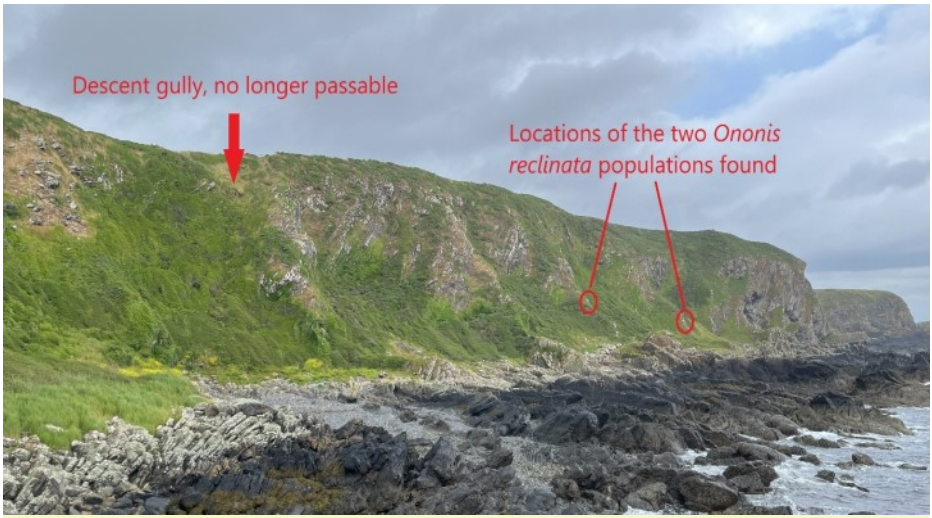



Figure 5. Site photograph, taken looking north-east, showing the location of the old descent gully and the two *Ononis reclinata* (Small Restharrow) sub-populations discovered during the 2024 survey *Matt Harding*


Figures 6 & 7. The two *Ononis reclinata* (Small Restharrow) sub-populations identified during the 2024 survey. Note the scrub encroachment, extending up the cliff faces either side of and below the colonies *Matt Harding*

Species associates present at the two colonies included *Jasione montana* (Sheep's-bit), *Thymus drucei* (Wild Thyme), *Koeleria macrantha* (Crested Hair-grass), *Anthyllis vulneraria* (Kidney Vetch), *Geranium sanguineum* (Bloody Crane's-bill) and *Daucus carota* (Wild Carrot).

Other notable plants recorded during the survey included *Limbarda crithmoides* (Golden-samphire), *Erodium maritimum* (Sea Stork's-bill), *Euphorbia portlandica* (Portland Spurge), *Samolus valerandi* (Brookweed), *Spergularia rupicola* (Rock Sea-spurrey) and *Asplenium maritimum* (Sea Spleenwort). Post-1970 hectad re-finds were made for *A. adiantum-nigrum* (Black Spleenwort) and *Carlina vulgaris* (Carline Thistle), and a new hectad record was made for *Bolboschoenus maritimus* (Sea Club-rush).

**Discussion**

A summary of data held by the BSBI Distribution Database for this species at Port Kemin is presented in the table below. Detailed population counts were made in 1993 and 1996 by Phil Lusby, recording 282 and 350 plants respectively. In 1993 it was recorded in four areas, which might correspond to the four potentially suitable rocky ribs identified and checked during the 2024 survey – of which two did not appear to hold any plants. These data suggest an apparent decline from 350 plants in 1996 to just 16 in 2024.

| Year | Number | Recorder | Details |
|---|---|---|---|
| 2024 | 16 | Harding, M. | 2 sub-pops of 8 plants each |
| 2004 | Present | McCleary, J. | |
| 1996 | 350 | Lusby, P. | Seed sampled for Millenium Seed Bank |
| 1996 | 10 | Muscott, J. & Lang, H.A. | |
| 1993 | 282 | Lusby, P. | 4 areas, sub-pops of 113, 80 and 89 |
| 1978 | Present | Silverside, A.J. | |
| 1977 | Present | Lang, H.A. | 'In sufficient quantity to make its future survival probable' |
| 1835 | Present | Graham, R.D. | |

Table 1. *Ononis reclinata* (Small Restharrow) records at Port Kemin, held by the BSBI Distribution Database

Although *Ononis reclinata* populations can fluctuate markedly year on year, the current state of the population at Port Kemin is concerning. Scrub encroachment has significantly reduced the area of suitable open habitat, with plants restricted to extremely steep, unstable ground, under which low but dense scrub will prevent successful regeneration from fallen seeds. Further survey work, complicated by the need for rope access down loose rock to check suitable habitat higher up the cliff face, is required to ascertain the true extent of the population, and assess the long-term survival prospects of one of Scotland's rarest plants.

The Mull of Galloway SSSI Site Management Statement acknowledges the balance of grazing pressure required to maintain the existing vascular plant diversity, noting that "[c]arefully managed and regularly monitored light grazing should be employed in areas of unimproved grassland and heathland to maintain a mix of plant communities". On steep ground such as at Port Kemin, managed livestock grazing is probably impractical. Although some evidence of deer and rabbit browsing was noted at the base of the cliffs, this was clearly insufficient to maintain an open sward and prevent the development of dense, dwarf maritime scrub. The Site Management Statement goes on to state:

> "Only where scrub and bracken encroach on important populations of rare plants would control measures be necessary."[5]

It would seem likely that this criterion has been met in the case of *Ononis reclinata*. Let us hope that a combination of more extensive surveys and targeted management to extend areas of suitable habitat around the remaining populations can be devised to, in the words of the late Hugh Lang, make its future survival probable.

**References**

Stroh, P. A., Walker, K. J, Humphrey, T. A., Pescott, O. L. & Burkmar, R. J. 2023. *Plant Atlas 2020: Mapping Changes in the Distribution of British and Irish Flora*. 2 volumes. Durham & Princeton: Botanical Society of Britain and Ireland and Princeton University Press.

5. Mull of Galloway SSSI Site Management Statement: site-management-statement.pdf

## Recording grasses — Mike Wilcox

As the new contact for general grasses and general rushes (remembering there are other referees for taxa/groups within this remit), I would like to encourage members to check some of the taxa they are recording.

In the north *Agrostis canina* (Velvet Bent) (2n=14) and *A. vinealis* (Brown Bent) (2n=28) are particularly in need of further study for their distribution. *A. vinealis* is generally regarded as a species of dry heath and grassland, but this does not hold true everywhere. In Orkney and Shetland only *A. vinealis* is recorded and it is possible that *A. canina* has been over-recorded in the far north, so it would be useful to collect in this area. There are few chromosome counts for these grasses and a count of c. 2n=56 for *A. vinealis* from the summit of Aonach Beag (v.c.97) could relate to another taxon. Please collect a few specimens from such areas (and if possible a live representative from that summit would be useful). Grasses should preferably be at flowering stage and if possible with appropriate rooting systems. Other taxa in *Agrostis* (*A. stolonifera*/*gigantea* (Creeping/Black Bent) and *A. capillaris*/*castellana* (Common/Highland Bent) can cause problems so good specimens welcome.

*Festuca ovina s.l.* (Sheep's-fescue) vs *F. filiformis* (Fine-leaved Sheep's-fescue) may be confused so please collect. (It is likely that segregates within *F. ovina* cannot be done without a chromosome count on current data but workers are beginning to unravel some of these issues [though not so much in Britain]; in the long-run, material of these will be useful.) Similarly, some of the *F. rubra* (Red Fescue) subspecies will pose difficulties (though currently these can be accepted based on Stace [2019]), so please collect these also.

Others such as *Phleum pratense*/*bertolonii* (Timothy/Smaller Cat's-tail) need further investigation, and in the past there was a wide-leaved *Helictochloa pratensis* (Meadow Oat-grass) named *H.* (*Avena*) *planiculmis* recorded for Scotland. The only surviving specimen, from Glen Sannox, Arran, is poor and there are questions to be asked around this 'alpine' form, so if in montane areas please collect some material especially if they might have wider leaves 6-10(12) mm not 2-4(6) mm).

The above is a selection that comes to mind at this moment. I shall always be glad to look at others.

## Summarising Hectad-scale Changes to the Flora of Individual Vice Counties

*David Elston*

In amongst the flurry of activity surrounding publication of Plant Atlas 2020, including the release of summaries of distributional change at hectad level in Britain and also in Scotland alone, I began to wonder what information could be extracted from the Distribution Database (DDb) about change in the Vice County (v.c.) I knew best, namely Kincardineshire. Consequently, I set about developing a MS Excel workbook, comprising linked worksheets, into which I could upload the results of DDb searches and within which I could explore changes to the flora of Kincardineshire and compare these to changes in Scotland as a whole.

There were many decisions to be made, most fundamentally which time period to compare 2000 to 2019 against (I chose 1930 t0 1999 to help balance out the number of records in the two periods). Also, I sought transparent and repeatable ways to overcome some questionable features of DDb output: national designations are transferred upwards, so *Anthyllis vulneraria* (Kidney Vetch) is labelled Nationally Scarce because its *subsp. lapponica* is Nationally Scarce; *Papaver cambricum* (Welsh Poppy) is labelled Nationally Scarce in searches for records in Scotland despite it being a neophyte there. And with a functional workbook in place, interpretation must informally at least acknowledge variation in recording habits alongside differential recording effort. A key benefit of looking across taxa comes from viewing point clouds in scatterplots: in the figure below, the majority of points lie above the 1:1 line, suggesting that, relative to the period 1930 to 1990, Kincardineshire was more intensively recorded during 2000 to 2019 than Scotland as a whole.

So what did I learn about the flora of Kincardineshire at hectad level?

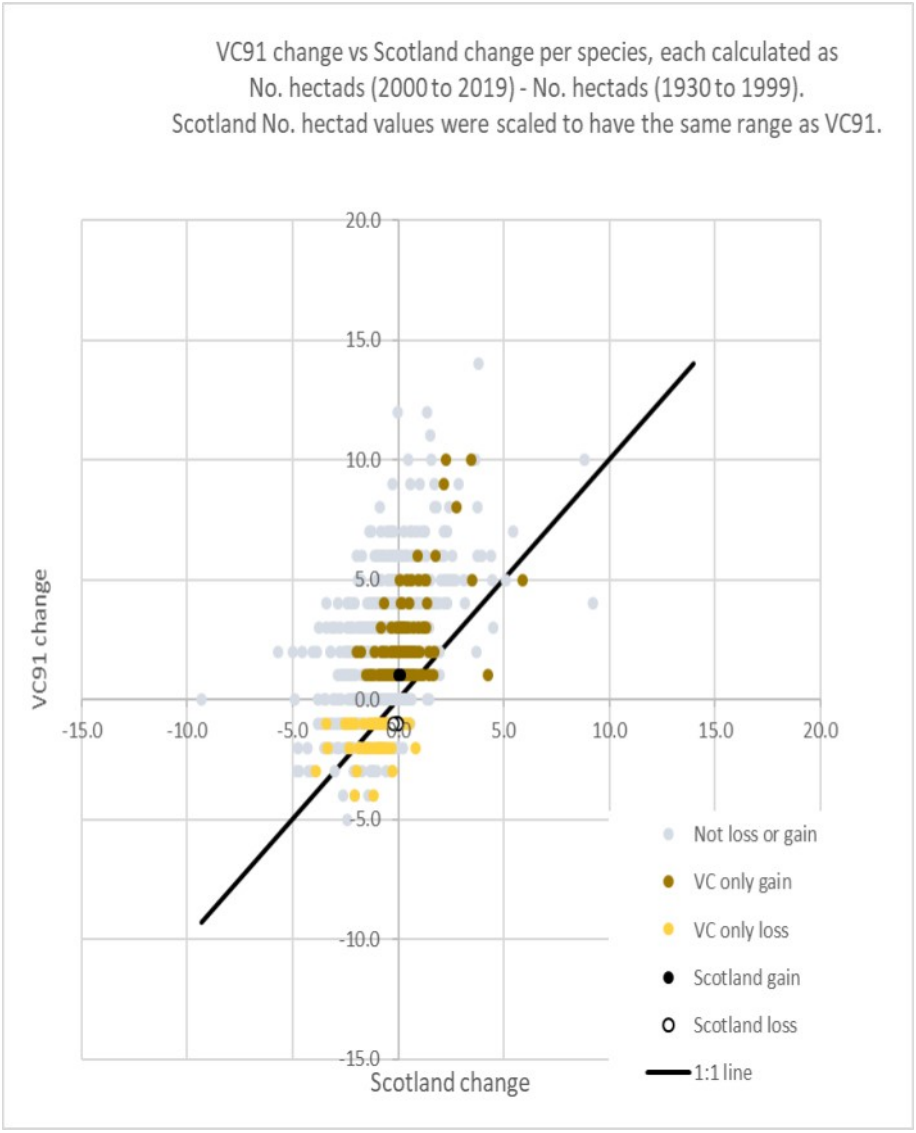
- The most widespread species during 2000 to 2019 were all natives, coincidentally 19 such species being recorded from all 19 hectads. However, it is surely only a matter of time before these are joined by some neophytes, with *Picea sitchensis* (Sitka Spruce) and *Fagus sylvatica* (Beech) as strong contenders, up from 13 and 14 hectads during 1930 to 1999 to 18 and 17 hectads during 2000 to 2019 respectively.
- Neophytes comprise both the majority of gains (species recorded during 2000 to 2019 but not during 1930 to 1999) and also the majority of species showing large increases between periods. For some species such as *Cupressus lawsoniana* (Lawson's Cypress) up from 0 to 10 hectads this must due in large part to differential recording practice. But for other species such as *Cortaderia richardii* (Early Pampas-grass) and *Elodea nuttallii* (Nuttall's Pondweed), both up from 0 to 5 hectads, there is likely to be a strong element of genuine change.

- As for Scotland as a whole, the declines of habitat specialists and species with national designations are manifest locally. Of the four species Red-listed as Endangered that were present during 1930 to 1999, one (*Carex maritima*, Curved Sedge) was not recorded at all during 2000 to 2019 and so is considered lost: likewise five of the 19 species Red-listed as Vulnerable that were present during 1930 to 1999, including the orchids *Dactylorhiza viridis* (Frog Orchid) and *Pseudorchis albida* (Small-white Orchid).
- However, in contrast to the national decline of archaeophytes, many plants of arable fields have been recorded in more hectads during 2000 to 2019 than during 1930 to 1999. Examples of this are: *Glebionis segetum* (Corn Marigold), up from 8 to 10 hectads, compared with an equivalent national decline of 5.6 hectads after scaling to the 19 hectads of Kincardineshire; and *Galeopsis speciosa* (Large-flowered Hemp-nettle), up from 7 to 11 hectads, compared with an equivalent national decline of 3.4 hectads after scaling.
- The climate change signal does not seem very strong, with only modest inroads made by native species having a southerly distribution. Thus, *Viola hirta* (Hairy Violet) shows no sign of expanding from its northern foothold at St Cyrus. Amongst water plants, which can be particularly mobile, the newly arrived *Lemna trisulca* (Ivy-*leaved Duckweed)* and *Ceratophyllum demersum* (Rigid Hornwort) were both recorded from only 1 hectad during 2000 to 2019. The greater change for *Calamagrostis epigejos* (Wood Small-reed), up from 0 to 3 hectads, may have been driven in part by forestry operations.

If any reader wants access to my MS Excel workbook to try it for themselves, either for a single v.c. or a grouping of v.c.s, it is available with instructions for use and fuller descriptions of findings at the Kincardineshire area on my DropBox folder available here or for readers of printed copy see the Kincardineshire webpage.

**Acknowledgements**

Many thanks to John Crossley for helping me develop the Excel workbook to make it portable across v.c.s, also to Matt Harding for developing a single DDb search which contains all the information required for any given Vice County.


VC91 change vs Scotland change per species, each calculated as
No. hectads (2000 to 2019) - No. hectads (1930 to 1999).
Scotland No. hectad values were scaled to have the same range as VC91.
VC91 change
Scotland change
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-15.0
-10.0
-5.0
0.0
5.0
10.0
15.0
20.0
Not loss or gain
VC only gain
VC only loss
Scotland gain
Scotland loss
1:1 line

Two archaeophytes that seem to have fared better in Kincardineshire than in Scotland as a whole:
*Galeopsis speciosa* (Large-flowered Hemp-nettle) and *Glebionis segetum* (Corn Marigold) *David Elston*

# Notable species recorded in the Nevis Nature Network project area, Westerness (v.c.97) in 2023-24

*Jim McIntosh (author), Ian Strachan & Gus Routledge*

**Introduction**

While undertaking a survey for the Nevis Nature Network (NNN) montane scrub restoration feasibility study in 2024 a huge number of incidental records were collected. The majority of them were collected by Jim McIntosh (JM) and Ian Strachan (IS) working as contractors to the Nevis Landscape Partnership. The survey took part in an area (see map next page) that largely encompasses the catchments of the Water of Nevis and the Allt a' Mhuillin. It includes the south-western half of Ben Nevis SSSI as well as Glen Nevis up to the southern watershed which follows the summit ridge of the Mamore mountains. It includes fourteen Munros (hills over 3,000 feet) and takes in three of the highest mountains in Scotland: - Ben Nevis, Càrn Mòr Dearg and Aonach Beag. The main findings of the montane scrub species survey will be published separately.

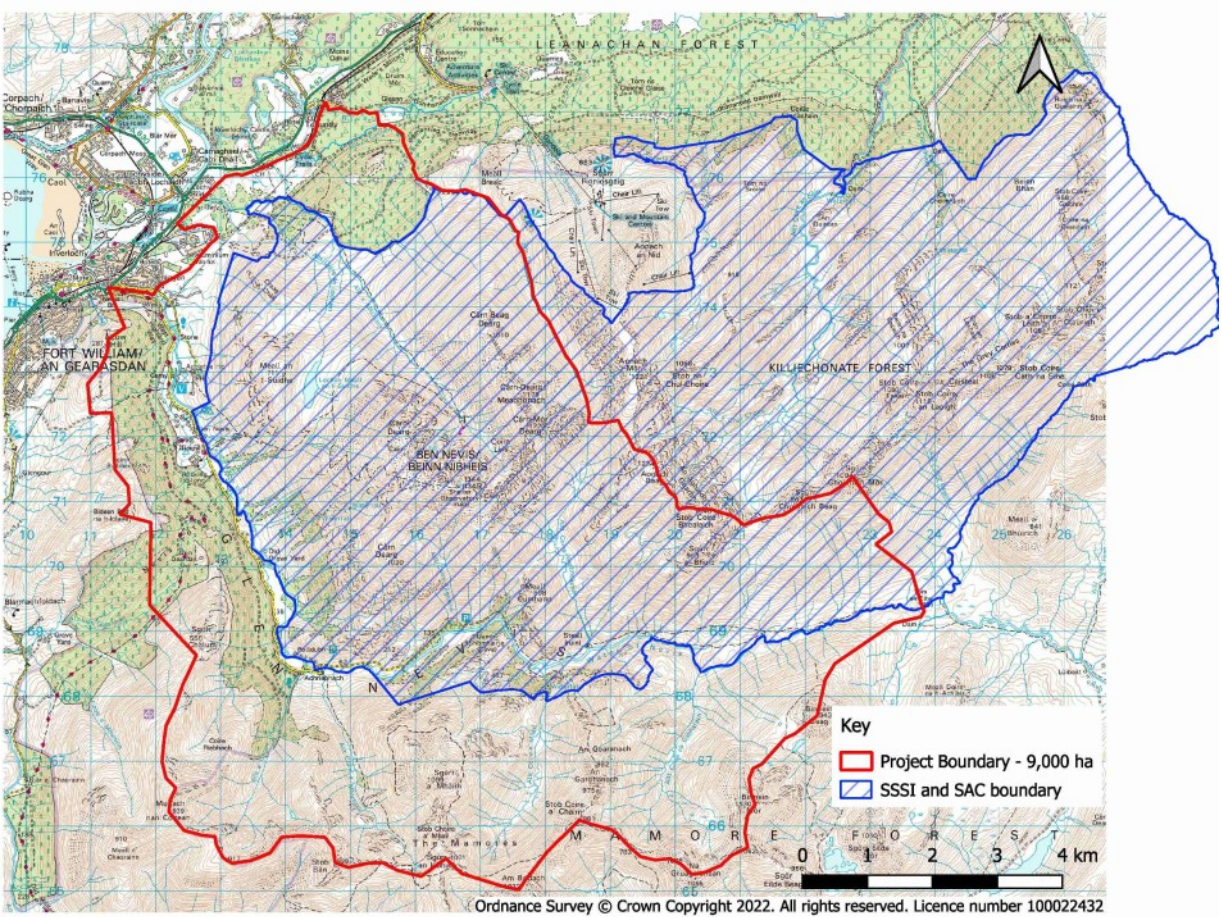
A significant number of records were also collected by JM and IM from the same area in 2023, and some 600 were collected by Gus Routledge (GR) whilst surveying Glen Nevis Estate in 2023. This analysis is based on all the records that were found in the survey area in 2023 and 2024 by these surveys. Co-incidentally, NatureScot contractors undertook Site Condition Monitoring of Ben Nevis SSSI in 2023 and recorded 166 populations of 37 Nationally Rare and Scarce taxa from across the SSSI, including many within the NNN area. However, these records have yet to be uploaded to the BSBI Database and have *not* been included in this analysis.

**Method**

The 2024 montane scrub survey looked for scrub species in and around cliffs, gorges and gullies with tall herbs and in the vicinity of previous montane scrub species records. The richest areas for montane scrub and other notable species generally had a base-rich geology and were typically on Dalradian schists and limestone. Some more acidic rock types such as quartzite and granite also supported a rich flora where there was base-rich flushing.

Whilst surveying montane scrub we recorded on the way to and from potential montane scrub sites, as well as in their general vicinity. In addition, we recorded 'associates' - species growing in close association with the target montane scrub species - generally with the same grid reference as that of the target population.

Other surveys generally aimed for as complete a list as possible of all species present in a 1 x 1km square. In all surveys we recorded all species encountered with a minimum six-figure grid reference (i.e. at 100 m resolution). All notable species were recorded with an eight or ten-figure grid reference.


LEANACHAN FOREST
FORT WILLIAM/
AN GEARASDAN
BEN NEVIS/
BEINN NIBHEIS
KILLIECHONATE FOREST
GLEN NEVIS
MAMORE FOREST
Key
Project Boundary - 9,000 ha
SSSI and SAC boundary
0 1 2 3 4 km
Ordnance Survey © Crown Copyright 2022. All rights reserved. Licence number 100022432

**Results**[1]

We collected 6,699 incidental and other records in the survey area – some 4,313 records in 2024 and 2,386 in 2023. These records were of 382 distinct taxa, of which 364 were native. The majority of records were recorded with a 100 m (6-figure) resolution but significant proportions were recorded with a 1 m (10-figure) or 10 m (8-figure) resolution (Table 1). Table 2 analyses the occurrences of taxa on the GB Red List (2021) and on the GB lists of Nationally Rare and Scarce taxa, with the number of 1km squares in which we found them.

| 1m | 10m | 100m | 1km | Total number of records |
|---|---|---|---|---|
| 1006 | 801 | 4703 | 189 | 6699 |

Table 1. Total number of incidental records made in 2023-24, by resolution[2].

| Notable taxa | GB Red Data list (revised 2021) | | | Nationally Rare & Scarce taxa (2020)[3] | |
|---|---|---|---|---|---|
| | Endangered | Vulnerable | Near-Threatened | Rare | Scarce |
| **Number of taxa** | **2** | **11** | **6** | **2** | **17** |
| **Number of records** | **14** | **136** | **72** | **17** | **193** |
| **In number of 1km squares** | 10 | 24 | 39 | 2 | 37 |

Table 2. Total numbers, by status, of notable taxa, notable taxon records and numbers of 1 km squares with a notable taxon in them. Note that some taxa are on both the GB Red Data and the Nationally Rare & Scarce lists.

1. This analysis excludes records of the montane scrub target species which will be reported separately

2. A six-figure grid reference describes a 100 x 100 m square and it is said to have a 100m resolution. Similarly, eight figure grid references have 10m resolution and ten-figure grid references have 1 m resolution.

3. Nationally Rare taxa occur in 1-15 10 km Ordnance Survey grid squares and Nationally Scarce in 16-100 OS grid squares.

Despite the survey area being fairly well recorded previously, with a total of 7,298 records of 1km resolution or better made prior to 2023, several species were recorded for the first time. These were:

a) ***Carex norvegica* (Close-headed Alpine-sedge).** GR made a remarkable find of this Nationally Rare species in the western Mamores in 2023. Further work identified and quantified sub-populations at three close but distinct sites between 805 and 836m above sea level. This is new to the vice-county and only the 6th Scottish and UK population (Routledge & McIntosh, 2024).

b) ***Melampyrum sylvaticum* (Small Cow-wheat).** A new population of this GB Red Data List Endangered and Nationally Scarce species was found by JM in a north-facing wooded gorge on the Allt Coire na Gabhalach at 425m above sea level, to the NW of Binnein Mòr. This is a new 10 x 10km square record, only the third recent record for Westerness, and brings the total number of Scottish 10 x 10km squares, post 2000, to 28.

Figure 1. *Melampyrum sylvaticum* (Small Cow-wheat), Allt Coire na Gabhalach,

c) ***Omalotheca norvegica* (Highland Cudweed).** This Nationally Rare species was found by JM and IS in 2023, just below the Càrn Mòr Dearg Arete. This is the first record for the Ben Nevis SSSI and only the second site in Westerness.

In 2024 we took the opportunity to survey the population in detail and found 33 plants scattered over a 36 x 3m band of sloping rocky ledges at 950-960m above sea level.

Figure 2. Fruiting *Omalotheca norvegica* (Highland Cudweed) wilted after an early frost in September 2023, Ben Nevis *Jim McIntosh*

d) ***Dryas octopetala* (Mountain Avens).** Three large populations of this Nationally Scarce species were found by JM on the north-west slopes of An Gearanach between 670 and 740m above sea level.

e) ***Juncus castaneus* (Chestnut Rush).** Three widely scattered small populations of this Nationally Scarce species were found by JM near Sgùrr an Iubhair, on Stob Choire a' Chairn and in Coire Ghabhail.

f) ***Platanthera* species (Butterfly Orchids)**. Populations of the GB Red Data List Vulnerable *Platanthera bifolia* (Lesser Butterfly-orchid) and the Near Threatened *P. chlorantha* (Greater Butterfly-orchid) were both found by GR. They were also the first records of both species in the Ben Nevis SSSI.

Figure 3. *Dryas octopetala* (Mountain Avens), *Juncus castaneus* (Chestnut Rush) and *Carex atrata* (Black Alpine-sedge) in the Mamores, 2024. *Jim McIntosh*

g) ***Pyrola rotundifolia*** **(Round-leaved Wintergreen**). A large population of this Nationally Scarce species was found on Meall Cumhann by IS, the first record for the SSSI.

Other particularly notable records included:

- A completely new population of the Nationally Scarce ***Carex atrata*** **(Black Alpine-sedge)** of six fruiting stems from six plants on the north-east ridge of Sgùrr a' Mhàim at 869m (Figure 3, right). There are just two other small populations locally – only one of which is in the survey area.
- Five new populations of the Nationally Scarce ***Arabidopsis petraea*** **(Northern Rock-cress)** were found in the survey area. Plants with undivided leaves were frequent. Remarkably, although at least eight populations are now known in the Mamores, it has never been recorded in the adjacent Ben Nevis SSSI.
- The GB Red Data List Endangered and Nationally Scarce species, ***Alchemilla wichurae*** **(Rock Lady's-mantle)**, was found in six scattered 1km squares. It had been recorded only once previously in the survey area.

Figure 4. *Arabidopsis petraea* (Northern Rock-cress) on Sgùrr an Iubhair, Mamores, 2024. *Jim McIntosh*

- The Nationally Scarce ***Veronica alpina*** **(Alpine Speedwell)** was found in a new 10 x 10km square at the eastern end of the Mamores between 843 - 959m on Na Gruagaichean.
- ***Thalictrum minus*** **(Lesser Meadow-rue),** was found on steep south-facing cliffs of Ben Nevis at an elevation of 618m in a new 10 x 10km square. This is remarkable because there are no other montane occurrences of this species in Westerness despite there being several in neighbouring Mid-Perthshire and Argyll.
- The locally scarce ***Equisetum hyemale*** **(Rough Horsetail)** was recorded in a clearing in Nevis Forest – another new 10 x 10km record.

Tables 3 and 4 list the Red Data Book endangered and vulnerable species recorded, showing the number of 1km squares in which we recorded them in 2023 -24 compared to previous records.

Table 3. List of the GB Red Data List Endangered species recorded in 2023-24, showing numbers of 1km squares in which they were recorded compared with previous records, within the survey area.

| **GB Red Data list Endangered species** | **Number of 1km squares recorded before 2023** | **Number of 1km squares recorded in 2023-24** | **Number of these squares not recorded previously** | **Total number of 1km squares with records** |
|---|---|---|---|---|
| *Alchemilla wichurae* (Rock Lady's Mantle) * | 3 | 9 | 8 | 11 |
| *Melampyrum sylvaticum* (Small Cow-wheat) * | 0 | 1 | 1 | 1 |

*Also Nationally Scarce

Table 4. List of the GB Red Data List Vulnerable species recorded in 2023-24, showing numbers of 1km squares in which they were recorded compared with previous records, within the survey area.

| GB Red Data list Vulnerable species | Number of 1km squares recorded before 2023 | Number of 1km squares recorded in 2023-24 | Number of these squares not recorded previously | Total number of 1km squares with records |
|---|---|---|---|---|
| *Arabidopsis petraea* (Northern Rock-cress) * | 3 | 7 | 5 | 8 |
| *Cerastium alpinum* (Alpine Mouse-ear) * | 8 | 10 | 6 | 14 |
| *Dactylorhiza viridis* (Frog Orchid) | 2 | 6 | 5 | 7 |
| *Juncus castaneus* (Chestnut Rush) * | 0 | 3 | 3 | 3 |
| *Luzula arcuata* (Curved Wood-rush) | 4 | 2 | 1 | 5 |
| *Platanthera bifolia* (Lesser Butterfly-orchid) | 0 | 1 | 1 | 1 |
| *Poa glauca* (Glaucous Meadow-grass) * | 4 | 3 | 2 | 6 |
| *Polystichum lonchitis* (Holly-fern) | 7 | 10 | 8 | 15 |
| *Pseudorchis albida* (Small-white Orchid) | 1 | 2 | 2 | 3 |
| *Saxifraga hypnoides* (Mossy Saxifrage) | 3 | 13 | 12 | 15 |
| *Sibbaldia procumbens* (Sibbaldia) * | 5 | 8 | 7 | 12 |

* Also Nationally Scarce

Additional records of Nationally Scarce species previously recorded in the survey area were also made for *Athyrium distentifolium* (Alpine Lady-fern), *Carex saxatilis* (Russet Sedge), *Carex vaginata* (Sheathed Sedge), *Cerastium cerastoides* (Starwort Mouse-ear), *Cerastium nigrescens* (Arctic Mouse-ear), *Micranthes nivalis* (Alpine Saxifrage), *Pinus sylvestris* (Scots Pine) and *Poa alpina* (Alpine Meadow-grass).

Eight GB Red Data List Near Threatened species were recorded in 2023-24: *Cerastium nigrescens* (Arctic Mouse-ear), *Cerastium cerastoides* (Starwort Mouse-ear), *Cornus suecica* (Dwarf Cornel), *Drosera anglica* (Great Sundew), *Euphrasia arctica* (Arctic Eyebright), *Hymenophyllum wilsonii* (Wilson's Filmy-fern), *Omalotheca supina* (Dwarf Cudweed) and *Platanthera chlorantha* (Greater Butterfly-orchid).

## Discussion

Ben Nevis SSSI has a remarkable list of notable species, largely concentrated in just three areas: the North Face, the cliffs to the east of Aonach Beag/Aonach Mor and Beinn na Socaich. This work has identified a fourth centre for notable species, the limestone cliffs to the west of Aonach Beag, and a fifth on south-east facing cliffs below Càrn Mòr Dearg Arete where *Omalotheca norvegica* (*inter alia*) was found.

The botanical importance of the Mamores has, until now, been rather eclipsed by the proximity of the Ben Nevis SSSI with its remarkable flora. However, many notable species populations were found across the Mamores in 2023-24, some for the first time. Further, there are a few important species in the Mamores that have never been found in the Ben Nevis SSSI despite several thorough surveys, such as *Carex norvegica* and *Arabidopsis petraea.*

The main findings of the montane scrub species survey will be published in a separate report which is currently in preparation.

## References

Routledge, G. and McIntosh, J. 2024. *Carex norvegica* (Close-headed Alpine-sedge) found new to Lochaber: a significant westerly range expansion. *BSBI Scottish Newsletter* 45: 5-8.

Strachan, I.M. 2017. *Ben Nevis North Face Survey 2014-16, final botanical report*. Available on the BSBI website at bsbi.org/westerness

## West Central Scotland Botany Network

*Michael Philip*

For three years, beginning in 2021, the three vice-counties of Lanarkshire (v.c.77) , Renfrewshire (v.c.76) and Dunbartonshire (v.c.99) had each developed a local botany network. The 'loose network model' has proved highly effective in generating local interest in field botany: a gradually increasing list of interested contacts centred around an extensive, published programme of outings and held together by a thrice-yearly newsletter.

These three networks are networks in the true sense: the only organisational structure is the contacts list among whom the outings programme and newsletter are circulated. There is no 'membership', no expectation, no committee, no money involved, no requirement to book onto outings. People are welcome just to turn up and join in whenever it suits.

Many of those who express an interest are essentially passively supportive, enjoying the newsletter and corresponding occasionally, for example when asking for a plant photo to be identified. But there are many who actually get the boots on and take part in outings, whether regularly or occasionally, and quickly increase their learning and experience by meeting others in common cause.

Growth has been rapid, with over 200 local contacts now in touch, and the level of recording activity in all three counties increased dramatically under this model. So a Zoom discussion was held in early 2024, to which a representative selection of the most active people were invited. This resulted in the unexpected (and surprisingly unanimous) view that we should pool our resources and work more closely together, with a single and more ambitious newsletter and a single outings programme which, because it includes all outings across the three vice-counties, gives everyone a much wider choice of places, dates and habitats.

2024 has been the first year of this new collaboration between our three local botany networks, forming a 'network of networks' which has taken the name West Central Scotland Botany Network. A new page was set up within the BSBI website, and this is where the combined Outings Programme is published. The new Newsletter called 'Trifoliate' is the brainchild of Frazer Henderson who offered to take on the initial editorship. It too is published on the combined page and readers of the BSBI Scottish News are warmly invited to visit at:

https://bsbi.org/west-central-scotland-botany-network

Here are some highlights of our first year:

**Outings**

The outings programme included a day on the island of Inchmurrin on Loch Lomond (v.c.99), three visits to the vast Whitelee Forest Windfarm area (v.c.76), four outings in collaboration with South Lanarkshire Countryside Rangers (v.c.77), and an ambitious expedition to Lanarkshire's southernmost point, Gana Hill (v.c.77), where we were met on the summit ridge by colleagues from the Dumfriesshire side of the boundary.

A walk to the Lang Craigs above Dumbarton was rewarded by a spectacular display of *Saxifraga hypnoides* (Mossy Saxifrage) in such profusion on the steep slopes that it looked like 'white lava' (see cover photo).

Several outings were flagged in the programme as training days and this attracted many new faces, keen to begin learning plants.

In all, 40 outings were held - from mountainous country on Loch Lomondside, to the coastal towns of Kilcreggan and Rosneath, to the RSPB Loch Lomond Reserve (where we have been compiling a detailed botanical record for the site), to a number of Lanarkshire towns (including a joint day in Lesmahagow with the Botanical Society of Scotland), to remote Renfrewshire landscapes.. Around 60 individuals were involved, including six different group leaders.

Outside the programme, over 20 people have submitted records working on their own. Indeed, solo recording is the backbone of the substantial increase in recording activity. But there have been some informal, small-group happenings as well and some of these have been highlights in their own right.

**'Special Ops'**

Dunbartonshire boasts some remote hill country. In early July a party of four was dropped off in Glen Luss to walk through Glen Mollochan to Glen Douglas. Their mission, in addition to maximising a general record, was to hunt for *Dactylorhiza incarnata subsp. pulchella* (Early Marsh-orchid). They succeeded in this - and two other people walking in from Glen Douglas to meet the group were surprised to find *Dactylorhiza incarnata subsp. incarnata* as well!

A more taxing expedition was undertaken in June by Stan Campbell and Fiona Merrilees (and Beemo the dog, who deserves a mention). Setting off very early, they drove to Inversnaid and climbed to the summit of Beinn a' Choin (a Corbett), working along the complex vice-county boundary and finding some good mountain species: *Polystichum lonchitis* (Holly Fern), *Juncus trifidus* (Three-leaved Rush), *Rhodiola rosea* (Roseroot), and *Vaccinium uliginosum* (Bog Bilberry) among others.

Figure 1. *Dactylorhiza incarnata* subsp. *incarnata* (Early Marsh-orchid)

Figure 2. *Dactylorhiza incarnata* subsp. *pulchella* (Early Marsh-orchid)

Long-term site remediation work at the former Exxon oil terminal at Bowling was completed in the summer, after several decades of meticulous decontamination. It was therefore possible, for the first time in many years, and with the supervision of the site's Principal Environmental Consultant, to gain entry on three occasions and record plants. The area is going to see much redevelopment in coming years, so it was good to get a baseline list of current species. The eagle eye of Malcolm Macneill spotted a tiny vegetative shoot which he suggested was *Blackstonia perfoliata* (Yellow-wort). Another visit to the spot several weeks later confirmed his identification when it was found in flower.

Aber Isle is a tiny, little-known island in the south-east corner of Loch Lomond. The previous plant record here listed just three species. During a boat trip out from Balmaha with Stephen Longster (Reserve Officer with NatureScot) in July, the opportunity was taken to detour to Aber Isle where a more realistic record of 58 species was achieved.

Figure 3. *Blackstonia perfoliata* (Yellow -wort)

Another encouraging collaboration this year has been with several windfarms. Site ecologists are increasingly keen to work with field botanists, seeing this as an opportunity both for personal learning and to deepen the plant record. Such cross-disciplinary partnerships are becoming increasingly frequent across our area - and this is hopefully being experienced in other parts of Scotland too as the environmental imperative to work together becomes ever stronger.

**Summary**

This article is just a thumbnail sketch of what our network has been up to in 2024. Readers are again invited to refer to our newsletter 'Trifoliate' where a much fuller account, and many more photographs, can be enjoyed.

Keep an eye out for our 2025 programme - you might want to join in at some point!

*All photos by the author*

## In Memory of Fiona Macfarlane (1955-2024)

Fiona's passion for field botany was ignited in childhood principally through her mother and her aunt, both of whom were keen botanists, and she built her skills through lifelong experience in Scotland. She had real affection for the Hebrides and the far north but her more recent contribution to local recording was mainly in Dumfriesshire and Lanarkshire.

Her excellent field skills produced some significant finds and the learning she passed on, together with her superb photographs of plants, have lasting value. She will be fondly remembered by all who knew her in the botany world.

by Michael Philip

# Vice-county Recorder reports 2024

## Dumfriesshire (v.c.72) *Chris Miles*

Just over 6,000 records were added to the DDb, all via the BSBI app. These included about 200 unique records for Bramble microspecies determined or confirmed by Angus Hannah.

We held a NYPH in Dumfries on the 1st January and then managed eight Dumfriesshire group meetings between April and September including a joint meeting with our Lanarkshire colleagues. Accounts of these meetings are available here https://bsbi.org/dumfriesshire.

A field meeting over a long weekend was held in Dumfries to advance the study of Scottish brambles with 8 people attending. We also ran an introduction to Sedges and Rushes training day with 10 people attending.

Particular species highlights including *Hierochloe odorata* (Holy-grass) *and Ajuga pyramidalis* (Pyramidal Bugle) were displayed at the Scottish Botany conference and can be seen here Some highlights from the botanical year in Dumfriesshire in 2024; Holy-grass Hierochloe odorata: A new population at Caerlaverock WWT Reserve; Pyramidal Bugle Ajuga pyramidalis at Blacks Hope; Brambles in Dumfriesshire 2024; and Hieracium stenopholidium

*Auga pyramidalis* (Pyramidal Bugle)

I gave a talk to the Nith Life Group in Dumfries and led a Saltmarsh Day for the volunteers and seasonal rangers at WWT Caerlaverock. At the same location I took part in a BBC Open Country programme with Dave Pickett WWT Reserve Manager which broadcast on 3rd October. I finished surveying all monads in the Moffat Hills to compare current knowledge of the special plants there with Derek Ratcliffe's account from 1990 and hope to publish this soon.

## Kirkcudbrightshire (v.c.73)

***David Hawker and Sarah White and Jim Davidson***

A new Joint VCR, Jan Davidson, has been appointed as Data Manager, with the task of organising records and catching up with the data entry backlog.

The main recording effort is through the regular outings of the Kirkcudbrightshire Botany Group. 14 meetings were held across a range of habitats, focussing on under-recorded areas. We aim to offer training and enjoyment as well as recording. There was a joint meeting with South West Scotland Environmental Information Centre on NatureScot's Cairnsmore of Fleet NNR.

We helped assess the status of several Nationally Rare and Scarce species on two RSPB reserves. We are working with two regenerative farmers/landowners to enhance the biodiversity of their land; there are already additional requests from other units in 2025. There is increasing concern about pressure from forestry and wind turbine developments, especially the loss of purple moor-grass habitats and unimproved grassland.

The Botany group's members were interviewed and photographed at a recent field meeting for a forthcoming article in the Dumfries & Galloway Life magazine.

The v.c.73 RPR is almost ready for uploading to the BSBI's webpage.

*Ranunculus baudotii* (Brackish Water-crowfoot) Refound at RSPB Mersehead 26th July 2024 after an apparent absence of at least 30 years.

*Saxifraga tridactylites* (Rue-leaved Saxifrage) New County Record, Kippford Car Park, 4th May 2024

*Viscum album* (Mistletoe): large mature plant in Kippford on *Acer* sp. on 4th May 2024 (Heather Edgar). The only previous record, 1973, was at nearby Rockcliffe, with the host tree felled in 1980.

Other notable finds:

*Saxifraga oppositifolia* (Purple Saxifrage): The Merrick, 24th April 2024. A rare plant in the Galloway hills last recorded at this location in 1988, while the last v.c. record was in 1998

*Sherardia arvensis* (Field Madder): recorded in profusion at Barlocco 3rd August 2024 on an old barytes mine spoil heap, only the third record for the v.c.

*Trifolium micranthum* (Slender Trefoil): several plants on forest track close to the car park at Polmaddy Settlement, 23rd August 2024. The only record since the first in 1973.

*Poterium sanguisorba ssp. sanguisorba* (Salad Burnet): a single flowering plant at Trostrie Farm, Twynholm, 5th July 2024. Only the 3rd v.c. record and the first since 2000.

## Wigtownshire (v.c.74) *Michael Jeeves*

During 2024 I:

- continued to work on a Rare Plant Register and as a step towards that prepared a list of Rare Plant Register species for inclusion on v.c.74 web page.

- led two guided wildflower walks for the Solway Firth Partnership as part of the launch of the Rhins Coastal Path.

- helped to organise a successful visit to Port Kemin to re-find Small Restharrow *Ononis reclinata*, which involved Matt Harding abseiling down a cliff.

- organised a further visit by local botanists to West Freugh M.O.D. base in order to survey Torrs Warren sand dune system. I also attended a meeting of the West Freugh M.O.D. Conservation Group.

- surveyed two organic farms in order to assist the owner with a claim for agri-environment payments. I also helped him with a National Plant Monitoring Scheme survey. Notable finds on the farms were *Gymnadenia borealis* (Heath Fragrant-orchid) and *Viola lutea* (Mountain Pansy).

- assisted a PhD student in the collection of small samples from the large (200 plants in 2024) *Mertensia maritima* (Oysterplant) population in Luce Bay for DNA analysis.

- joined Angus Hannah on two days to look for brambles in Wigtownshire.

- received and looked through the late Dr Alan Silverside's notebooks, papers and dried plant specimens for Wigtownshire.

- processed a total of 1558 records.

- received a number of records from visiting botanists, including three new v.c. records by Paul Stanley from the same caravan site. These were *Poa infirma* (Early Meadow-grass), *Crassula tillaea* (Mossy Stonecrop) and *Trifolium ornithopodioides* (Bird's-foot Clover).

## Ayrshire (v.c.75) *Dave Lang*

In 2024, our small v.c.75 Ayrshire recording group decided to combine our usual programme of visits to seasonally relevant habitats with getting involved in the National Plant Monitoring Scheme (NPMS).

The NPMS involved our group being assigned an OS monad, which turned out to be at Blairquhan in South Ayrshire. This monad had to be visited three times over the year – once for initial reconnaissance, once for early season plant recording, and a final time for late season recording. Access to the area assigned to us was somewhat limited, as was the diversity of natural habitats available to monitor. However, returning to watch one area develop botanically over the course of the season was an interesting new approach for our group.

*Salix herbacea* (Dwarf Willow) Re-find of record from botanical excursion to Blackcraig Hill in the 1980s – these willows are thought to potentially live for thousands of years. This one is also infected with willow tar. A locally scarce species in Ayrshire with only three other known locations. *Photo © Carol Crawford*

Other highlights from the year included the first botanising trip to Black Craig Hill since the 1980s, where locally notable species *Salix herbacea* (Dwarf Willow), *Carex bigelowii* (Stiff Sedge), *Cryptogramma crispa* (Parsley Fern) and *Diphasiastrum alpinum* (Alpine Clubmoss) were all re-found.

During an outing to Cornish Hill in the southeast of our county in July, we found both *Utricularia intermedia* agg. (a type of bladderwort) and a confirmed example of *Utricularia minor* (Lesser Bladderwort) – both of which are scarce in Ayrshire. While our final outing of the year to Muirhead Reservoir in the north of the county resulted in a new site for the GB Vulnerable species *Saxafraga hypnoides* (Mossy Saxifrage).

Finally, we were seemingly quite rich in finds made with our formal programme of field events in 2024, with new locations for locally notable species *Ervilia sylvatica* (Wood Vetch), *Ophrys apifera* (Bee Orchid) and *Crassula tillaea* (Mossy Stonecrop) all made this year, along with a new site for the GB Near Threatened *Neottia nidis-avis* (Bird's-nest Orchid).

*Carex bigelowii* (Stiff Sedge)
A locally scarce sedge species in Ayrshire refound this year on Blackcraig Hill. Photo *© Carol Crawford*.

## Renfrewshire (v.c.76) *Keith Watson*

Recording continued apace with several outings and individual recording efforts. The recording is now co-ordinated with neighbouring vice-counties as part of the 'West Central Scotland Botany Network' (for more details see https://bsbi.org/west-central-scotland-botany-network).

In total so far 7,131 records were made last year, with records from 139 monads. Many of the records (about 500 each) are due to the efforts of Jim Blackwood and Kirsty Menzies along with Michael Philip and Peter Wiggins. The latter again produced target maps which helped focus fieldwork; efforts were focussed on the diminishing number of monads with few or no records pre-2000. Note should again be made of Malcolm Macneill's trips to mainly urban sites and the continued flow of rare and unusual finds such as *Cardamine corymbosa.*

Enjoyable finds on group excursions were records for *Eleogiton fluitans* (Floating Club-rush), *Saxifraga aizoide*s (Yellow Saxifrage) and *Potamogeton gramineus* (Various-leaved Pondweed) at Crawhin Reservoir, above Inverkip. In May, at Lochgoin Reservoir (near Eaglesham), Michael rediscovered *Carex magellanica* (Tall Bog-sedge); later searches at a few nearby bogs found a further three populations of this rare sedge. A search for *Sagina subulata* (Heath Pearlwort) in the hills above Gourock was unsuccessful, but in compensation a new find was made below Corlick Hill, but seemingly restricted to a precariously situated singleton! Another notable find was *Diphasiastrum alpinum* (Alpine Clubmoss), a locally scarce species re-found this year on Blackcraig Hill.

*Carex magellanica* (Tall Bog-sedge) (right)
This rare sedge of flushed bogs was last reported from Lochgoin in 1977

*Sagina subulata* (Heath Pearlwort) (left)
A locally very rare pearlwort found as a single plant on a rock outcrop below Corlick Hill

Efforts to record critical taxa continue with increasing locations for brambles and hawkweeds. A recently returned batch of dandelions (specimens by KW and a large bundle from the late Alan Silverside) produced many interesting finds including two new species for Britain!

## Lanarkshire (v.c.77) *Peter Wiggins & Michael Philip*

This year we joined with Dunbartonshire and Renfrewshire to form the 'West Central Scotland Botany Network' and now have a shared Outings Programme and a new shared Newsletter called 'Trifoliate'. See https://bsbi.org/west-central-scotland-botany-network.

Of our 15 field meetings, five were specifically for everyone to learn and improve their botanical skills. We made over 15,000 plant records across 444 monads, including 84 previously unrecorded. We tackled some critical species groups: *Taraxacum, Hieracium* and *Rubus. W*ith the help of referees and other experts we recorded 22 species including some new to the v.c. Encouraged, we are going for many more this year.

We developed contacts in a number of windfarms and visited over 25 windfarm monads. Next year we plan to do more, giving us access to many of the 27% of Lanarkshire monads still with no records.

We have been working with South Lanarkshire Countryside Rangers visiting many local nature reserves and training volunteers. Our collaboration with BSS Urban Flora project continued with an outing in Lesmahagow. Malcolm Macneill continued to scour the streets of many towns for interesting plants: the highlight was *Bidens frondosa* (Beggarticks) at Pinkston Basin on the Forth & Clyde Canal - a first record for Scotland.

*Bidens frondosa* (Beggarticks)

*Rubus anisacanthos* (a first vice-county record for this Bramble)

We also had two “border skirmishes”. Near Tarbrax we met with Sue Jury and worked along the v.c. border with Midlothian. We also went to the deep south of the v.c. and, climbing Gana Hill from our side, met Chris and Alison Miles from the Dumfriesshire side and managed to re-find many plants of interest in this shared botanical hotspot (see photo).

## Peeblesshire (v.c.78) *Luke Gaskell*

Due to other commitments my botanising time in Peeblesshire was somewhat limited. However, 3868 records in total were collected and digitised in 2024 many from under recorded monads. Some areas proved surprisingly productive. For example, the Harlawmuir Burn near Carlops had abundant *Berula erecta* (Lesser Water -parsnip), together with *Carex diandra* (Lesser Tussock-sedge), *Sparganium emersum* (Unbranched Bur-reed) and *Potamogeton alpinus* (Red Pondweed), all of which are scarce in the vice-county. The valley has so far escaped afforestation which blankets much of the surrounding ground, but worryingly it is not currently grazed or otherwise used.

Some interesting plants were found at Fruid, an extensive hill sheep farm located at the top of Tweedale which has good acid heath and grassland habitats. While the number of plant species in each monad seldom exceeded 100, small flushes had some nice plants such as *Eriophorum latifolium* (Broad-leaved Cottongrass), *Carex* × *fulva* and its parents C. *hostiana* and *C. lepidocarpa, Eleocharis quinqueflora* (Few-flowered Spike-rush) and on a rock outcrop, *Rubus saxatilis* (Stone Bramble). I was recording

on a beautiful day in August surrounded by a large numbers of Scotch Argus butterflies. Much of this upland ground is either afforested, under threat from windfarms or being rewilded. My hope is that some of these Borders sheep walks remain in traditional management for future generations to enjoy.

I walked up Dollar Law to check on a locality for *Cornus suecica* (Dwarf Cornel), but disappointingly found only a few specimens. This is not particularly surprising as this site is near to the southern edge of this plant's range. I was, however, pleased to come across *Caltha palustris var radicans* an under recorded sub-species of Marsh-marigold which has single small flowers and procumbent stems rooting at the nodes. The only previous v.c. record was made in the same area in 1925.

Matt Parratt has contributed some interesting new alien records including *Abies fraseri* (Fraser Fir), *Picea glauca* (White Spruce) and *Leucojum vernum* (Spring Snowflake). Ian and Marion Moir have been very active in the east of the county where among other things they have reported *Lepidium didymum* (Lesser Swine-cress), *Carex otrubae* (False Fox-sedge), new to the v.c., and a possible new plant *Poterium sanguisorba ssp. balearicum* (Fodder Burnet), which is being sown in regenerative grass seed mixes. No field meetings were held in Peeblesshire, but I did host an arable weeds day at Kittyfield Farm in Roxburghshire.

Sitka spruce seedlings colonising *Calluna* Heath

## Selkirkshire, Roxburghshire (v.c.79, v.c.80)

***Jeff Waddell and Rod Corner***

2024 was the most productive year for recording in Roxburghshire ever, with 18,150 records of 818 taxa collected and validated. 269 monads were visited, with 100+ taxa recorded in 106 of these. The most species rich monad, NT4820 Synton Loch and Stonyford Moss had 260 taxa recorded in one visit.

The recording of the county recorders was greatly augmented by the prolific efforts of a new recorder, Chris Gray. Chris concentrated personal recording in the rich but under-recorded area south of Hawick, near where he lives and on Forestry sites, where he works across the county. Luke Gaskell was also a significant contributor in 2024 as in many prior years. The county botany group continued with several visits across the season with support from Stuart MacPherson and Matt Parratt.

A particular effort was made recording the nationally scarce plant specialities associated with the calcareous basin mire fens of the county as described in the captions below.

Nine new county records were made: *Alkekengi officinarum* in Kelso; *Crocus* × *luteus* at Ruletownhead; *Euonymus fortunei* at Teviot Bank; *Hypericum olympicum*, *Leycesteria Formosa* and *Narcissus minor* at Jedburgh; *Narcissus radiiflorus* at Monteviot; *Onobrychis viciifolia* at Bonjedward; and *Spirodela polyrhiza* at Lady Moss.

*Juncus compressus* (Round-fruited Rush) is extremely rare in Scotland. A new colony was found on the River Tweed opposite Floors Castle, extending its known range nearly 2km downstream.

Jim Mcintosh visited Minto Craigs and recorded three plants of *Asplenium septentrionale* (Forked Spleenwort), an improvement on the prior survey, when one plant was noted in 2022.

*Calamagrostis stricta* (Narrow Small-reed) was recorded from ten locations extensively around Alemoor Reservoir, some of which had dense colonies of many culms. One colony was on unusually dry vegetation – damp mesotrophic grassland which was inundated only when the loch level is high.

*Carex appropinquata* (Fibrous Tussock-sedge): a special effort was made to familiarise ourselves with this slightly cryptic species which hasn't received much attention in the county recently. Seventeen locations were found between Dunhog Moss, Alemoor and Branxholm Wester Loch. One of the Alemoor sites is particularly special as it forms a dense and extensive colony in herb rich fen meadow with *Trollius europea* Globeflower. Its habitats ranged from this relatively dryer situation to permanently wet schwingmoor/transition fen.

*Juncus alpinoarticulatus* (Alpine Rush): this nationally scarce rush was found at a new site, a flush near Mabonlaw Moss and re-found at three known sites Stoneyford Moss, Long Moss and Branxholme Wester Loch. It was seen to be declining at the later due to undergrazing and the vegetation becoming denser, as it is a poor competitor. Of these sites only Stoneyford Moss is grazed. It is widely at risk of disappearing over time if

under grazing persists, which seems likely as remaining agriculturally marginal land is being abandoned or afforested.

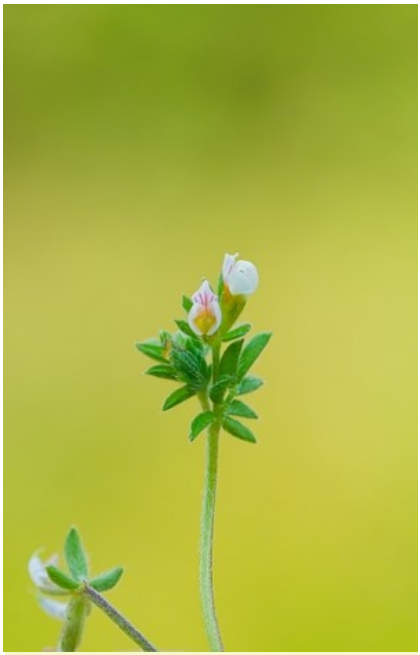
It was remarkable that *Potamogeton coloratus* (Fen Pondweed) was found at three new sites (Mabonlaw Moss, Dunhog Moss and Stoneyford Moss) in 2024 along with a re-find at a known site, Branxholme Wester Loch. The species has been overlooked in the county previously.

A new site, and hectad for *Equisetum hyemale* (Dutch Rush) was found in a flush at Berryfell in the Slitrig valley, south of Hawick.

*Cerastium arvense* (Field Mouse-ear) was found in two sites, including Colmslie Hill – which was a new hectad record and Scurry Rock, which is a known colony,

Forest tracks provided several interesting records of scarce native plants, alien to the area including *Ornithopus perpusillus* (Bird's-foot) on Rowantree Hill, Teviothead and *Potentilla argentea* (Hoary Cinquefoil), Hyndlee Forest.

*Cerastium arvense* (Field Mouse-ear)
*Chris Gray*



*Ornithopus perpusillus* (Bird's-foot)
*Chris Gray*

## Berwickshire (v.c.81) *Robin Cowe*

This year, nearly four thousand records were collected across the county by ten recorders. I updated the RPR for Berwickshire with the new sites and plants discovered in the last decade.

St Abbs Head had a Bioblitz, which I attended to record the vascular plants at the Head. I also did a two-day project to re-record the *Astragalus danicus* (Purple Milk-vetch) with the help of the rangers after finding a map by Michael Braithwaite of the distribution of Purple Milk-vetch in 2004/ 2006. I wrote a small PDF of my findings; the short version is that little has changed, and the plant is doing well.

The NYPH took in Coldstream, Eyemouth, Ayton, Chirnside, Reston, Paxton, and Auchencrow, with several recorders putting down a record for these villages for future years.

The record of the year was *Calystegia soldanella* (Sea Bindweed) found at the edge of Pease Bay Caravan Park. This was a first for Berwickshire on the tiny eroding dunes of the Sands.

Other notable records were:

*Allium scorodoprasum* (Sand Leek): a first in Berwickshire for 25 years on the banks of the Tweed near Coldstream.

*Aremonia agrimonoides* (Bastard Agrimony): just outside Earlston, last seen in 1969 by Albert Long.

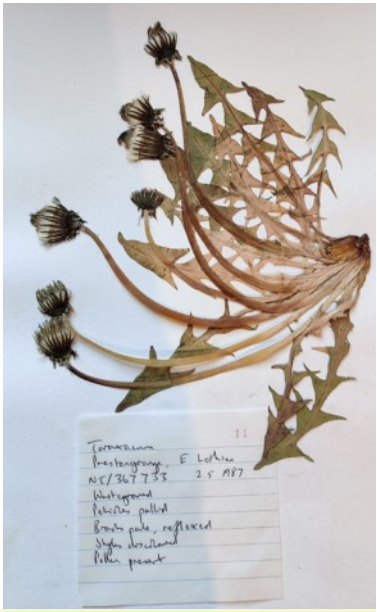
*Vicia lathyroides* (Spring Vetch): last seen at St Abbs Head in 1984 by Michael Braithwaite. Also at Millar's Moss.

*Vicia lathyroides* (Spring Vetch)

## [East Lothian](#) (v.c.82) *Marion Moir*

Records for the Database: 15,219 with help from Louise Hardy and her plant group, Caspian Richards, and Carolyn Hargest whilst working on the Biodiversity Surveying Project.

Helen Jackson's death this year was a sad event; she represented one of the group of botanists who recorded for the Botany of the Lothians in the 1980/90s and was v.c. Recorder for East Lothian for 25 years. Her death was followed later by Alan Silverside's death, and Helen had relied immensely on his botanical skills. So, the result, from my point of view, was a lot of sorting and a good collection of herbarium specimens which had to be determined by a referee and prepared with labels for the RBGE Herbarium. Alan Silverside's herbarium collection of *Taraxacum* was commended by John Richards, the Referee, and had 17 first records for v.c.82, including *T. acutangulum* from Prestongrange that he has not seen before and is usually found in Scandinavia.




*Taraxacum acutangulum*, found at Prestongrange by Alan Silverside and confirmed by referee John Richards as a first British & Irish record

Winter months were spent in making species lists for the East Lothian Council Biodiversity Plan; some areas had been selected before 2020 and were now being surveyed. Two members of the Lothian Botany Group offered to help and were given a day's training by Ben Averis.

Dealings with the Council Rangers have resulted in a concentrated effort to get rid of *Spartina anglica* (Common Cord-grass) in the Tyne Estuary, where there was a danger of it spreading further along the coast to Aberlady Nature Reserve. The Council would not normally use a weedkiller but on this occasion, they have done so, in view of the results from RSPB's efforts in Dingwall. It has been mostly successful but, a slight problem, new plants have grown on the edges where they don't want to destroy the vegetation.

iNaturalist and iRecord records: I have looked briefly at these and have found some good records of *Adoxa moschatellina* (Moschatel), *Neottia ovata* (Common Twayblade) and *Dianthus deltoides* (Maiden Pink). A summary of the Lothian Botany Group activities for 2024 is available here.

Other notable records were:

*Lactuca serriola* (Prickly Lettuce) found at Prestonpans Station. First recorded as *Lactuca virosa* (Great Lettuce) in 2023 but changed with the advice of Dr Markus Ruhsam who works on the DNA sequencing at RBGE. The midrib of the leaf is white, whilst *L. virosa* is brown-purple. In Scotland, most records for *L. serriola* are found around Glasgow. NCR

*Geum macrophyllum* (Large-leaved Avens) from Pressmennan Wood on a damp path near the lake recorded by Carolyn Hargest. NCR. See Lothian Botany Group Newsletter and write-up in BSBI News.

*Pyrus pyraster* (Wild Pear), an old tree from woods near Winton. It has thorns and small round leaves, and makes an attractive small tree for Council planting. Also planted at Gullane near the carpark, and recently at Blackford Hill carpark in Edinburgh. NCR

*Rorippa* × *armoracioides* (Walthamstow Yellow-cress) looking almost like a bedding plant at the eastern end of Prestonpans, growing quite tall. It is the hybrid of *R. sylvestris* (Marsh Yellow-cress) and *R. austriaca* (Austrian Yellow-cress). Alan Silverside identified this in 2011 and now refound in 2024. There are not many records for this in Scotland except in the middle belt but interestingly two herbarium specimens from Oban, Argyll found by B. H. Thomson in 1988.

*Rosa virginiana* (Virginia Rose) a ground cover rose used on the re-seeded Bing at The Cast, Prestongrange NCR. *Festuca trachyphylla* (Hard Fescue), a tussock grass, was introduced there and identified by Alan Silverside in 2011.

Prestongrange roadside has *Cotoneaster fruticosus* (Shrubby Cotoneaster), an arching deciduous bush, golden in the Autumn, which could be confused with *C. simonsii* (Himalayan Cotoneaster). Identified by Alan Silverside in 2007, and revisited by myself in 2024.

## Midlothian (v.c.83) *Sue Jury*

We have been very busy in Midlothian and have sent over 36,000 records to the database. Walks with the Botany Group have taken place from May to September with an official programme of walks. The group is joint with East Lothian. Impromto walks also take place outside these months. The group operates through a "WhatsApp" method of communication. The group is growing in size.

The County Recorder leads walks for the Edinburgh Natural History Society and helps support The Wildlife Information Centre and attends their Local biodiversity meetings.

New Scottish and County records have been found and published in the Aliens and Adventives section on the BSBI News.

Further introductions of Pillwort (*Pilularia globularia*) have been planted in Murder Acre and will be monitored over the next few years.

Posters of the "Midlothian Notable Finds for 2024" were presented at the Annual Scottish Conference in November.

A checklist of species for the Vice County has been started.

Some notable records were:

*Bromus secalinus*: second record for Midlothian.

*Sisymbrium irio* (London-rocket): second record for Midlothian.

*Cardamine occulta* (Hidden Bittercress, Asian Bittercress): first record for Midlothian.

*Guizotia abyssinica* (Niger): first record for Midlothian.

*Beckmannia syzigachne* (American Slough Grass): first record for Scotland.

*Juncus anthelatus* (Lax-flowered Rush): first record for Scotland.

## Fife & Kinross (v.c.85) *Sandy Edwards*

BSBI Field Meeting at Tentsmuir. This involved a wide range of people from advanced to beginners and was an opportunity for some identification learning. Also, a chance to see how a rapid change in habitat had affected the flora as this is a very well recorded area with a very large dune slack. Some local rarities such as *Centaurium littorale* (Seaside Centaury), *Rumex hydrolapathum* (Giant Water-dock), *Parnassia palustris* (Grass-of-Parnassus), *Lathyrus japonicus* (Sea Pea) (see Field Meeting Reports in the Year Book).

Liaison with Fife Local Conservation Sites. Updating plant records.

Two Identiplant students who did well.

Hamlyn Jones is now the joint recorder for v.c.85 and, with BSBI member Alison Davies, has produced a list of excursions for 2025. This will be sent to all vice-county members.

*Lathyrus japonicus* (Sea Pea)

*Scabiosa ochroleuca* (Cream Scabious)
Only two records in the UK. Presumably a garden escape but the site in Tentsmuir is more than two miles from urban area (report sent to Aliens & Adventatives).

Other notable records were:

*Laphangium luteoalbum* (Jersey Cudweed): new to v.c.85, two records.

*Gagea lutea* (Yellow Star-of-Bethlehem): gone from only site in N Fife for many years. This a new site in S Fife.

*Polypogon viridis* (Water Bent): new record. At bus station so presumably came in from further west.

*Hydrocharis morsus-ranae* (Frogbit): new record.

*Pucinellia viscosa* (Yellow Bartsia): a second site in v.c.85.

## Stirlingshire (v.c.86) *Matt Harding and Phil Sansum*

2024 was an exciting year for botany in Stirlingshire, with the launch of the Stirlingshire Botany Group, a joint venture covering West Perthshire as well. We ran ten field meetings across the year:

- New Year Plant Hunts in Stirling, with over 40 species found in flower both times.

- Visits to local rarities such as *Teesdalia nudicaulis* (Shepherd's Cress), *Ranunculus auricomus* (Goldilocks Buttercup) and *Lysimachia thyrsiflora* (Tufted Loosestrife).

- Counts of *Platanthera bifolia* (Lesser butterfly-orchid) and *chlorantha* (Greater Butterfly-orchid) populations.

- Aquatic hunting at Loch Ardinning, with *Eleogiton fluitans* (Floating Club-rush) and *Lobelia dortmanna* (Water Lobelia) highlights.

- Discovering new populations of locally rare species such as *Scleranthus annuus* (Annual Knawel) and *Ornithopus perpusillus* (Bird's-Foot) at Avonglen Quarry.

Lyn Jones and Matt Harding ran a well-attended BSBI field meeting to the Campsies above Queenzieburn, which made new vice-county records of *Rorippa islandica* (Northern Yellow-cress) and *Hirschfeldia incana* (Hoary mustard), as well as 20-year re-finds for *Sedum villosum* (Hairy Stonecrop) and *Cryptogramma crispa* (Parsley Fern). Matt also led a guided walk for non-botanists around Nethercroy, for the Eco-museum of Scottish Mining Landscapes.

Nearly 6,000 records were made in the vice-county in 2024, involving over 40 botanists – **thank you** to everyone! This included 22 vice-county and 90 hectad firsts, many of which were neophytes. Notable finds included *Bupleurum subovatum* (False Thorow-wax), *Chaerophyllum aureum* (Golden Chervil), *Hemerocallis lilioasphodelus* (Yellow Day-lily), *Laphangium luteoalbum* (Jersey Cudweed) and *Allium scorodoprasum* (Sand Leek).

We were delighted to welcome Angus Hannah, Scottish Bramble Referee, to help update our Bramble record from the 1980s. Highlights included *Rubus lindebergii*, *dasyphyllus*, *drejeri*, *elegantispinossus*, *scissus*, *ulmifolius* and *wirralensis*.

One SHARPP re-find was made: *Sagina subulata* (Heath Pearlwort) at Cambusbarron Quarry, not seen here since 1993. Finally, the draft Stirlingshire Rare Plant Register was updated and is available here.

Stirlingshire Botany Group on the New Year Plant Hunt in Stirling in Jan 2024 – finding 42 species in flower. The Hunt in December 2024 topped this with 45 species flowering.

Matt hunting for aquatics at Loch Ardinning – *Lobelia dortmanna* (Water Lobelia) and *Potamogeton natans* (Broad-leaved Pondweed) surrounding!

*Peter Wiggins*

Other notable finds were:

*Inula helenium* (Elecampane), a locally rare archaeophyte growing at Skinflats.

*Bupleurum subovatum* (False Thorow-wax) growing at a road edge in Grangemouth, new to the vice-county.

*Rubus lindebergii*, a scarce species in Stirlingshire with broad white edges to the sepals – a re-find from 1981.

*Allium scorodoprasum* (Sand Leek), growing on the north side of the River Carron – first reported on social media and subsequently confirmed! Probably of garden origin, but not seen in the vice-county since 1961.

*Anthracoidea scirpi*, a smut fungus growing on *Trichophorum germanicum* (Deergrass), found in the Campsies above Queenzieburn on the BSBI field meeting – new for the area.

*Primula elatior* (Oxlip) growing at Mugdock Country Park, presumably planted originally, new for the vice-county.

*Saxifraga hypnoides* (Mossy Saxifrage) in glorious flower on Double Craigs SSSI.

*Sedum villosum* (Hairy Stonecrop), refound by Victoria Curley on the BSBI Campsies field meeting after 22 years.

*Laphangium luteoalbum* (Jersey Cudweed) in Grangemouth, new to the vice-county.

## West Perthshire (v.c.87) *Liz Lavery and Jane Jones*

For the year 2024, over 4700 records have been collected and entered into the DDb. All but a few have now been confirmed. There were approximately six people or groups sending in these records which is very much appreciated, but a special thank you must go to Matt Harding and Anne Gilchrist for their contributions. The RPR spreadsheet was updated to the end of 2023 and from recording this year 126 new records of RPR species will be added in.

Anne had a couple of the interesting finds in the Trossachs. She recorded *Dryopteris aemula* (Hay-scented Buckler Fern) near the east end of Loch Katrine, not recorded since the 1980's but now with a good grid reference and she discovered that *Hymenophyllum wilsoii* (Wilson's Filmy-fern) was much more widespread in this same area once she explored more carefully. John Gallacher refound *Paris quadrifolia* (Herb Paris) in the River Devon Gorge, east of Dollar; again this had not been recorded in this location since the 1980's. Likewise O. Lasne recorded *Salix myrsinites* (Whortle-leaved Willow) on Beinn A' Choin, the last record on this mountain being in 1983.

The Stirling Botany Group ventured into v.c.87 on a few occasions on their evening outings, exploring some of the richer spots with a variety of habitats and species.

Both v.c. recorders, Liz Lavery and Jane Jones have been Identiplant tutors this year and helped nine students complete the online course.

*Dryopteris aemula* (Hay-scented Buckler Fern) near Loch Katrine *Anne Gilchrist*

## Mid Perthshire (v.c.88) *Jim McIntosh, Neale Taylor*

8,660 records were made and added to the BSBI Database in 2024 by a total of 40 contributors. Remarkably, 700 of these records are of 46 native and mostly montane Nationally Rare or Scarce species. We are very grateful for notable contributions by NTS Ben Lawers staff Dan Watson & Lewis Donaghy; Wild Strathfillan surveyors, Ophélie Lasne, John Holland and Lindsay Mackinlay; Glen Lochay Estate surveyor, Innes Manders and for ad-hoc surveys by Faith Anstey, Anne Burgess and Matt Harding.

Neale validated 5,000 plant records from iRecord/Indicia (including records from iNaturalist) and moved them into the DDb. 1,500 iRecord/iNaturalist 2024 records were also validated and most will be moved onto the DDb in due course.

We helped Perth & Kinross Council survey proposed Local Nature Conservation Sites (pLNCS) for inclusion in the local development plan. Neale surveyed eleven and Jim surveyed three sites - some of which turned out to be very diverse. For example, six Nationally Scarce species had previously been found on the montane Creag Garbh site, on the south side of Loch Tay, but we found a further eight NS species including *Draba norvegica* (Rock whitlowgrass) and *Micranthes nivalis* (Alpine Saxifrage). A new hectad record of *Juncus alpino-articulatus* (Alpine Rush) was made at the Meall a' Choire pLNCS, near Pitlochry and of *Salix myrsinites* (Whortle-leaved Willow) (photo) at the Meall Ban pLNCS, near Trinafour. Jim also drafted a Rare Plant Register species list for Mid-Perthshire for council staff to help with site assessment. It is also available in the BSBI DDb.

After a gap of 30 years, Neale spent a few days partially resurveying Moncreiffe Hill near Perth, now a Woodland Trust site. This is still a work in progress, but the spread of brambles, non-native species and ticks, and the general lack of disturbance (resulting in the apparent loss of ruderal and similar species) are notable changes.

Both species of Agrimony have been variously recorded at many of the same sites over the years. Jim began a small project to systematically collect fruiting Agrimonia from each population and carefully identify them.

Neale arranged for Brian Burrow, BSBI Referee to examine Alistair Godfrey's hawkweed collection which he has inherited, and this yielded some interesting records:

- *Hieracium argillaceum* (Southern Hawkweed), bridge over River Almond – 1st v.c. record.

- *Hieracium sabaudum f. bladonii* in Perth – first record of the species since 19th century, but the form bladonii appears to be spreading north and is new in the v.c.

- *Hieracium lasiophyllum* (Stiff-haired Hawkweed), Pitcairns Glen in Ochil Hills – 2nd v.c. record.

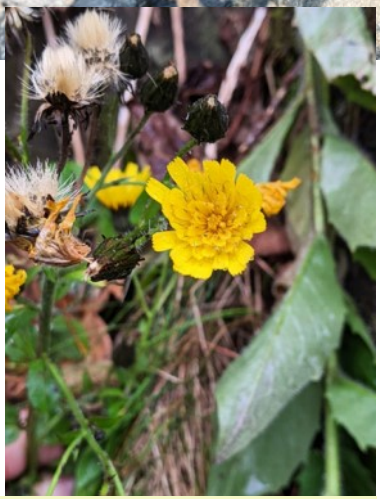
- *Hieracium fucatifolium* (Painted-leaved Hawkweed), Glen Lyon - first record since 19th century.

- *Hieracium scotostictum* (Dappled Hawkweed) near Luncarty – first record since 19th century; found close to the location of the first record.

Field work during the year, which avoided Breadalbane and Highlands, areas which have been comparatively well visited, unexpectedly yielded three possible new *Hieracium* species to the UK as well as *H. vagum* (Glabrous-headed Hawkweed) - see below.

Jim continues to organize the annual Recording Week which aims to gather records in remote areas and help train a new generation of botanists - in West Ross in 2024 with plans for Glen Lyon in 2025. Neale was an Identiplant Tutor with 3 students. Faith Anstey and Dan Watson led groups on an enjoyable field day near and on Ben Lawers for the identification of grasses, sedges and rushes.

*Salix myrsinites* (Whortle-leaved Willow). A new hectad record of this GB Red Data List Endangered species in Meall Ban pLNCS near Trinafour: One 3m sq bush, 1m sq bush plus three smaller bushes and numerous seedlings on limestone outcrops on Meall na Moine at 558m.



*Hieracium vagum* (Glabrous-headed Hawkweed). A 2nd v.c. record by Neale Taylor, from Moncreiffe Hill, near Perth.

*Tanacetum macrophyllum* (Rayed Tansy). Growing near Wade's Bridge, Aberfeldy. A new v.c. record first recorded by Ruth Atkinson in iRecord in 2023 and confirmed by Neale Taylor in 2024

## East Perthshire (v.c.89) *Martin Robinson*

Recording was at quite a low level this year, but with lists provided by visitors the total came to 2,311. Four taxa were new to the vice-county. The main event was Mark Lynes's *Alchemilla* field meeting, which was centred on upper Gleann Beag (Glenshee) and Fealar. Those present were able to familiarise themselves thoroughly with *Alchemilla glomerulans* and *A. wichurae*, and also saw *A. sciura*. The latter was seen to just creep over the county boundary along the edge of the ski car-park, becoming the first firm record for v.c.89. The meeting also provided a good opportunity at Fealar to see *Trichophorum cespitosum* (Northern Deergrass) together with *T. germanicum* (Common Deergrass) and their hybrid.

Some more surveying was done for Perth & Kinross Council, during which a superb oxbow was visited, disconnected from the river Isla. In the swamp were large single-species stands of *Bidens cernua* (Nodding Bur-marigold) and *Comarum palustre* (Marsh Cinquefoil), with some *Lysimachia thyrsiflora* (Tufted Loosestrife). A feature that became apparent during explorations of the river Isla was the complete dominance of *Impatiens glandiflora* (Himalayan Balsam) along the banks, forming impenetrable thickets along much of its length.

The main achievement of the year was the publication of 'The Special Plants of East Perthshire', a totally revamped version of the Rare Plant register, with photos and maps.

## Angus (v.c.90) *Robin Payne, Theo Loizou*

A combination of poor weather and other commitments left both VCRs struggling to spend in the field.

Theo re-discovered a good population of *Carex rariflora* (Mountain Bog Sedge) not recorded since 1996 on Mayar and in later summer carried out several botanical surveys (NVC) for Angus Council. Interesting finds included:

*Rumex hydrolapathum* (Water Dock). A good population (>100 plants) occurs at Elliot Links which may be the largest population in Angus.

*Scabiosa columbaria* (Small Scabious). This species is locally frequent at Elliot Links and may represent the most northerly extant population in the UK.

*Rumex hydrolapathum* (Water Dock)

Dan Watson and Matt Harding visited Glen Doll and Meikle Kilrannoch in June and collected about 500 records! Highlights included new sites for *Carex atrata* (Black Alpine Sedge) and *Micranthes nivalis* (Alpine Saxifrage) on Craig Maud.

Dan Watson and the Mountain Woodland Action Group and gathered over 400 records for Glen Prosen. Interesting species recorded included *Athyrium distentifolium* (Alpine Lady-fern, two varieties), *Carex vaginata* (Sheathed Sedge), *Dactylorhiza incarnata* subsp. *pulchella* (Early Marsh-orchid) *Equisetum pratense* (Shady Horsetail), *Polystichum lonchitis* (Holly Fern), *Salix lapponum* (Downy Willow), *Salix myrsinifolia* (Dark-leaved Willow), *Saussurea alpina* (Alpine Saw-wort) and *Saxifraga hypnoides* (Mossy Saxifrage).

We are grateful to Anne Burgess, Jo Parmenter and others for continuing to supply records for Angus. Robin continued to chair the Angus Local Nature Conservation Sites Group and provide botanical support for the group and gave a talk on the history of botanical recording in Angus to the Tayside Recorders Day in September.

## Kincardineshire (v.c.91) *David Elston*

The Kincardineshire Rare Plant Register has been finalised. Many thanks to proofreaders Carol Blow, Alison Peaker and Jake Brendish.

A North East Scotland Botanical Recording Network (NESBRN) visit to Mount Battock collected records from three under-recorded tetrads, extending the known distribution of *Cornus suecica* (Dwarf Cornel). Sadly, *Omalotheca supina* (Dwarf Cudweed), only recorded there prior to 1860, eluded us.

Angus Hannah and Michael Philip included Kincardineshire in their tour to collect photos for Angus's forthcoming book on Scottish brambles, helpfully updating records along the way.

Theo Loizou discovered two patches of *Linnaea borealis* (Twinflower) in heathland near Clachnaben. Remarkably, both were adjacent to the main path used by hillwalkers to the summit.

Following some further area-based recording, my ambition of collecting reasonable length species lists for all tetrads in the county has now largely been completed. However, many interesting habitats within tetrads remain unrecorded, so a process of infilling is now required.

With help and encouragement from David Welch's widow, Muriel, I have been making arrangements for some of his pressed specimens to be transferred to the herbarium at Aberdeen University.

Alison Peaker, Carol Blow, David Plant and Judy Leslie have started to go through the file cards with the long-term objective of ensuring all information on these cards is in the DDb.

I visited Drumtochty Forest with Karen McDonald, Forestry and Land Scotland Environment Ranger, to mark out Kincardineshire's only known patches of *Potentilla anglica* (Trailing Tormentil) in the hope of avoiding damage by pending forestry operations.

*Centaurium erythraea* (Common Centaury) was found for the first time in Kincardineshire, growing in abundance along the track to the balancing ponds by the A956 near Kirkton of Maryculter.

With help from Dandelions referee John Richards, a spring visit to St Cyrus led to *Taraxacum melanthoides* (Bluish-leaved Dandelion) being added to the Kincardineshire list. This is only the 6th record for the species in Scotland and was publicised by the NNR using social media.

*Astragalus glycyphyllos* (Wild Liquorice) was rediscovered at Thornyhive Bay where it was discovered new to Scotland by David Skene in the mid 1700s. The latest previous record from this site in the BSBI's Distribution Database is dated 1889.

Other notable records:

*Ornithopus perpusillus* (Bird's-food) was discovered along a forestry track above Phesdo, providing an additional site for this locally scarce species.

*Oenanthe fistulosa* (Tubular Water-dropwort) was found for the first time in Kincardineshire, growing in a balancing pond by the newly constructed A956 near Hare Moss.

*Cornus suecica* (Dwarf Cornel) is on the edge of its range in Kincardineshire, being found previously only on Mount Battock in a purely vegetative state. This year it flowered well and its known range was extended to an adjacent tetrad.

## South Aberdeenshire (v.c.92) *Ian Francis*

2024 saw around 4,200 plant records submitted, mostly through traditional lists or spreadsheets, with, so far, fewer than 100 via the BSBI Recording App. Numerous other records within other DDb workspaces (mainly pre-2024) remain to be processed. Around 30 observers submitted botanical records during the year, and I thank them all, along with Andy Amphlett and David Elston for advice and assistance.

*Saxifraga hirculus* (Marsh Saxifrage)

Highlights included a new site for *Saxifraga hirculus* (Marsh Saxifrage) found by Simon Thomas in upper Deeside. This basic flush held 126 flowering spikes and at 880 m is a new altitudinal record (750 m previous highest). Earlier v.c.92 records involved translocations to Donside in the 1970s and 80s by David Welch, not seen since 2008. Simon's peatland restoration surveys also yielded records of *Drosera* × *obovata* (*anglica* × *rotundifolia*) (Hybrid Sundew), rare in the eastern Highlands, and more widely, scrutiny of *Trichophorum* specimens produced the first definite record in v.c.92 of *T. cespitosum s.s.* (Northern Deergrass), and several hybrids – clearly much overlooked.

Along with many new hectad and red list records, and a number of *Taraxacum* v.c. firsts from David Elston, other notable finds included *Oenanthe fistulosa* (Tubular Water-dropwort) found by Lizzie Bacon near Lumphanan – first v.c. record, far north and probably introduced, and the second vice county record by Victoria Curley of *Glyceria notata* (Plicate Sweet-grass) on the Aberdeenshire coast. Finally, an excellent re-survey report on *Aristavena setacea* (Bog Hair-grass) in several vice-counties in North-East Scotland was produced by Mike Smedley; these were the first records for the area since 1992.

## North Aberdeenshire (v.c.93) *David Elston*

The North East Scotland Botanical Recording Network (NESBRN) counted 454 inflorescences of *Saxifraga hirculus* (Marsh Saxifrage) at one of its three sites near the Buck of Cabrach (main photo). Separately, Tristan Norton made visited a second site, counting 114 flowering plants plus about 50 that had flowered this year but gone over.

NESBRN unsuccessfully attempted to re-find *Pyrola rotundifolia* (Round-leaved Wintergreen) on adjacent hillside. The habitat seemed unsuitable: perhaps this species is no longer present in North Aberdeenshire.

Andrew Jones and Mike Smedley have both been active at Forvie NNR: Andrew recorded locations of *Myosotis ramosissima* (Early Forget-me-not) and associates, whilst Mike rediscovered *Aristavena setacea* (Bog Hair-grass) last recorded there over 100 years ago.

Two owners of small parcels of land invited visits, during which I demonstrated species present, collected records and discussed management options. Both kindly let me leave my car there to facilitate further recording nearby.

From midsummer onwards, my main effort has been to fill spatial gaps in North Aberdeenshire at tetrad level. Reasonable length lists for about 50 previously under-recorded tetrads were obtained, leaving about 270 for future years.

Angus Hannah and Michael Philip included Kincardineshire in their tour to collect photos for Angus's forthcoming book on Scottish brambles, helpfully updating some records along the way.

With help from David Welch's widow, Muriel, I have been making arrangements for some of his pressed specimens to be transferred to the University of Aberdeen's herbarium.

With help from Hawkweed referee Brian Burrow, two new species were added to the list for North Aberdeenshire: *Hieracium saxorum* (Rock Hawkweed, pictured) from Hill of Towanreef and *Hieracium dipteroides* (Aberfeldy Hawkweed) from by the Allt Deveron in Cabrach Parish.

Other notable records:

*Scleranthus annuus* (Annual Knawel) was found along a track through forestry at Hill of Ardgrain, Ellon, used also by vehicles for access to a wind turbine and nearby agricultural land. This is only the second record for North Aberdeenshire since 1991.

*Aristavena setacea* (Bog Hair-grass) was found by Mike Smedley at Forvie NNR in an area with seasonally fluctuating water levels. The species has only ever been recorded from two sites in North Aberdeenshire, the most recent record being by Trail from Slains (and Forvie) Parish in1904.

*Ulex gallii* (Western Gorse) was found on species-rich heathland at The Tore, Cabrach, new to North Aberdeenshire.

*Chaenorhinum minus* (Small Toadflax) was found in quantity at the base of a wind turbine on Gordonstown Hill, Kirkton of Auchterless. There are only three previous records of this species in North Aberdeenshire, the most recent of these being in 1998.

*Omalotheca supina* (Dwarf Cudweed) was found growing on hill tracks on Creag on Sgor, new to North Aberdeenshire.

## Banffshire (v.c.94) *Flora Donald*

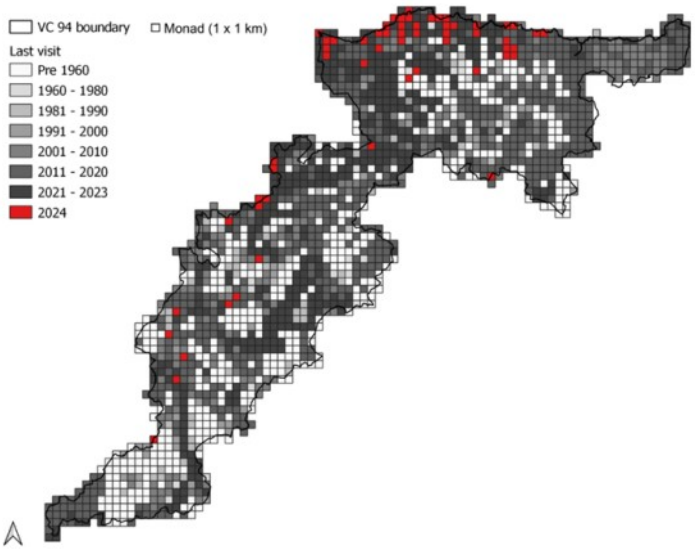
A total of 2773 records were added to the database in v.c. 94 this year, 2404 of which were recorded in 2024 by 23 botanists. This constituted 526 taxa, in 12 hectads, 44 tetrads, and 58 monads. Inventories were made in four monads with no previous records.

Ten botanists came for a recording weekend at the beginning of June, braving chilly squalls to look for SHARPP species along the coastline between Portgordon and Portsoy. They contributed 63% of 2024 records. Only one target species, *Potamogeton natans* (Broad-leaved Pondweed), was refound but inventories were updated in 21 monads and a handful of plants last seen 60 - 70 years ago were refound. The most impressive was *Goodyera repens (Creeping Lady's-tresses)*, last recorded at Roughilly wood in 1904. An extended account of the weekend can be found in the field meeting report.

The first vice county record of *Crassula helmsii* (New Zealand Pygmyweed) was made during the recording weekend. Aberdeenshire council and NatureScot were quick to respond and contact the landowner.

Seventy-five new hectad records were made for taxa including *Atriplex prostrata* (Spear-leaved Orache), *Bolboschoenus maritimus* (Sea Club-rush), *Gymnadenia borealis* (Heath Fragrant-orchid) and *Rubus laciniatus*. Findings of *Chara virgata* (Delicate Stonewort) and *Chara vulgaris* (Common Stonewort) were new hectad records and the second record of each species in Banffshire.

Fifty-seven taxa on the rare plant register were recorded. Highlights included *Trapogon pratensis* (Goat's-beard) found by Anne Burgess after 22 years, *Pseudorchis albida* (Small-white Orchid) re-found after 19 years by Malcolm MacGarvin, and *Vicia lathyroides* (Spring Vetch) re-found in Cullen by Ian Green after 61 years.



## Moray (v.c.95) Ian Green

The main reason for recording in v.c.95 is to collect records for a forthcoming Atlas Flora, surveying all the monads. During 2024 around 14,000 records were collected. Eighteen new species were added to the vice-county list (this includes hybrids, subspecies and varieties as well). Only one of these species being native *Carex muricata subsp. pairae* (Prickly Sedge), but possibly not native at this site. I decided to start taking a look at the brambles in the vice-county, so far re-found nearly all the previous species recorded for the v.c., plus three new non-native species *Rubus armeniacus*, *Rubus tuberculatus* and *Rubus ulmifolius* (Elm-leaved Bramble). Only three botany field meetings were done by the Moray Botany Group in 2024. These meetings are to check on rare species in the v.c.

*Trifolium resupinatum* (Reversed Clover) Two plants on road verge, America. This road verge had been sown with a wildflower seed mix in 2023, so mostly came from this source.

*Betonica macrantha (*Big Betony). One plant found on the side of forest track, Alves Wood. Most likely dumped at this site.

## East Inverness-shire (v.c.96) *Andy Amphlett and Adam Fraser*

- 15,650 new records were added to the DDb. All records have been verified and validated.

- 81% of these records were collected by the VCR, often accompanied by Liz Amphlett. Other recorders who individually collected more than 1% of the records were: Audrey and Bob Turner, Jim McIntosh, David Elston, Gus Routledge and Ian Green. Combined, these recorders along with the VCR collected 95% of the records in 2024. 150 other recorders contributed smaller numbers of records, many via iRecord & iNaturalist.

- 819 taxa (at species rank or below) were recorded.

- 23 taxa (at species rank or below) were new to v.c.96.

- 12 taxa (at species rank or below) were recorded for the first time post-1999.

- Records were collected in 42 hectads, 236 tetrads and 449 monads.

- 89% of records were collected at 100m precision or better.

- 1136 records were of v.c.96 Rare Plant Register taxa (7.3%).

- 4% of records were new hectad records, 40.9% were new tetrad records and 68.7% were new monad records.

- 2,058 pre-2020 records were added to the DDb, and additional details (locality name and accurate date) added to 1,605 pre-2000 records.

In addition, c. 2,500 records from 2024, entered into iRecord or iNaturalist have yet to be transferred to the relevant DDb workspaces. Of these, almost all those created since June 2024 have been verified within Indicia.

Some notable records were:

*Gymnadenia densiflora* (Marsh Fragrant-orchid): min. six plants on flushed, base rich slope. Species in the general area included *Carex dioica*, *C. hostiana*, *C. lepidocarpa*, *Eriophorum latifolium*, *Parnassia palustris*, *Schoenus nigricans* & *Trollius europaeus*. ID confirmed by Richard Bateman (referee). First v.c. record.

*Myosotis discolor subsp. dubia* (Changing Forget-me-not): a scarce native in Scotland, but perhaps overlooked. Recorded at 3 locations in damp pasture with Juncus. First v.c. records.

*Hordeum murinum* (Wall Barley): Recorded at six locations, the first v.c. records since 1988.

*Lepidium campestre* (Field Pepperwort): The second v.c. record and the first since 1900.

*Parietaria judaica* (Pellitory-of-the-Wall): four large clumps and two small clumps, at base of walls in Nairn. First v.c. record since 1970. Found by Ian Green.

*Polypogon viridis* (Water Bent): has finally arrived in v.c.96, but only a single plant. Found by Ian Green.

*Sorbus croceocarpa* (Orange Whitebeam): two trees, one old and collapsed, the first v.c. record since 1971. Possibly the same location as a record from 1909. Det. by Tim Rich.

*Vulpia fasciculata* (Dune Fescue)
Tens of thousands of plants on dunes at Nairn. A casual, inland, record in 1971 is the only other v.c. record. One of only two extant populations in Scotland.

*Cardamine pentaphyllos* (Five-leaflet Bitter-cress). One clump, probably a garden throw out in area of waste ground. 3rd Scottish record. Found by Sue Thomas. ID confirmed by M.J. Crawley.

*Allium paradoxum* var. *normale* (Few-flowered Garlic). With flowers and no bulbils. 1st record for Scotland, ID confirmed by Paul Green. Clump in patch of waste ground between garden and farm buildings.

## West Inverness-shire (v.c.97) *Ian Strachan and Ian Bonner*

2024 was another productive year with more than 10,500 new records for Westerness. Nearly half of these resulted from a survey of montane scrub undertaken by Ian Strachan and Jim McIntosh in Glen Nevis for the Nevis Landscape Partnership. As well as finding new populations of *Salix lapponum* (Downy Willow) we found many new sites for other notable species, especially in the Mamores. Some highlights were presented at the SBC in November (https://bsbi.org/scottish-annual-meeting/scottish-botanists-conference-2024-exhibits-handouts) and are reported in this edition of Scottish News.

Ian Bonner and Liz MacDonald added about 2000 new records or updates for Ardnamurchan, especially in the Kentra area. Of particularly interest were: the frequency of *Centaurium littorale* (Seaside Centaury) in the upper saltmarsh turf around Kentra Bay and Ardtoe; the presence of *Ceratocapnos claviculata* (Climbing Corydalis) around the margin of Kentra Moss as well as on Eilean Shona (see below); the continued appearance of *Eryngium maritimum* (Sea Holly) near Portuairk, with three plants this year instead of the usual one, and *Ranunculus sceleratus* (Celery-leaved Buttercup) at Ormsaigbeg.

At the west end of Ardnamurchan, near Sanna, the known colonies of *Asplenium septentrionale* (Forked Spleenwort) were surveyed by Jim McIntosh for the Species Recovery Trust. Jonathan Keefe also discovered a new, inland site, 3km to the east, as well as other good finds in Ardnamurchan and Morvern. In Moidart a team led by Nigel Brown collected more than a thousand records for Eilean Shona, filling a significant gap in coverage. Of particular note was the frequency of *Polypodium interjectum*

(Intermediate Polypody) and the 2nd vice-county record for the hybrid *P.* × *mantoniae*.

In Morvern, Inverness Botany Group held a recording week at Ardtornish, and Lochaber Natural History Society visited the Black Glen with the SWT Ranger, finding new sites for species such as *Viburnum opulus* (Guelder Rose). Jon Mercer continued his valuable work recording squares in the Great Glen, and Lewis Donaghy added records for rarely visited hills in the north-west. He also made a remarkable discovery on the shore near Arisaig (see below).

We have been helping the Highland Council to compile a list of potential Local Nature Conservation Sites (LNCS) for Lochaber, and to support this process IS has been surveying various sites including Glen Spean Oakwoods and the Blar Mòr, although much work remains to be done. IS also advised BEAR Scotland regarding management of species-rich verges.

Other activities by IS included monad recording at Creag Meagaidh NNR, with new sites for *Carex atrata* (Black Alpine-sedge) and *Equisetum pratense* (Shady Horsetail). Jim McIntosh also added many new records in places such as Glen Righ and Nevis Forest, where he found a new population of *Equisetum hyemale* (Rough Horsetail).

A new population of *Carex salina* (Saltmarsh Sedge)was found in Loch nan Uamh by Lewis Donnaghy, in saltmarsh near Druimindarroch. This is a fourth site for Westerness, 10 km from the nearest site (Loch Nevis) and only the sixth locality in Britain (see report on page 9).

An unwelcome find by Ian Strachan was *Senecio minimus* (Toothed Fireweed), growing abundantly beside the A830 north of Arisaig on burnt ground, the first Scottish record for this New Zealand invasive.

*Carex aquatilis* (Water Sedge) Found by Ian Strachan in Loch Laggan, near Aberarder, the first localised record in the east of the county and only the third v.c. record this century.

*Pimpinella saxifraga* (Burnet Saxifrage): re-found by Ian Strachan in dunes near Traigh after a gap of 33 years, a rare species in Westerness with no other recent records.

## Dunbartonshire (v.c.99) *Michael Philip*

Following three years of network development in our three counties, discussion with a cross-section of active botanists led to a decision to work much more closely together. So, Dunbartonshire, Renfrewshire and Lanarkshire formed the new 'West Central Scotland Botany Network' early in 2024 and now have a shared Outings Programme and a new shared Newsletter called 'Trifoliate'. Both are published on our Network's webpage on the BSBI website: https://bsbi.org/west-central-scotland-botany-network Please visit the page and read what we've been up to and see also on page 51.

In Dunbartonshire in 2024 over 15,000 records were gathered from 237 monads visited, including 15 previously completely unrecorded monads.

Particular effort was made in photographing Dandelions. Photo-sets of 29 plants were sent to the referee, resulting in 22 identifications. Of these, six were first vice-county records.

Other highlights were the surprise find of *Laphangium luteoalbum* (Jersey Cudweed) on disturbed ground by an industrial site near Faifley (a species uncommon in Scotland, but likely to turn up more frequently). And a careful hunt in Glen Mollochan in the Luss Hills resulted in the re-find of a 1988 record of *Dactylorhiza incarnata* subsp. *pulchella* (Early Marsh-orchid). By coincidence, another subspecies - *Dactylorhiza incarnata* subsp. *incarnata* - was found the same day in Glen Douglas: a first Dunbartonshire record of this taxon this century.

22 organised group outings were held in all, including further detailed work on mapping the flora of the RSPB Loch Lomond Reserve. We have enjoyed continuing partnership with West Dunbartonshire Council and Luss Estates.

*Laphangium luteoalbum* (Jersey Cudweed)

## Clyde Islands (v.c.100) *Angus Hannah and Sarah Cowan*

It has been a year of extraordinary finds on Arran this year:

- A new patch of *Trichomanes speciosum* (Killarney Fern) and re-finding two existing patches.

- New extensive patches of *Circaea alpina* (Alpine Enchanter's-nightshade) near Lochranza and a couple in Glen Rosa.

- Surveying the 300+ *Platanthera chlorantha* (Greater Butterfly-orchids) in an ancient hay meadow on the south of the island.

- *Hieracium cyclicum* (Round-leaved Hawkweed) re-found by Chris Miles at the Fallen Rocks at the north of Arran, not seen since 1987.

- *Dryopteris expansa* (Northern Buckler-fern) re-found in Merkland Woods.

- Scattered patches of *Hypericum elodes* (Marsh St John's-wort) in fine health in coastal boggy areas at the north of Arran, re-finds C. Miles and S. Cowan.

- Monitoring of the remaining single patch of *Mertensia maritima* (Oysterplant), and relieved to find it still 'hanging in there' for another year.

- Re-finding the single *Crambe maritima* (Sea-kale) at Kings Cave, Arran.

- *Rubus vestitus*, near Cnoc na Dail, Lamlash. First find on Arran since 1950's on an Angus Hannah batology visit!

- A new colony of *Trichomanes speciosum/Vandenboschia speciosa,* sporophyte (Killarney Fern) near to an existing site on Arran's coastal cliffs.

Non botanical finds but nonetheless just as impressive and an indicator of the botanical substructure on which they rely:

Rare Hazel Gloves fungi in old damp, humid hazel woodland, south of the island.

- Scarce Persistent Waxcap and Smokey Spindle fungi on fragmented patches of unimproved short grasslands on the south of the island.

- Key indicator species of *Lobaria* lichens on mature beech and sycamore at Merklands woods.

- Rare Chamomile Shark moth caterpillar on *Hieracium* at Thunderguy.

- Scarce Elephant Hawk moth caterpillar on *Fuchsia* at Kildonan.

- Crossbill and Goshawk birds in Kildonan mature Sitka and mixed woods, Eas Mor.

Arran continues its impressive range of plants that affords the island its Important Plant Area (IPA) status. The Isle of Arran Rare Plant Register was also updated by Sarah Cowan in 2024, and can be found here.

During 2024 Angus Hannah has continued his work as Scottish *Rubus* (Brambles) referee, leading training workshops, identifying many hundred brambles from photos sent in by other botanists, travelling the country to help recorders update their *Rubus* records, and working on a new Scottish Brambles Handbook.

Both Angus and Sarah plan to step down as Vice-county Recorders for the Clyde Islands in 2025, with Angus continuing in a caretaker role. If you are interested in becoming a Recorder for this wonderful and botanically important vice-county, or would just like to learn more about what is involved, please email Angus Hannah.

Re-find of *Circaea alpina* (Alpine Enchanter's Nightshade) at Lochranza and new finds of extensive, thriving colonies further along the north coast to Fairy Dell and another site inland at Glen Rosa. Arran seems to suit this shy and shade loving nationally scarce plant.

300+ spikes of *Platanthera chlorantha* (Greater Butterfly-orchid) at the south end of Arran in an ancient hay meadow which is to be preserved as such by the new owners. The meadow has not been ploughed for around 60 years.

## Kintyre (v.c.101) *Dave and Pat Batty*

Recording was limited during the year due to other commitments and our intimation to retire. We are hopeful that new recorders will be found in 2025. In late winter/early spring there were several storms which washed up large amounts of seaweed high up the beaches in Knapdale. During a visit to Danna two colonies, one large, of *Bidens cernua* (Nodding Bur-marigold) were found growing in this deposited seaweed. This is the first record since 2011.

Very few botanists visit Kintyre but we had a record from the island of Sanda of *Datura stramonium* (Thorn-apple) on the coast. This is the first record for over 50 years. Another visitor found *Reseda luteola* (Weld) on the coast, only the fourth record for the v.c. and the first since 2002.

Another colony of *Scrophularia auriculata* (Water Figwort) extending along a ditch for c.100 m was found in north Knapdale. There are only a few scattered records for this species but where it is present it can be extensive.

## South Ebudes (v.c.102) *Simon Smart*

*Saxifraga spathularis* × *umbrosa* was recorded for the first time on Jura growing on moist, rocky woodland near to the Jura Hotel. Unsurprising given its regional presence to the north and south of the v.c. and on the mainland yet with only two other records in the v.c., one at Port Ellen, Islay in 1999 and on Colonsay in 2000.

Malcolm Ogilvie reported a poor year for *Platanthera chlorantha* (Greater Butterfly-orchid) at the two regularly monitored sites on Islay, with only four and five spikes respectively, but with more plentiful *Coeloglossum viride* (Frog Orchid) and *Anacamptis pyramidalis* (Pyramidal Orchid) at the Killinallan site. Kevin Byrne reported a new population of *Asplenium ceterach* (Rustyback) on Colonsay among limestone rubble. This is a rare species in the v.c. confined to lime-rich substrates. A notably persistent population on Jura occurs on the mortared sides of the Three Arch Bridge, well known to those who have run the Jura fell-race as the point at which the road back to Craighouse is regained having enjoyed some hours in the hills. A large number of Islay Orchid records were also received from Grahame Preston in 2024 detailing populations of *Dactylorhiza incarnata* (Early Marsh-orchid), *D. francis-drucei* (Narrow-leaved Marsh-orchid), *D. maculata* (Heath Spotted-orchid), *D. purpurella* (Northern Marsh-orchid) and *Epipactis palustris* (Marsh Helleborine) from the island. Many thanks to everyone who recorded in 2024.

*Asplenium ceterach* (Rustyback)

## Mid Ebudes (v.c.103) *Lynne Farrell*

Main recording effort was in June with BSBI field trip to Tiree where we recorded in 10 tetrads and several monads. We helped with a University of Aberystwyth undergraduate project on *Mertensia maritima* (Oysterplant) and are awaiting feedback from that. Three NPMS plots set up in 2016 were re-recorded, with little change to report in the floral composition on the grassy heathland areas. We re-surveyed the extent of *Astragalus danicus* (Purple Milk-vetch) at its one known location, counted *Eryngium maritimum* (Sea Holly) along one of the extensive beaches, and searched for and found *Pilularia globulifera* (Pillwort) at two localities. Our BSBI Scottish Officer, Matt Harding, who joined the group, made special excursions to record *Potamogetons* (Pondweeds), *Euphrasias* (Eyebrights) and *Rubus* (Brambles) with some success, re-finding *Rubus mucronulatus* last seen in 1982, and *Potamogeton rutilis* (Shetland Pondweed) and *Stuckenia filiformis (Slender-leaved Pondweed). He also found Potamogeton crispus* (Curled Pondweed), new to Tiree, planted in a small pond at a campsite!

Early in the year the first confirmed record for *Ajuga pyramidalis* (Pyramidal Bugle) set off a search for it on Coll and Tiree, with success, so we had that species recorded on all three main islands within a week. In September, I visited Mull and encouraged several of my local people who are helping with recording and producing the next RPR. Then in December a recent graduate from Liverpool volunteered to help with iRecord input and verification.

## North Ebudes (v.c.104)

***Stephen Bungard and Joanna Walmisley***

Over 5,500 records from 2024 have been added to the DDb including a dozen taxa new to v.c.104 and over 60 new hectad records. The new taxa are mostly garden escapes or planted, but we have three native species that are new to the vice-county.

SHARPP in 2024: Fourteen taxa were searched for, six of which involved members of SBG. Over the year, five taxa were re-found, giving a success rate of 36%. Between July and December, the two re-finds were:

- *Lysimachia minima* (Chaffweed) at Lorgill Bay - not seen there since 1971.
- *Atriplex praecox* (Early Orache) at Ord Bay – not seen there since 29/08/1979, exactly the same day that it was re-found in 2024!

Skye Botany Group (SBG) numbers have varied at the monthly field meetings, from between three and twelve. Emphasis has continued on re-finding SHARPP targets: July saw us in the Allt Grillan Gorge, a SSSI (see below); August at Ord on the Durness limestone; September and October in lochs on the Trotternish peninsula and in the Cuillin Hills.

*Nitella confervacea* (Least Stonewort)
Loch Lonachan. Found by Ben Goldsmith (2023). New to v.c.104.
*B. Goldsmith*

*Hieracium subtenue* (Dark-bracted Hawkweed): Waternish. Found by Joanna and Julian Walmisley. The first vice-county record since 1970.
*J. Walmisley.*

*Persicaria runcinata*
Kinloch. Found by Mark Duffell. This led to the re-evaluation of plants found in 2022 in Portree, which also turn out to be *P. runcinata*.
*S.J. Bungard*

Other notable records:

*Potamogeton rutilus* (Shetland Pondweed): Loch Mòr. Found by Joanna and Julian Walmisley. New to v.c.104. Needs final confirmation.

*Rumex obtusifolius* × *sanguineus* = *R* × *dufftii*. Found by Joanna and Julian Walmisley. New to hectad.

*Hieracium reticulatiforme* (Reticulate-leaved Hawkweed). Found by Joanna and Julian Walmisley. The third modern record in v.c.104.

*Elymus repens* × *junceiformis* = *E* × *laxus:* Fiskavaig. Found by Joanna and Julian Walmisley. New to hectad.

*Elodea nuttallii* (Nuttall's Waterweed): Torrin. Found by Stephen Bungard. New to v.c.104. Deliberate introduction.

*Vicia sativa subsp. segetalis:* Kyleakin. Found by Joanna and Julian Walmisley. New to v.c.104.

*Dactylorhiza fuchsia* × *purpurella* = *D* × *venusta:* Fiskavaig. Found by Joanna and Julian Walmisley. New to hectad.

*Erica ciliaris (Dorset Heath).* Harlosh. Found by Joanna and Julian Walmisley. New to Scotland. Garden escape.

*Nymphoides peltata* (Fringed Water-lily). Torrin. Found by Stephen Bungard. New to v.c.104. Accidental introduction.

## West Ross & Cromarty (v.c.105) *Duncan Donald*

As previous reports have explained, with very few active botanists living in West Ross I rely heavily on support from visitors to help me cover the ground. So it was truly wonderful to have welcomed four field meetings this year, only one of which I had any responsibility for organizing!

In June, the Inverness Botany Group visited the croftlands at Duirinish and Drumbuie: an area well recorded by Stephen Bungard in 2011, but we saw large numbers of *Platanthera chlorantha* (Greater Butterfly-orchid) and updated several 1950s records. New hectad records included the hybrid orchid *Dactylorhiza maculata* × *purpurella*, *D.* × *formosa*.

Following on immediately, Dan Watson ran a week-long recording meeting on the National Trust for Scotland's Kintail estates, based at Morvich Outdoor Centre. It was good to welcome several keen young field-botanists. 3,000 records were collected across a wide cross-section of habitats. Highlights – all at least locally rare – included thirteen sites for *Carex magellanica* (Tall Bog-sedge) across three tetrads at Falls of Glomach; new populations of *Carex vaginata* (Sheathed Sedge), *Juncus castaneus (*Chestnut Rush) and *Melampyrum sylvaticum (*Small Cow-wheat) near known sites; and new hectad records for *Alchemilla xanthochlora (*Pale Lady's-mantle) and

*Epilobium alsinifolium (*Chickweed Willowherb). This year's palm must go, yet again, to Dan himself, for finding the *Sagina procumbens* × *saginoides*, *S.* × *normaniana* (hybrid Pearlwort), a new vice-county record.

In July, Jim McIntosh organised a week-long BSBI meeting based at the Woodland Trust's Couldoran House; over 5,500 records were collected. Highlights from nearly 1,000 records from Gleann Shildeag estate itself included J*uncus anthelatus* (Lax-flowered Rush) from North America (a new vice-county record); *Sorbus rupicola* (Rock Whitebeam); and *Salix repens* var. *argentea (*the silvery form of Creeping Willow), unusually from an inland crag. Beinn Eighe, not tackled systematically since 1997, yielded updates for *Athyrium distentifolium (*Alpine Lady-fern), *Cerastium nigrescens* (Arctic Mouse-ear), *Euphrasia frigida (*Upland Eyebright), *Goodyera repens* (Creeping Lady's Tresses), *Pyrola minor* (Common Wintergreen), *Sagina saginoides* (Alpine Pearlwort) and *Sibbaldia procumbens* (Sibbaldia). Many of Beinn Alligin's Arctic-alpines – e.g. *Arabidopsis petraea* (Northern Rock-cress), *Luzula arcuata* (Curved Woodrush) and *Poa flexuosa* (Wavy Meadow-grass) – have been monitored in recent years and were seen again during this trip, but it was pleasing to have added new sites for lower-level species too, notably *Hammarbya paludosa* (Bog Orchid) and *Salix phylicifolia* (Tea-leaved Willow); the views were also spectacular. The Applecross Trust kindly offered a lift, via a private track, to enable us to reach hitherto poorly recorded areas at the peninsula's centre; highlights included a significant colony of Bog Orchid, and the discovery – amidst otherwise acidic heath and bog – of an alkaline ravine sheltering *Asplenium viride* (Green Spleenwort), *Dryopteris oreades* (Mountain Male-fern), *Galium odoratum* (Woodruff), *Orchis mascula (*Early-purple Orchid), *Orthilia secunda* (Serrated Wintergreen), *Polystichum aculeatum* (Hard Shield-fern) and *Salix caprea* subsp. *sphacelate* (the upland form of Goat Willow). Jack Ravenscroft & Lewis Donaghy also found Serrated Wintergreen, and *Melica nutans* (Mountain Melick), near Coulags. Rassal Ashwood is now sadly devastated by Ash Dieback but, from nearby, Chris Miles reported [locally rare] *Veronica anagallis-aquatica (*Blue Water-speedwell) for the first time since Druce's 1893 record!

In August, Inverness Botany Group joined me at Cadha Buidhe (where, unbeknownst to us, Will Soos had recently rediscovered *Polystichum lonchitis* [Holly-fern]). We ourselves found *Salix cinerea* × *phylicifolia*, *S.* × *laurina* (Laurel-leaved Willow) nearby, a new record, and re-found *Salix caprea* subsp. *sphacelata*. Later that month, during a foray at Dundonnell, Will and I made a new hectad record for *Atriplex praecox* (Early Orache); and I was shown one of the estate's true *Malus sylvestris* (Crab Apples), which has a very different 'jizz' from *Malus domestica*.

Other miscellaneous rare finds include a new *Zostera marina* (Eelgrass) colony offshore at Mellon Charles, discovered by Seabed and Seashore Loch Ewe community group; *Genista anglica* (Petty Whin), found by Jim McIntosh near Loch Droma; and *Hymenophyllum tunbrigense* (Tunbridge Filmy-fern) – much rarer in v.c.105 than Wilson's Filmy-fern – found by Oliver Moore on Ben Shieldaig.

Renewed thanks to all those who have submitted records during 2024.

## East Ross & Cromarty (v.c.106)

***Brian R Ballinger and Mary Dean***

This year we and others have recorded in many parts of the vice county and 6917 records have been entered on the DDb to date. We are grateful to all the contributors.

Field meetings led:

Inverness Botany Group meeting from Fortrose to Chanonry Point on May 11th.

Joint meeting between the Botanical Society of Scotland and the Inverness Botany Group at the Seaboard villages on July 11th.

BRB contributed to the Botanical Society of Scotland's Urban flora Project and has entered over 41,000 records from various parts of Scotland including Easter Ross over the last 10 years (the project as a whole has produced over 100,000 records).

The following publications appeared in 2024:

Ballinger B.R. Near your House - Plants near houses in Easter Ross BSBI Scotland Newsletter 46 13-15

Ballinger B.R. Urban and Rural Woodlands in Easter Ross BSS News 122 23-25

Exhibits at the Scottish Botanists' Conference:

Ballinger B. The Flora of Bus Stops - while you are waiting for that bus

Ballinger B. Easter Ross town walls - a plant count

Talks:

A brief talk by BRB to the Highland Biological Recording Group at Strathpeffer on November 9th 'Plant Zonation on Walls'.

One new vice county record was made, dating back to May 2023. Gus Routledge found a colony of *Fritillaria meleagris* (Fritillary) in a grassy area above the saltmarsh zone of the Cromarty Firth. We have not yet investigated its origin.

## West Sutherland (v.c.108) *Ian M. Evans and Gwen Richards*

Given the fickle weather, this has been quite an accomplishing year. Assynt field work was focussed on completing the survey of the lower parts of Quinag, with 645 records from six monads. We also recorded the valley of the River Loanan south of Inchnadamph, with 948 records from eight monads. Local Nature Conservation Sites and other areas of interest in the parish contributed a further 677 records from 11 monads.

Further afield, a ninth season of two week-long visits to Tongue on the north coast yielded over 2220 records from 31 monads. The literal highpoint was accessing the summit ridge of Ben Loyal by Argocat, courtesy of Wildland. There was impressive regeneration of *Betula nana* (Dwarf Birch) on the way up and we logged a good range of montane species.

On another day we were able to pinpoint the *Sorbus rupicola* (Rock Whitebeam) in sea-cliff woodland on the Kyle of Tongue, the first time it has been seen this century. Our thanks as always to Gordon Rothero and Ro Scott for their contributions.

Records of particular interest include *Trichophorum* × *foersteri* (Hybrid Deergrass) in both Assynt and Tongue, accompanied by *T. cespitosum* (Northern Deergrass) at the same site in Assynt. The very rare smut *Anthracoidea scirpi* was noted on the *T.* × *foersteri* at Tongue.

However, pride of place must go to the four hybrid orchids photographed by Philip Smith at Durness on 21st July, confirmed by Richard Bateman, which included the first British and Irish record of *Dactylorhiza viridis* × *Gymnadenia densiflora* (Frog Orchid × Marsh Fragrant-orchid).

Summit ridge, Ben Loyal, 29th July 2024

## Outer Hebrides (v.c.110) *Paul Smith*

Recording continues towards a tetrad flora. Just over 3000 records were added in 2024. The recorder made two visits in 2024, fewer weeks than usual. In spring I visited Barra, relatively neglected recently since it had good tetrad-level coverage early in the flora project. There were two objectives – to record islands NE of Barra, and to record some *Taraxacum* (Dandelion) (including a follow-up request from John Richards). Gighay had nice cliffs with *Ajuga pyramidalis* (Pyramidal Bugle) and *Vicia sativa* ssp *nigra* (Common Vetch) (a rare native locally). Perhaps the most interesting was a new site for *Calystegia soldanella* (Sea Bindweed), on a scruffy verge near Castlebay, but probably native.

A midsummer trip to Lewis and Great Bernera aided by Jim McIntosh and Geoffrey Hall recorded a mix of moorland, coast and inhabited tetrads, including several long walks. A surprising cluster of ferns and fern allies was written up in BSBI News 157.

It was a year for microspecies. *Taraxacum* efforts in Barra and Vatersay produced new county records for *T. obtusifrons*, *trilobatum*, *porrigens* and *kernianum* and followed up a new species. Then, enthused by Angus Hannah, I photographed *Rubus* (Brambles) in July. Brambles are thinly scattered, but *Rubus dasyphyllus* turns out to be widespread across northwest Lewis, and there were new records for *R. tuberculatus* (status unknown) and *R.* × *tridel* 'Benenden' (introduced), both in Stornoway Castle grounds. The rare *R. ebudensis* was refound in South Harris (last seen 1980). Finally, *Hieracium* (Hawkweed) specimens identified by Brian Burrow included *H. vennicontium* from a new site. Big thanks to the determiners.

## Orkney (v.c.111) *John Crossley*

Having almost run out of unrecorded areas to visit, post Atlas 2000, I turned some attention to common species. In this I was influenced by a new book by Ken Thompson called 'Common or Garden'. These most widespread and adaptable species show the most infra-specific variation. Very exposed coasts and hilltops such as occur in v.c.111 should be fertile hunting grounds, and so it has turned out. The most striking examples were both on North Ronaldsay - extremely dwarfed, prostrate forms of *Jasione montana* (Sheep's-bit) and *Atriplex patula* (Common Orache), the latter, confusingly, growing on a beach.

The largest poorly recorded area in v.c.111 was in the southern half of Hoy, fine scenery but generally botanically poor wet heath and bog. Two days of walking with Andrew Upton and much of it has been covered, and it did yield a new site for *Ophioglossum azoricum* (Small Adder's-tongue) and both *Arctostaphylos* (Bearberry) species.

Another great day on Hoy, albeit in challenging weather, was with Alison Evans and Roger Golding, in pursuit *of Cystopteris pseudoregia*, recently confirmed as occurring in Britain. We found it in three places on the same steep hill-face. A bonus for me was *Dryopteris lacunosa*, not quite so new but I had been quite unaware of it.

Perhaps the most unusual sight of the year was *Carex maritima* (Curved Sedge) growing happily from cracks in stonework at North Ronaldsay lighthouse. Possibly it was brought there with sand during the building of the light (the plant grows abundantly elsewhere on the island).

Finally, *Alchemilla mollis* (Garden Lady's-mantle) is a prolific invasive, finding its way into unimproved neutral grasslands and hill tracks. A group of us spent two days in an SSSI uprooting it, but there is much still to be done.

*Carex maritima* (Curved Sedge) at North Ronaldsay lighthouse

*Jasione montana* (Sheep's-bit) Dwarf variety *nana?* in sheep-grazed heath, North Ronaldsay

# BSBI Scottish AGM Minutes

**Saturday 2nd November 2024 at Scottish Botanists' Conference, RBGE**
**Chaired by David Elston, Chair BSBI Committee for Scotland**

## 1. Welcome

The Chair welcomed all present.

## 2. Minutes of the BSBI Scottish AGM 2023

These had been sent electronically and printed copies were also available on the day.

No substantive issues were noted. They were approved as a record of the 2023 AGM, proposed by Stephen Bungard, seconded by Ian Strachan and with general consent of those present.

## 3. Chair's report

3.1. VCRs

The Chair thanked VCRs and all who supported them in their work during the year, including those running and participating in local groups and networks, everyone who has collected and submitted records particularly those relating to SHARPP, also referees for aiding correct identification.

Three past VCRs have sadly passed away since the last AMG (Alan Silverside, Wigtownshire; Michael Braithwaite, Berwickshire & past President; Helen Jackson, East Lothian). Their contributions to BSBI were gratefully acknowledged. The recent passing of Mary Gibby, former Director of Science and RBGE was noted and gratitude expressed for her fostering of the relationship between RBGE and BSSI that we benefit so much from.

Jan Davidson (Kircudbrightshire) was welcomed to the panel of VCRs, and it was hoped Lyn Jones (Fife) would join soon. A list of requests for further input was published in the latest edition of BSBI News and offers of help were encouraged.

3.2. There were two Scottish recipients of awards for "An outstanding contribution to botany in your area (county, region or country)" and Malcolm Macneill and (posthumously) David Welch were congratulated.

3.3. Following the successful launch of Plant Atlas 2020 in Scotland, BSBI made a presentation to MSPs and staff at Holyrood, sponsored by Mark Russell MSP. The presentation was well received and the value of Plant Atlas 2020 recognised by a Parliamentary Motion.

3.4. All involved in leading and organizing the large, diverse and successful set of outreach events and field meetings were thanked, especially Beccy Middleton as Field Meetings Secretary and Faith Anstey as Chair of the Outreach

Committee. Faith was warmly thanked by all present for her leadership of the outreach activities is Scotland, a role to be undertaken in future by Aileen Meek.

3.5. Thanks were given to John Crossley as Editor of, and all contributors to, another splendid edition of the Scottish Newsletter.

3.6. Three national consultations had been responded to during the year, and support from the Chair provided to two local consultations.

3.7. An update was provided of the current state of play regarding discussions for uploading BSBI data to NBN Atlas with a reduced time lag, also regarding seeking to encourage consultancies to make more use of BSBI data. Further contributions to the discussion were invited.

3.8. The Chair thanked all others who had contributed to the work of BSBI in Scotland during the year, including the Committee for Scotland, RBGE and the principal funders of the Scotland Officer post (NatureScot and an anonymous donor). The extent and quality of the work undertaken by Matt Harding as Scotland Officer during the year was recognised by acclamation.

**4. Adoption of new constitution for Committee for Scotland**

The Chair described how the constitution had been completely rewritten in line with the BSBI's governance guidelines, as the old constitution was very much outdated. Copies of the old and new constitution were provided as for the 2023 AGM minutes, since there were so many changes that it was not practical to list them. The Chair thanked Julia Hanmer, Chief Executive, for her help in this process. Ian Francis proposed that the CfS adopt the new constitution; this was seconded by Theo Loizou and agreed by general consent of those present.

**5. Committee for Scotland 2024-25 – composition and elections**

John Crossley was standing down from the Committee as he had been a member for the required number of years, and Louise Ross because due to a change of employment she felt less able to contribute. The Chair thanked both for their contributions.

Alex Twyford had been nominated for election by the Committee. The remainder of the existing Committee were willing to continue as follows: David Elston as Chair, Polly Spencer-Vellacott as Secretary, Beccy Middleton as Field Meetings Secretary, Georgia Hancock, Ian Francis, Sarah Watts, Amelia Hodnett and Caspian Richards.

The committee as a whole was proposed by Ian Evans, seconded by Jim McIntosh and agreed by those present.

**6. The Chair outlined several areas of activity anticipated during 2024-25. Aspects not mentioned in the report for the year to date were as follows.**

6.1. Beccy Middleton was thanked for her work fixing dates and venue for next year's Annual Summer Meeting (the corrected dates being Mon 4 - Thurs 7 August 2025, based in Melrose), details to appear in the yearbook;

6.2. Further development of the Mountain Plants Alliance a joint initiative with NTS, Plantlife and RBGE to share knowledge about, and jointly promote steps to protect, this important element of our flora.

6.3. A sample contribution for 'Wildlife on the Tourist Trail' would be prepared and circulated in the hope of encouraging other botanists to provide descriptions of the flora that may be seen by visitors to selected tourist sites.

6.4. More tutors were sought for Identiplant to enable a greater proportion of applicants to be enrolled onto the scheme.

6.5. Members were encouraged to undertake recording at the many unallocated NPMS squares in Scotland.

6.6. Although several nationally-led science projects are being worked up, none are expected to implemented during 2025 and so recorders will have another opportunity to focus on local priorities. A request for assistance collecting samples of Hierochloe odorata Holy-grass for genetic analysis will be issued.

**7. Date of next 2025 AGM**

2025 Scottish Botanists' Conference, date TBA.

**8. AOB**

The chair asked for questions and comments from the audience.

Duncan Donaldson mentioned a backlog in verifications and wondered if this would cause problems regarding the provision of records to the NBN Atlas – what will happen if records are not verified? The Chair said that verified and unchecked records would be upload to NBN Atlas – not all records (i.e. for common species) need to be individually verified. Matt Harding confirmed that VCRs should not worry about backlogs but focus on current recording.

Davina Gray asked about progress with the Biodiversity Metric as there was no information available yet, and wondered if the NPF4 would provide any stronger voice for plants allowing rare plants to be protected? The Chair said that it seems to be business as usual – economic development seems able to overrule botanical interest of the same spatial level of importance. Ro Scott said that we will see what the results of the new enquiry at Coul Links are. The Chair agreed that this would be a test of the Scottish Government.

Cameron MacIver made a comment about the provision of biodiversity data and charging for it – about the possibility of Local Record Centres (where they exist) charging once for data that would include BSBI data. He also asked if other sources were available and how they compare with BSBI records. The Chair said that although the discussion to date had been regarding NBN Atlas many VCRs have links with councils and LRCs. The conclusion was that sharing data is the aim, but questions remain about how to do it best.

**Are you interested in becoming more involved in BSBI's activities?**

There are many ways in which you can become more involved in BSBI.

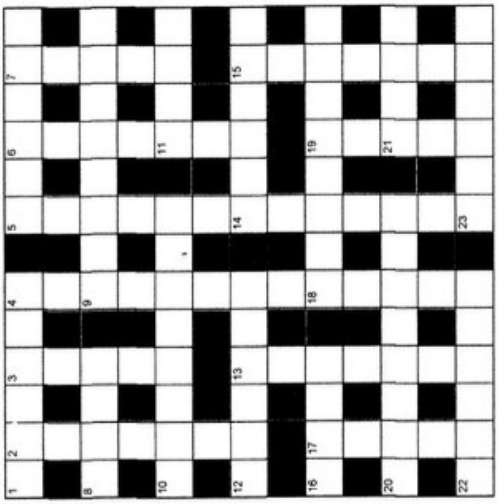
To find out activities organised at a local level, the best source of advice is your vice county recorder, details from the local botany section of the BSBI website.

The **Outreach Committee** is always keen to hear from members willing to assist with training courses and workshops.

Also, the constitution of the **Committee for Scotland** requires some turnover of membership at each AGM. If you are willing to consider joining, please contact Chair/Secretary to discuss.

CROSSWORD No 9

by Cruciada



ACROSS

1. A 3 is smashed in study (4,2)
5. It's certain that, in France, you will be involved in opening line of dehiscence (6)
8. Does potato function include preparation of soybean? (4)
9. Old countryside patroller you originally found in conservatory growing fruit (8)
10. My ice all melted in mass of hyphae (8)
11. Tall yarrow conceals supportive friend (4)
12. Something sticky found in shelter is a member of Fabaceae (6)
14. Yonder kid has covering of straw (6)
16. He or she employs American casualty (4)
18. A burger case poet cut off with DAFOR element (8)
20. An alternative ending to Germander's hesitation is native to Troy (8)
21. Extremely light (4)
22. Trews ripped up mid-morning and scattered about (6)
23. Rodent – brown – seen climbing palm (6)

DOWN

2. Online company kind to locally adapted population (7)
3. Medic at uni takes exercise with date, say (5)
4. Anti-abortion allowance results in unusual extra production (13)
5. Overheated marathon contestant, perhaps, gets 12 (7,6)
6. Gives label to mother and thanks for collection of body segments (7)
7. Countryside work introducing robots to a leading landowner (5)
13. Universal time looms over damaged relic of Carex fruit (7)
15. Erica has plans that are nice (7)
17. Ordered letters for ancient crop (5)
19. Lump of turf four brought to full stop (5)

Solution on page 106

# Botanical Society of Scotland

## Field meetings Summer 2025

## ALL WELCOME

The meetings listed below are the scheduled field meeting of the Society. We may also arrange extra meetings throughout the summer months. Check our website https://www.botanical-society-scotland.org.uk/ for further details, any additional events, or changes to arrangements. For all meetings, except for those for which a specific contact is mentioned, the primary point of contact is the **Programme Secretary**, Maria.Chamberlain@ed.ac.uk

**Monday (Bank Holiday) 5 May, 10am Craigmillar Park, Edinburgh**. Foraging walk and taster picnic.
Leader: Nenya Milne. Contact for registering and further information: Maria Chamberlain Maria.Chamberlain@ed.ac.uk

**Tuesday 20 May, 7pm Carnoustie Golf Course**. General recording. Joint with Dundee Naturalists Society. Leader and contact: Anne Reid acmc.reid@virgin.net

**Thursday 29 May, 7pm—9pm Ashworth Laboratory, University of Edinburgh**. **Evening crash course in flowering plant ID (not grasses).** Leader: Richard Milne
Please **book** with Maria.Chamberlain@ed.ac.uk

**Sunday 1 June, 11am West Lothian Bings**. Plants and fungi. Joint meeting with Edinburgh and Lothians Fungi Enthusiasts.
Leaders: Cameron Diekonigin and Richard Milne

**Sunday 22 June, 10am—4pm Holyrood Park, Holyrood Park Education Centre. 'Towards 900 Plants'.**
Leaders: several

**Saturday 28 June, 10am. Ben Chonsie (via Glen Turret) BSS Alpine Field Meeting. Leader: John Holland.**
Numbers limited, booking essential, email john.holland@sruc.ac.uk

**Saturday 12 July, all day from 10.30 am. Evanton,** Easter Ross. Joint with Inverness Botany Group. Leader and for further information: Mary Dean themarydean@aol.com

**Saturday 12 July, all day Kinghorn Loch, Fife**. Bioblitz. Leader: Robert Mill

**Saturday 26 July, 11am Carsehall bog (near Loch Leven)**. Joint with the Fife Botany walks Group. Leader: Sandy Edwards.
Further details from Alison Davies alisond2006@gmail.com.

**Some time in September**, date and time to be confirmed. Fungus Foray. Joint meeting with Edinburgh and Lothians Fungi Enthusiasts. Leader: Cameron Diekonigin.
Check our website https://botsoc.scot/.

# BSBI Annual Summer Meeting 2025

## Monday 4th August – Thursday 7th August, Melrose.

Join us for some wonderful botanical excursions in the Scottish Borders. There will be opportunities to see a wide range of exciting plants and habitats, but of special interest are the numerous basin mire fens, many of which are calcareous, which together form the largest concentration of this botanically rich habitat in the UK. There will be something for members of all levels of experience and beginners are particularly welcome.
There will be field excursions on Monday afternoon, Tuesday, Wednesday and Thursday morning to suit a range of interests, along with evening talks and workshops.

Further information and booking is available through the event page at https://bsbi.org/annual-summer-meeting - please register before 30th June

ANSWER TO CROSSWORD ON PAGE 104

ACROSS

1. READ UP 5. SUTURE
8. TOFU 9. ORANGERY
10. MYCELIAL 11. ALLY
12. LEGUME 14. THATCH
16. USER 18. ABUNDANT
20. TEUCRIAN 21. VERY
22. STREWN 23. RATTAN

DOWN

2. ECOTYPE 3. DRUPE
4. PROLIFERATION 5. SCARLET RUNNER
6. TAGMATA 7. RURAL
13. UTRICLE 15. CINEREA
17. SPELT 19. DIVOT

**CRIB**

ACROSS

1. anagram of A + DRUPE 5. SU<TU>RE
8. potaTO FUnction 9. O/RANGER/You
10. anag ALL MY ICE 11. tALL Yarrow
12. LE<GUM>E 14. THAT/CH
16. US/ER 18. A/BUN/DANT
(e)20. in TEUCRIUM replace UM with AN
21 double definition
22. anag TREWS + morNing 23. charade

DOWN

2. E/CO/TYPE 3. DR/U/PE
4. PRO-LIFE/RATION 5. pun
6. TAG/MA/TA
7. R.U.R. was the work that introduced the word 'robot'/A/L
13. U/T/anag RELIC 15. anag ARE NICE
17. double def 19. D<IV>OT

# BSBI FIELD MEETINGS AND WORKSHOPS 2025

## See Year Book and website for full details

**Saturday 7 June (Beginners, Training) Plant Families Workshop, 10th Perthshire Scout Hall, Perth (v.c.88)**
Leader & contact: Aileen Meek (aileenammeek@gmail.com)

**Saturday 8 June (Training, General) Kinnoull Hill SSSI, Perth (v.c.88)**
Leader & contact: Faith Anstey (faithanstey@gmail.com)

**Saturday 14 June (Beginners, Training) Start to identify Grasses, Holyrood Park Education Centre, Edinburgh (v.c. 83)**
Leader & contact: Michael Philip (botany@opus44.co.uk)

**Saturday 21 and Sunday 22 June (Specialised, Amber) Endemic hawkweed survey, Sittal of Glenshee (v.c.89)**
Leader & contact: Tim Rich (tim_rich@sky.com)

**Sunday 22 June (General, Red) Little Kilrannoch, Caenlochan SSSI, Glen Doll, Angus (v.c.90)**
Contact: Lyn Jones (joneshamlyn@gmail.com)

**Saturday 5 and Sunday 6 July (Specialist, Training) Brambles, Dunbar (v.c.82)**
Leaders: Marion Moir, Caspian Richards and Angus Hannah.
Contact: Marion Moir (marion.moir@btinternet.com)
Saturday 5 to Monday 7 July (Recording) Letterewe Forest (v.c.105)
Leader & contact: Duncan Donald (drd16C@gmail.com)

**Saturday 12 July (General, Recording) Evanton (v.c.106)**
Leader & contact: Mary Dean (themarydean@aol.com)

**Sunday 13July (Training) Start to Identify Grasses, Kirkhill Community Centre, Inverness (v.c.96)**
Leader & contact: Faith Anstey (faithanstey@gmail.com)

**Saturday 19 July (Training) Grasses, Sedges & Rushes, Ben Lawers (v.c.88)**
Leaders: Dan Watson and Faith Anstey. Contact: Faith Anstey (faithanstey@gmail.com)

**Monday 4 to Thursday 7 July (Beginners, General, Recording, Training) Annual Summer Meeting, Melrose , Roxburghshire (v.c.80)**
Contacts: Becky Middleton (beccy.a.middleton@gmail.com) (local details) or Jonathan Shanklyn (jdsh@bas.ac.uk) (general enquiries) for further information

**Saturday 9 and Sunday 10 August (Intermediate, Training) Aquatic plants – survey and identification, Deeside, Aberdeenshire (v.c.92)**
Leaders: Ian Francis (v.c. 92 Recorder), Kathy dale (Freshwater ecologist), Olivia Lassiere (Ecologist, Scottish Canals). Contact: Ian Francis (ian@farmland.plus.com)

**Saturday 106 and Sunday 17 August (Recording) Northern Lochs of the Galloway Forest Park (v.c.95)**
Leaders: Carol Crawford and Dave Lang. Contact: (carol@carolcrawford.plus.com)