Botanical Society of Britain & Ireland

# BSBI

## SCOTTISH NEWSLETTER

48 Spring 2026



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Grey rows of the contents table are included in the online version only, to reduce costs.

For the full issue (and past issues), please see: bsbi.org/learn/periodicals/newsletters/scottish-newsletter, or sign up for the digital subscription. Contact: scottishnewsletter@bsbi.org.

This *Scottish Newsletter* was edited by Jenna Poole and Matt Harding, with editorial assitance from Sorrell Banks, Rebecca Cheape, Anthony McCluskey, and Caspian Richards.

Cover photo: *Kalmia procumbens* (Trailing Azalea) East Ross, by Alex Liddle. Entrant in the BSBI Photographic Competition 2025. bsbi.org/take-part/activities/bpoty.

The BSBI's Scotland webpage is: bsbi.org/in-your-area/countries/scotland.

# Notices

## Announcements from the Committee for Scotland

*David Elston (Chair, Committee for Scotland)*

**Scottish Botanists' Conference (SBC)**: The 2026 SBC will be held at the Royal Botanic Garden Edinburgh (RBGE) on Saturday 7 November. As ever we are very grateful to RBGE for agreeing to host the event.

**Scottish Annual General Meeting (AGM)**: To create more time for networking, and for the workshops and exhibitions at the Scottish Botanists' Conference, the Committee for Scotland has decided to trial holding the Scottish AGM as an online event ahead of the SBC, instead of combining it with that event. This online AGM will be held in late September or early October, and should last no more than half an hour, followed by an online botanical talk. The date and time of this event, and full details of the talk, will be confirmed nearer the time and announced by email and on the website. The closing date for nominations for election to the Committee for Scotland by the membership will be 28 days before the AGM. Nominations should be sent to the Secretary of the Committee for Scotland, Polly Spencer-Vellacott (pollyspencervellacott@gmail.com), and require the support of two other BSBI members.

Details of these events will be updated as we have them at bsbi.org/take-part/events/browse/annual-events/scottish-botanists-conference-agm.

## Scottish Newsletter Editor and Editorial Team vacancies

After two brilliant *Scottish Newsletters*, John Crossley stepped down as Editor to focus on his work as Vice-County Recorder for Orkney - our thanks to John for his superb stewardship of the newsletter.

The newsletter is now in need of a new Editor to take the reins. The role could be shared across a small team, and proof-readers may also be required. The newsletter is an annual periodical, and the next issue is due for publication in Spring 2027, with work starting in January 2027.

You would be working closely with the Scotland Officer, to source feature articles, and then compiling these articles and the vice-county annual reports into one invaluable source of botanical news from across Scotland. It's a great way to keep up with what's happening, and hear first-hand about exciting botanical finds and ambitious plant conservation stories. So if you have editorial experience, or the enthusiasm and time to hone these skills, please email volunteering@bsbi.org.

## Scotland Vice-County Recorder vacancies

*Matt Harding (Scotland Officer)*

Following some well-earned retirements we now have several vice-counties where we are looking to recruit new Vice-County Recorders (VCRs). Caith-

ness is vacant, and in East Perthshire we are looking for a team to succeed Martin Robinson. In the Clyde Islands, Angus Hannah has stepped down and we would welcome new recorders to help support Sarah Cowan. We are also keen to recruit additional VCRs for North Ebudes and Westerness, in anticipation of members of the existing teams stepping back, and would welcome recorders based in or near Kintyre to assist the new VCR team with coverage.

Several other vice-counties are looking to build their teams, including people to help organise local botany group activities in West Lothian and Stirlingshire.

If you are interested in becoming a VCR, or part of a team, or would like to learn more, please contact Matt Harding matt.harding@bsbi.org. Find out more about vice-counties and the work of VCRs at bsbi.org/in-your-area/local-botany.

## Outreach Committee Publicity Volunteer vacancy

*Aileen Meek (Chair, Scottish Outreach Committee)*

The Scottish Outreach Committee is in need of an Outreach Publicity Volunteer. Can you help? The Outreach Committee plan and organise training workshops and field meetings throughout Scotland, to enable people with an interest, but perhaps no prior training, to learn about botany.

When venues, locations and dates are set, these events need publicity to attract new aspiring botanists to come and learn about plant ID, and to encourage the building of knowledge and skills in botanists who want to progress further.

All you need to do is to distribute the details of events via various platforms, helping to spread the word and get people interested in our events.

Want to find out more? Or just get started? Please get in touch on 07879 626559 or email aileenammeek@gmail.com.

You can also find out more about the Committee here: bsbi.org/about/governance/country-committees/scotland/scottish-outreach-committee. The Outreach Committee is always keen to hear from members willing to assist with training courses and workshops. Contact Aileen Meek aileenammeek@gmail.com to find out more.

## New BSBI website launched

In November 2025 we launched the new BSBI website. We hope that you have all had a chance to take a look at it. Thank you to everyone who has made use of, and sent feedback on, the refreshed site so far. All of our old favourites are still there, but we've also included new features, like plant pages, improved events listings, and an improved search facility. We're continuing to develop all of our websites, and will include regular updates in our member emails, to let you know what's new. If you have trouble logging in please get in touch on enquiries@bsbi.org, and to give feedback on the website please use websitefeedback@bsbi.org.

# Scotland Officer's Report 2025

*Matt Harding, Scotland Officer*



Matt in mountain botany heaven, on the Hesperides Ledge high on the north face of Ben Nevis.
*Mike Pescod*

My year kicked off with the BSBI's New Year Plant Hunt, and in what is fast becoming a tradition, members of my local botany group joined me for a Hunt around Stirling. We managed to top our previous year's tally by three, finding 45 species in flower along our route including locally scarce plants such as *Trifolium arvense* (Hare's-foot Clover), *Lamium amplexicaule* (Henbit Dead-nettle) and *Aethusa cynapium* (Fool's Parsley). We celebrated what surely was the highest total in Scotland, until a quick check of the results website revealed we had been gazumped by a list of 53 species from Coldingham, Berwickshire – bravo Robin Cowe!

For me, the major botanical event of 2025 was the publication of *A new vascular plant Red List for Great Britain*, led by BSBI Scientific Officer Pete Stroh. This was a comprehensive review of the Great Britain (GB) Red List for all native and archaeophyte vascular plants, using the BSBI's plant distribution data verified and published in *Plant Atlas 2020*. Threat assessments for each taxon were undertaken following the standardised International Union for Conservation of Nature (IUCN) criteria, making the results comparable with other Red List projects around the globe. The results revealed that over 25% of Scotland's flora is threatened or near threatened with extinction, with 43 taxa assessed at the most dire level (short of actual extinction), 'Critically Endangered'. The GB Red List also highlights a group of taxa where, despite sterling work by BSBI recorders and other botanists for many years, we still don't know enough about their distribution and trends to make an informed threat assessment. I have highlighted a few of these 'Data Deficient' taxa in an article in this Newsletter, along with pointers as to how to identify them, in the hope that raising their profile will encourage more botanists to seek them out and record them.

Of course, the achievements of the new GB Red List and *Plant Atlas 2020* would not be possible without the data gathering that underpins all this analysis. In 2025, botanists in Scotland made over 300,000 plant records – an impressive total and an increase of 20% on 2024 – so thank you to everyone who contributed records! The launch of the BSBI Recording App has made a

big difference for many botanists in the field, eliminating time-consuming data entry and bringing the records straight to the BSBI's Distribution Database (DDb) for verification by Vice-County Recorders, as well as making it easier to make the odd casual record here and there whilst on non-botanical excursions (analysis of my casual records reveals clusters at playparks and supermarkets…).

Another advance in data gathering this year has been the incorporation of iRecord and iNaturalist records into the DDb, resulting in over 1,500 recorders contributing records to the Scottish total in 2025 via one channel or another. Whilst some of this data inevitably needs careful validation, the benefits of reaching such a wide pool of new recorders is significant, and in my vice-county of Stirlingshire new sites for goodies such as *Sedum villosum* (Hairy Stonecrop) and *Botrychium lunaria* (Moonwort), and novel aliens such as *Cardamine corymbosa* (New Zealand Bitter-cress), have been discovered by iRecord and iNaturalist users. We are keen to recruit more iRecord verifiers to help sort through and validate these data, so if you are interested and would like to find out more please get in touch (matt.harding@bsbi.org).

It was Scotland's turn to host the rotating BSBI Annual Summer Meeting (ASM) in 2025, with 55 botanists from all over Britain and Ireland descending on Melrose for four days of botanical recording, focused on Roxburghshire but with excursions in neighbouring Selkirkshire and visits further afield to the coast in East Lothian and Berwickshire, and to the mountains of Dumfriesshire. More details are provided in the BSBI Yearbook (available to members) and in the summary note in this Newsletter; suffice to say that some great company was enjoyed, lots of fantastic plants were seen, and thousands of records made using the Recording App. Thanks are due to everyone who helped organise the ASM and led excursions, and particularly to Jeff Waddell, Jonathan Shanklin and Beccy Middleton as the core organisers. On a personal note, I thoroughly enjoyed wading into lochs and rivers on all four days, helping to bring aquatic plants such as *Potamogeton x angustifolius* (Long-leaved Pondweed), *Subularia aquatica* (Awlwort) and *Ranunculus fluitans* (River Water-crowfoot) to the considerably drier masses.



Nick Stewart picking through a grapnel of *Nitella translucens* (Transluscent Stonewort) and *Chara virgata* (Delicate Stonewort), hunting the elusive *C. socotrensis*.
*Matt Harding*

On the subject of aquatics, 2025 saw a real push to increase targeted recording of this group of plants, easily overlooked on generic recording excursions, helped by the ASM and several dedicated events: an aquatic plants training and recording weekend at Muir of Dinnet, South Aberdeenshire; a recording weekend focused on the northern lochs of the Galloway

Forest Park, Ayrshire; and the Colvend Lochs Project in Kirkcudbrightshire (see the article by Sarah White in this Newsletter, and the relevant vice-county Annual Reports). A big thank you to all the organisers and trainers who led these events. As a result, the annual number of records of aquatic plants made in Scotland rose from 1,975 in 2024 to 2,597 in 2025, a 30% increase. The challenge now is to maintain this higher level of interest and recording effort in future years! My contribution to the total included a wonderful day out in a boat on Lake of Menteith (West Perthshire) with aquatic expert Nick Stewart, searching for *Najas flexilis* (Slender Naiad). Alas we failed to refind our target, but were amply compensated by records of *Potamogeton lucens* (Shining Pondweed), *Pilularia globulifera* (Pillwort) and the enigmatic *Chara socotrensis*, thought to be an introduced species and in Britain now known only from this site.

All field meetings have an element of botanical training built in, as we pick up knowledge and skills from our peers, but in Scotland we are fortunate to have a dedicated Outreach Committee who organise and run training events (see the article by Aileen Meek in this Newsletter). This year Outreach events focused on wildflower families and grass identification for new and improver botanists, as well as a new workshop on rush identification for 'complete beginners' held at the autumn Scottish Botanists' Conference – many thanks to all the workshop leaders and tutors who lent their expertise and enthusiasm. Special mention should also go to Jake Brendish and David Elston, who held Scotland's first ever Field Identification Skills Certificate (FISC) in Aberdeenshire. The FISC is fast becoming a standard qualification for professional botanists and ecologists working in the consultancy sector, and being able to provide them with the opportunity to test their identification skills in a standardised way here in Scotland is a great step forward for BSBI's mission to support botanical skills development.



Identiplant students admiring ***Micranthes nivalis*** (Alpine Saxifrage) and *Sabulina rubella* (Mountain Sandwort) on the south-west crags of Ben Lawers. *Matt Harding*

The BSBI's Identiplant course, a tutor-led remote learning programme, is also central to this mission. In 2025 38 students took the course in Scotland, and the intake grows year-on-year with 46 students enrolled for 2026 – limited only by the number of tutors. If you would like to get involved and try your hand at being an Identiplant tutor for 2027, please get in touch! (matt.harding@bsbi.org) You don't need to be an expert botanist to be a tutor, just have a thorough grounding in the basics, and the support materials and a mentor will help guide you through. Although Identiplant is a remote learn-

ing course, no one would dispute the benefits of in person field training, and with that in mind I held a day for Identiplant students on Ben Lawers (Mid Perthshire) at the start of August. The mountain weather gods smiled on us, and a fantastic time was had revising family characteristics for commoner species and admiring the smorgasbord of arctic-alpine rarities that Ben Lawers has to offer. The group was blown away by the blue jewel of a plant that is *Gentiana nivalis* (Alpine Gentian), enjoying a remarkable year on the mountain with record numbers at several sites. Other student favourites were *Polystichum lonchitis* (Holly-fern), *Salix reticulata* (Net-leaved Willow), *Myosotis alpestris* (Alpine Forget-me-not) and *Micranthes nivalis* (Alpine Saxifrage). The fingernail-sized rosette of *Sagina nivalis* (Snow Pearlwort) that I found after much searching, flowerless and mist-enveloped, was less popular.



*Micranthes nivalis* (Alpine Saxifrage) in full flower on the south-west crags of Ben Lawers.
*Matt Harding*

As Gus Routledge says in his article in this Newsletter, every so often an opportunity comes along that you simply can't pass up, and in 2025 it was the national *Saxifraga cespitosa* (Tufted Saxifrage) survey organised by Plantlife Scotland. Whilst Gus worked away in the north of Scotland, I had the Ben Nevis and Grey Corries populations to survey (Westerness), ably supported on Nevis by Mike Pescod and his Abacus Mountain Guides team, whose job was it to get me to places most botanists can't and stop me wandering off a cliff whilst looking for saxifrages! They succeeded in their brief, allowing me to survey all known sites on the north face in great detail, more than doubling the population here to 216 plants. Doubtless more colonies exist in even more inaccessible corners on this giant, alpine expanse of rock.

Highlights included a 100 m abseil down the crest of the Comb to reach Hesperides Ledge, a sloping weakness dripping with *Veronica alpina* (Alpine Speedwell) and other nice plants; an atmospheric excursion down the top of Number 2 Gully on a rope through some of the most abundant and lush *S. rivularis* (Highland Saxifrage) populations I've ever seen, to rediscover a splendid Tufted Saxifrage plant with 50 flowers first found by Ian Strachan on the Ben Nevis North Face Survey (2014-16); and finding a 'nursery' of tiny Tufted Saxifrage seedlings growing in a seepage line on the gully sidewall at the top of the main colony. Moments that perhaps class as memorable rather than highlights *per se* included free-hanging on the abseil off Hesperides Ledge, trying to count and photograph plants without dropping my phone, GPS or notebook, and pulling the rope at the base of the Great Chimney abseil and then cowering as it disgorged some of its rattly innards upon us. The Grey Corries survey was a quite different affair, as I walked up to camp high in the mountains the night before, and enjoyed a solitary, sunlit day



*Saxifraga rivularis* (Highland Saxifrage) growing in profusion in the upper reaches of Number 2 Gully, Ben Nevis.
*Matt Harding*

exploring the crags and their rich arctic-alpine flora, rewarded by the discovery of three Tufted Saxifrage plants (one of which was, as Gus notes, a monster). This area still has much to reveal botanically, and I was delighted to find new populations of *Carex atrata* (Black Alpine-sedge), Alpine Speedwell, Holly-fern and other super plants.

From the highest point in Scotland to the lowest, 2025 was the year I decided to investigate the Forth Estuary coastline that bounds my vice-county in the east more forensically, focusing particularly on the tricky taxon groups of *Salicornia* (Glassworts) and *Atriplex* (Oraches). The headline discovery from these efforts was *Salicornia emerici* (Shiny Glasswort) at the RSPB's Skinflats reserve, a first confirmed record for Scotland, along with new sites for *S. dolichostachya* (Long-spiked Glasswort) and *Atriplex longipes* (Long-stalked Orache). Enthused, I applied what I had learned to the saltmarsh in Aberlady Bay, East Lothian, coming away with refinds from the 1980s of *S. europaea s.s.* (Common Glasswort) and Long-spiked Glasswort, and new vice-county records of Long-stalked Orache and *A. portulacoides* (Sea-purslane). East Lothian Recorder Marion Moir also surveyed the saltmarshes for Glassworts at Tyninghame in the east of her vice-county, with notable success. I am very grateful to the BSBI Referees Fred Rumsey and John Akeroyd for their generous support and patience with my efforts, and would like to acknowledge the brilliant work of the whole BSBI Referee network – a group of taxonomic experts that provide invaluable assistance to botanists such as I.

Just along the coast at Longniddry, in September we were delighted to welcome the Rose referees, Roger Maskew and Gareth Knass, for a training workshop for Scottish Vice-County Recorders on this tricky taxon group in advance of the publication of their splendid new BSBI Handbook, *Wild Roses of Great Britain and Ireland*. Roger and Gareth's skill in interpreting the features of the plants in front of them was a marvel to behold, and their ability to communicate the complexities of the local rose species and their hybrids in a clear, accessible manner was appreciated by all. The session was a real eye-opener for me, and I particularly valued learning about *Rosa x dumalis*, the hybrid between *R. squarrosa* (Glandular Dog-rose) and *R. vosagiaca* (Glaucous Dog-rose) which has double-toothed leaves with glandular margins, but a fairly narrow stylar orifice and glaucous-green, folded leaflets – a combination of characters that I see quite frequently in Stirlingshire and look forward to investigating more critically in 2026! Sadly Roger Maskew passed away recently, and I feel so honoured to have had the opportunity to meet

and learn from him at this event.

November saw the Scottish Botanists' Conference (SBC) return to Royal Botanic Garden Edinburgh (RBGE), a joint event with our partners the Botanical Society of Scotland (BSS) and RBGE. This year a record 230 botanists descended on Edinburgh for the conference, booking up well in advance – a great indicator of the health and enthusiasm of the Scottish botanical community. RBGE also held an Herbarium open event the following day, where volunteers helped sort through a treasure trove of Scottish herbarium specimens hidden away in the RBGE basement, discovering a host of new vice-county records and other valuable material now on the pathway to accession and a place in the national herbarium collection.

My personal standouts from the SBC were the account of work towards a new, and simpler (hurrah!) *Euphrasia* (Eyebright) taxonomy by 'Team *Euphrasia*', and the discussion session on conservation translocations, where over 80 participants debated a few of the aspects of this complicated topic, ably chaired by Alistair Whyte of Plantlife Scotland. Two themes coming out of the discussion were the need for clearer oversight and better information sharing. Since the conference, I've been pleased to learn about plans for a national conservation translocation database, as well as plans for closer partnership with the BSBI in Scotland by some practitioners. As always, the success of the SBC depends on volunteers: providing talks and leading workshops, showcasing their botanical finds and projects through exhibits, and bringing an amazing energy to the day. A huge thank you to everyone who contributed, and if you would like to get involved with the 2026 edition, I'd love to hear from you!

To close this glimpse into my botanical year as BSBI Scotland Officer, I want to thank the Vice-County Recorder network in Scotland, a group of passionate, dedicated and welcoming botanists without whom the BSBI's work – producing Red Lists, Plant Atlases, providing training courses, developing recording projects and much more – simply would not be possible. This year we welcomed new Vice-County Recorders Ian Moir and Georgia Hancock to Argyll and Kintyre, and John Gallacher to West Perthshire, and we are actively looking to recruit more recorders in a number of vice-counties, particularly in Caithness which is currently vacant. If you would like to get involved and want to learn more, or would like to recruit assistants for your vice-county, please do let me know (matt.harding@bsbi.org). Happy botanising in 2026!



The late Roger Maskew demonstrating the features of *Rosa mollis s.s.* (Soft Downy-rose) at Longniddry, East Lothian.
*Matt Harding*

# Scottish Outreach 2025

*Aileen Meek (Chair, Scottish Outreach Committee)*

In 2025, seven leaders organised training events which attracted 151 attendees (see table below). The Scottish Botanists' Conference at the end of the year, and the Scottish Newsletter as the new season begins, are perfect opportunities to thank the leaders and the twelve tutors (all named below), for volunteering their time to prepare for and run these events. Thank you all so much!

We are always keen to expand the range of locations for outreach events to take place. If you are interested in attending a workshop or field meeting in your area, or if you would like to organise or lead one, please let us know.



Graminoids at Ben Lawers.
*Faith Anstey*

Many members of the BSBI and other organisations with Scotland's natural environment at their heart, such as Perthshire Society of Natural Science (PSNS), will remember Alistair Godfrey. Alistair was joint BSBI Vice-County Recorder for Mid Perthshire (VC88) from 2003, with Jim McIntosh, and during this time he also served on the BSBI Committee for Scotland. Alistair died in December 2022. Liz Lavery wrote an appreciation of his life and described his significant contributions towards the management and conservation of nature-rich and vulnerable areas in Perthshire and Scotland in both his work and leisure time. You can read the inspiring obituary written by Liz in BSBI News 156 from April 2024.

Alistair's daughter Maggie was one of our students at the Plant Families ID Workshop in Perth in June 2025 and has written a review of this training event below. Thank you to Maggie.

**BSBI workshops: A beginner's perspective**

**Maggie Godfrey**

On 7 June 2025, I attended the Plant Families ID Workshop in Perth. While booking our place for the workshop we were prompted to grade our pre-existing botanical knowledge; this was used to organise the workshop attendees into groups, ranging from beginner to advanced, with a tutor assigned to each group. I generously rated myself as Level 1, and on the day of the workshop relievedly found myself in the beginner group and amongst friend-

ly and enthusiastic attendees. Prior to the workshop I had a little botanical knowledge thanks to my father, Alistair Godfrey. Having a BSBI recorder as a father meant that from a very young age I was taken (dragged) along on regular walks to look for plants. I was very fortunate that he shared his wealth of knowledge with me, but much less fortunate in terms of remembering it.

The workshop introduced a method of identification mostly new to me - using keys to identify a plant's family, then narrowing down possibilities until a conclusive identification is reached (a much more sustainable approach than solely trying to memorise species!). Each workshop attendee was provided with a copy of Faith Anstey's *Pocket Guide to Wildflower Families*, a comprehensive yet accessible key to common wildflower families, around which the workshop was based. The workshop also featured the *Collins Wild Flower Guide*, to which the pocket guide is an excellent complement.

A vast selection of plant specimens was provided at the workshop, on which we were able to test our emerging identification skills. In the afternoon we headed outside to hone our skills in the wild, in this case Viewlands Reservoir Park. It was surprising to see so many species present in an urban area, and we were able to successfully identify species of Speedwell, Vetch, Orchid, and Comfrey.

The workshop was enjoyable, engaging and accessible due to the thoughtful presentation, organisation, and tutoring towards multiple ability levels. All tutors were patient, kind and approachable, ensuring that we felt comfortable enough to ask questions. To a beginner, botany can appear overwhelming and intimidating, with some of the available educational material being challenging to follow (and sometimes quite dry)*. The workshop, and Faith Anstey's pocket guide, greatly improve upon this and are a must for anyone newly venturing into botany.

My advice to any beginners considering attending a workshop: do it! And don't forget your antihistamines.

*I can't help but comment on "educational material being … (..sometimes quite dry)". On the contrary, our materials in Viewlands Reservoir Park on 7 June got quite seriously wet! But not yet as wet as it got at Ben Lawers. So bring your brolly!

To learn more about the work of the Scottish Outreach Committee, please visit:bsbi.org/about/governance/country-committees/scotland/scottish-outreach-committee

The table below shows a summary of the Scottish Outreach events in 2025, with dates, topics, locations and attendee numbers.



Plant Families ID workshop at Viewlands Reservoir Park.
*Aileen Meek*

| Date | Type | Target group | Subject | VC | Location | Leader/s | Tutor/s | Atte. no. |
|---|---|---|---|---|---|---|---|---|
| 23 Apr | Training Field Meeting | Student Beginners | Plant ID | 92 - South Aberdeenshire | NESBREC, Aberdeen University | Aileen Meek | A Salway, J Brendish | 16 |
| 25 May | Guided Walk | Interested Beginners | Morrone Birkwood Flora | 92 - South Aberdeenshire | Mar Estate, Braemar | Ian Francis, Nicky Penford | | 5 |
| 7 Jun | Workshop | Beginners | Plant Families | 88 - Mid-Perthshire | Perth Scout Hall | Aileen Meek | L Lavery, F Anstey, E Schreiner, J Brendish, P Spencer-Vellacot, M Robinson | 17 |
| 8 Jun | Training Field Meeting | Beginners/ Improvers | Plant Families | 88 - Mid-Perthshire | Kinnoull Hill SSSI | Faith Anstey | F Anstey, P Spencer-Vellacot, L Lavery | 10 |
| 14 Jun | Workshop | Beginners/ Improvers | Grasses | 83 - Midlothian | Holyrood | Michael Philip | M Moir, S Jury, P Wiggins | 17 |
| 13 Jul | Workshop | Beginners/ Improvers | Grasses | 96 - Inverness | Kirkhill CC, Inverness | Faith Anstey | S Thomas, M Eagleson, R Scott, M Scholten | 18 |
| 19 Jul | Training Field Meeting | Beginners/ Improvers | Grasses, Rushes, Sedges | 88 - Mid-Perthshire | Ben Lawers | Faith Anstey, Dan Watson | F Anstey, D Watson | 28 |
| 1 Nov | Workshop | Beginners/ Improvers | Rushes for Complete Beginners | 83 - Midlothian | RBGE, Edinburgh | Chris Miles | | 40 |

# Feature Articles

## From Data Deficient to Data Sufficient: under-recorded taxa in Scotland

*Matt Harding, Scotland Officer*

The publication in 2025 of *A New Vascular Plant Red List for Great Britain* (Stroh *et al*., 2025) marked a step forward in our understanding of the threat of extinction faced by our native and archaeophyte flora. Examining the Scottish flora in light of the new Red List, 348 of our taxa were assessed as threatened (43 Critically Endangered, 91 Endangered and 214 Vulnerable), with a further 128 taxa assessed as Near Threatened. In other words, over 25% of Scotland's flora is threatened or near threatened with extinction – a sobering thought.

The new Red List also highlighted a group of taxa that were 'Data Deficient' (DD), making a threat assessment impossible. In the words of the authors:

"A taxon is [Data Deficient] when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but for which appropriate data on abundance and/or distribution are lacking or insufficient to support a threat assessment. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate."



*Botrychium nordicum* (Nordic Moonwort) at Glen Shee, South Aberdeenshire. The pinnae margins are deeply incised. *Matt Harding*

In total, 63 taxa occurring in Scotland were assessed as Data Deficient, including 18 taxa from non-critical groups (i.e. not Hawkweeds, Dandelions etc.). Many of these are subspecies, or recently discovered taxa such as *Botrychium nordicum* (Nordic Moonwort) and *Lycopodium lagopus* (Hare's-foot Clubmoss), and in the majority of cases the key issue is insufficient mapping data – in other words, not enough recorders making records to allow a accurate distribution to be mapped. Another reason for data deficiency can be taxonomic uncertainty, for instance where we are unsure whether the taxon is really a distinct 'thing', or just a part of natural morphological variation within a species that, for instance, doesn't breed true in cultivation. Sometimes the two reasons for under-recording are linked, making it a challenge to tease out why botanists are not tackling a particular taxon.

Scroll to the end of the new Red List, and you will encounter the 'Waiting List' (WL) – a

repository of taxa, introduced by Cheffings and Farrell (2005), where we simply don't know enough yet to tackle an assessment of the risk of extinction. As you might expect, this Waiting List includes groups of plants bedevilled by taxonomic uncertainties, as well as those with insufficient distribution or population data, or uncertainties regarding their native, archaeophyte or neophyte status. Scotland's *Rubus* (Bramble) microspecies currently reside on the Waiting List, but hopefully not for too much longer thanks to the work of specialists like Angus Hannah, and many recorders getting the batology bug!

The purpose of this article is to draw attention to those 18 Data Deficient non-critical taxa, and an additional 24 Waiting List non-critical species and subspecies, where the key impediment to assessing their risk of extinction is a lack of recording by the botanical community, and provide some pointers as to how to get started with them. See the table below, which discusses the Data Deficient taxa first, followed by the Waiting List taxa. This selection assumes interested botanists have access to standard Floras e.g. Stace (2019), the BSBI Handbooks series (now also available as less expensive eBooks), the Plant Crib (Rich and Jermy, 1998), which is freely available on the BSBI website, and a very informative booklet on difficult and under-recorded taxa and their identification resources (Stroh *et al*., 2015; see references for link), produced to aid recording for *Plant Atlas 2020* (Stroh *et al.*, 2023).

As always, recorders are strongly encouraged to make use of the fantastic BSBI Referee network (BSBI member login required) to help ensure the accuracy of the data they collect (see Norton and Parmenter, 2026), and check the BSBI's Online Plant Atlas 2020 (Stroh *et al*., 2023) to find out more about many of the taxa highlighted here. Perhaps by the next Red List update, a boost in recording effort will enable us to move from 'Data Deficient' to 'Data Sufficient' for many of these taxa, allowing accurate threat assessments to be carried out.

| **Taxon** | **Common name** | **2025 Red List status** |
|---|---|---|
| ***Botrychium nordicum*** | **Nordic Moonwort** | **DD** |
| Described by Stensvold and Farrar in 2017, it was discovered in Glen Shee in 2019 and is one of the most recent additions to our flora. Look for deeply incised pinnae margins, consistently present in *B. nordicum* but "usually not" in *B. lunaria* (Moonwort)! Other *Botrychium* plants in Britain with incised pinnae may or may not be this species – molecular work is ongoing, but botanists should always look closely at their Moonworts (and why wouldn't you) and take photos to accompany the record. | | |
| ***Festuca rubra* subsp. *arctica*** | **Red Fescue** | **DD** |
| This montane taxon is the only one of five native *F. rubra* subspecies not to have been assessed, with the almost complete absence of recent records on the Scottish mainland suggesting both a lack of recording and the difficulty of distinguishing the taxon! Descriptions are available in Cope and Gray (2009) and Stace (2019). The latter notes that its densely white-hairy, glaucous spikelets with | | |

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| short awns are diagnostic, but glabrous plants exist in many populations (a good rule of botanical thumb: don't just check one individual). It is also found on serpentine at lower altitudes. | | |
| ***Hypopitys monotropa* subspecies** | **Yellow Bird's-nest** | **DD** |
| Traditionally considered to consist of two subspecies in Britain and Ireland, *monotropa* and *hypophegea*, the presence of intermediate plants that don't fit and potentially unreliable characters has led to inconsistent or inaccurate recording at the subspecies level. Fred Rumsey has attempted to tackle this by producing a new key, available in *BSBI News* 159 pp. 20-24, and recorders are encouraged to revisit their populations and try it out! If you note use of the key against your record, that will help build a better dataset for this super plant. | | |
| ***Lycopodium lagopus*** | **Hare's-foot Clubmoss** | **DD** |
| Like the Nordic Moonwort, another late addition to our flora, which was overlooked for *L. clavatum* (Stag's-horn Clubmoss). See Rumsey (2007) for the distinguishing characters. To start with check high altitude plants for single strobili that are sessile (or on a short peduncle <1cm long). Plants intermediate between the two species have been discovered; helpfully the BSBI's Distribution Database (DDb) now has an option to record these as '*Lycopodium clavatum-lagopus* intermediate'. | | |
| ***Nasturtium microphyllum*** | **Narrow-fruited Water-cress** | **DD** |
| One of the most widespread Data Deficient taxa, it has been under-recorded in recent years across Scotland, perhaps because fruits are needed to confirm the key characters. Rich (1991) has helpful drawings of the fruits and seeds for the three *Nasturtium* taxa: *N. microphyllum*, *N. rorippa-aquatica* (Water-cress) and their hybrid *N. x sterile*, along with words of caution for botanists regarding other characteristics. Revisiting local sites for this later in the season to hunt for fruits would help to reduce our dependence on *N. rorippa-aquatica* agg. | | |
| ***Polygala vulgaris* subsp. *collina*** | **Common Milkwort** | **DD** |
| A poorly known subspecies amongst recorders, with the last Scottish record dating back to 1962. To distinguish it from subsp. *vulgaris* requires careful observation of the flowers. In *collina* the inner sepals are smaller and narrower than in *vulgaris*, their veining is different, and there are fewer corolla lobules (the frilly bit) in *collina*. Stace (2019) and Rich and Jermy (1998) may help you to get your head round it! | | |
| ***Ranunculus acris* subsp. *borealis*** | **Meadow Buttercup** | **DD** |
| Recorded from the uplands and islands of 11 Scottish vice-counties, but for some of those the most recent records date back to the 1800s! The basal leaves of this subspecies are divided into 3(-5), blunter, non-overlapping segments, the central one rarely divided >1/2 way to the midrib. Contrast that with subsp. *acris,* which has much more divided, lanceolate, overlapping leaf segments. Botanists encountering it can go one step further by checking the hairiness of stem, leaf | | |

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| and petiole to get var. *villosus* or var. *pumilus* - see Stace (2019). | | |
| ***Ranunculus flammula* subspecies** | **Lesser Spearwort** | **DD** |
| Endemic taxa might be high on the target list for any botanist, yet the *R. flammula* subspecies (*minimus* and *scoticus*) known only from Scotland and Ireland remain under-recorded. Subsp. *scoticus* has the wider known distribution, and is a perennial of stony or peaty substrates at loch margins, whereas *minimus* seems coastal, occurring in dense mats on flushed sea-cliffs and in short damp turf on lowland moors. Basal leaf shape (cordate for *minimus*, reduced to a slender subulate petiole in *scoticus*) helps to distinguish them from the widespread and variable subsp. *flammula*. Padmore (1957) provides an excellent account of the characters of all three taxa, and Stace (2019) includes a shorter key to them. | | |
| ***Rhinanthus minor* subspecies** | **Yellow-rattle** | **DD & WL** |
| Five *R. minor* subspecies are found in Scotland – *borealis, lintonii, monticola, stenophyllus* and *minor*. These apparently intergrade, and not all populations can be assigned to subspecies, but it is worthwhile trying against the key in Stace (2019). Recent under-recording may well be masking genuine declines, a particular concern for the montane and northern taxa assessed as Data Deficient (*borealis, lintonii* and *monticola*). The two more widespread subspecies (*stenophyllus* and *minor*) currently languish on the Waiting List due to insufficient mapping data. Plant Atlas 2020 has an account for each subspecies, and Westbury (2004) also provides descriptions. | | |
| ***Rumex acetosa* subsp. *hibernicus*** | **Irish Sorrel** | **DD** |
| This endemic subspecies is a plant of fixed sand dunes, dune grassland and machair, with historic records from the Outer Hebrides. It is distinguished by its papillose-scabrid vegetative parts, visible under a hand lens - see Akeroyd (2014) and Stace (2019). Dwarf plants on the Unst serpentine share this character and have been assigned to this taxon as well. More recording effort is needed away from this botanical honeypot to help determine its true Scottish distribution. | | |
| ***Salicornia emerici*** | **Shiny Glasswort** | **DD** |
| A notoriously tricky group, with great phenotypic plasticity. Over half of all Scottish *Salicornia* records have been assigned to an aggregate taxon, which is sometimes all that is possible. However, tackling the group can be lots of fun, and referee Fred Rumsey gave an excellent presentation on Getting to Grips with Glassworts at the Scottish Botanists' Conference in 2025, which has now been turned into an ID guide on the BSBI website. It's a great starting point, alongside keys in Stace (2019) and Rich and Jermy (1998). *S. emerici* was discovered new to Scotland in 2025, and more discoveries doubtless remain to be made… | | |
| ***Scleranthus annuus* subsp. *polycarpos*** | **Annual Knawel** | **DD** |
| Away from its Breckland and Surrey strongholds this taxon is poorly known, and it is probably under-recorded elsewhere in the range of the species. It is associated with 'natural' open sandy habitats, rather than traditional arable, and has | | |

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| been recorded from four Scottish vice-counties, but the most recent record is from 1960. Identification relies on the presence of ripe fruit: the achene of subsp. *polycarpos* is smaller than subsp. *annuus*, with parallel to convergent sepals when ripe (rather than divergent) – see Stace (2019). | | |
| ***Utricularia intermedia* agg.** | **Bladderworts** | **DD (& LC)** |
| This poorly known species complex contains three tricky taxa: *U. intermedia s.s.* (Intermediate Bladderwort), *U. stygia* (Nordic Bladderwort) and *U. ochroleuca* (Pale Bladderwort). It is suspected that many Scottish records for *U. intermedia s.s.* are misidentifications, and there are very few post-2000 records for *U. ochroleuca* in the DDb in comparison with the 1987-1999 time period. This is perhaps in part the result of confusion with *U. stygia*, which is far more widely recorded and was assessed as Least Concern. Stace (2019) has a key and drawings of the flowers, gland distribution and quadrifid hairs of each. | | |
| ***Arctium nemorosum*** | **Wood Burdock** | **WL** |
| The recording of *A. nemorosum* and *A. minus* (Lesser Burdock) has been complicated by the various different taxonomic treatments used by recorders over time! The system mapped out in Stace (2019) has now been widely adopted, although the characters separating these two species have some overlap. Martin Rand (2019) helpfully tabulates the relevant features, and provides a guide on how to approach naming your plants. | | |
| ***Arenaria serpyllifolia* subsp. *lloydii*** | **Shore Sandwort** | **WL** |
| A dune ecotype of *A. serpyllifolia* now treated as a subspecies, but poorly recorded with just six Scottish records (from Wigtownshire and East Lothian). Plants in suitable coastal habitats with dense inflorescences should be checked for capsule size and shape and pedicel length (Stace, 2019; Rich and Jermy, 1998). | | |
| ***Bromus hordeaceus* subsp. *longipedicellatus*** | **Soft-brome** | **WL** |
| Described by Spalton (2001), Cope and Gray (2009) considered it a variant but Stace (2019) and Stroh *et al*. (2023) assign it subspecies status. Look for a tall, erect *Bromus* to 1.5 m, with a lax panicle, some spikelets spreading and long-pedicelled. Its papery lemmas with prominent veins help to distinguish it from *B. racemosus*, itself a scarce plant in Scotland. Its distribution map appears likely to be dependent on recorder activity rather than actual occurrence. | | |
| ***Callitriche hermaphroditica* subspecies** | **Autumnal Water-starwort** | **WL** |
| The distributions of the two subspecies, *hermaphroditica* and *macrocarpa*, have not been worked out, and of >2,000 species records in Scotland only three have been made below species level (assigned to subsp. *hermaphroditica*). Identification requires fruits: *macrocarpa* being slightly larger and wider winged than *hermaphroditica*. See Stace (2019) and Lansdown (2008) for details. | | |
| ***Cochlearia pyrenaica* subspecies** | **Pyrenean Scurvygrass** | **WL** |
| Many botanists have enough trouble with *Cochlearia* without getting into | | |

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| subspecies, hence the under-recording of *C. pyrenaica, C. micacea* (Mountain Scurvygrass) and other taxa in recent years. *C. pyrenaica* has cordate basal leaves, upper stem-leaves slightly or not clasping stems, fruits wider above the middle and rarely acute at both ends, and with veins forming distinct reticulation on the fruits when dry. Once you've got there, subsp. *pyrenaica* has fruits cuneate at base and leaves not succulent; subsp. *alpina* has fruits rounded at the base and leaves usually succulent. Subsp. *pyrenaica* is reportedly restricted to Skye in Scotland, with *alpina* throughout Scottish mountains, although records on the DDb don't conform to this. See Stace (2019) and Rich (1991) - the latter has a good discussion of the ID challenges posed by *Cochlearia*. | | |
| ***Festuca ovina* subspecies** | **Sheep's-fescue** | **WL** |
| Three subspecies are defined: *ovina, hirtula* and *ophioliticola*, although these have been very sparsely recorded in Scotland. Cope and Gray (2009) warn that "identification beyond species level should not be attempted without adequate laboratory equipment" – those with the means to continue can be guided by the measurements in Stace (2019)! Subsp. *ophioliticola* is often preferential to calcareous or serpentine soils, which may be useful when considering relevant populations. | | |
| ***Huperzia 'selago* subsp. *arctica'*** | **Fir Clubmoss** | **WL** |
| *H. selago* subsp. *arctica* has been applied to montane, yellowish plants with determinate growth and appressed leaves - see Stace (2019). However most, if not all, of these plants are probably better regarded as *H. appressa* or hybrids with it. *H. arctica* may occur on the serpentines of Unst, but more research is needed (Stroh *et al*., 2023). With this in mind, you can record suspect plants as '*Huperzia selago* (boreal taxon)' on the DDb – currently clustered in the Outer Hebrides and Cairngorms, occasional elsewhere. | | |
| ***Melampyrum pratense* subspecies** | **Common Cow-wheat** | **WL** |
| The vast majority of Scottish records have only been made to species level. Subsp. *pratense* is likely to be widespread, whilst subsp. *commutatum* has just one confirmed record in Scotland, and is associated with scrub, hedgerows and open deciduous woodland on calcareous soils. The key character is uppermost leaf length: in subsp. *commutatum* they are mostly 3-8x as long as wide, and in subsp. *pratense* they are mostly 7-15x as long as wide (Stace, 2019). | | |
| ***Molinia caerulea* subsp. *arundinacea*** | **Purple Moor-grass** | **WL** |
| The validity of the subspecies is questioned by Cope and Gray (2009), and there has been little systematic effort to record it in Scotland. However, Stace (2019) provides comparative measurements for the subspecies *caerulea* and *arundinacea*, and notes that *arundinacea* has a scattered distribution, and is found in fens and fen-type vegetation by rivers and canals. | | |
| ***Montia fontana* subspecies** | **Blinks** | **WL (& LC)** |
| Four subspecies are recognised by Stace (2019) based on seed characters, and all have been found in Scotland. Subsp. *fontana* (smooth, shiny seeds) has been | | |

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| widely recorded, whilst subsp. *chondrosperma* (tubercles on faces and margins, dull) and subsp. *variabilis* (tubercles along margin only) have 300 records each. Subsp. *amporitana* (also tubercles on margin only) appears to be much rarer, with just 17 records. Subsp. *fontana* and *chondrosperma* were assessed as Least Concern on the new Red List, whereas *amporitana* and *variabilis* were assigned to the Waiting List. | | |
| ***Myosotis discolor* subspecies** | **Changing Forget-me-not** | **WL** |
| Both subsp. *discolor* and *dubia* are found in Scotland, but botanists only really started recording them regularly post-2000; with all records of *discolor* being post-2020. See Stace (2019) for key characters: positioning of uppermost pair of stem-leaves, calyx and calyx-teeth shape, and initial corolla colour. Subsp. *discolor* occurs on dry, sandy or peaty ground and on ultrabasic rocks, whereas subsp. *dubia* prefers damp, base-poor pastures, moorland edges and muddy tracks. | | |
| ***Sparganium erectum* subspecies** | **Branched Bur-reed** | **WL** |
| Four subspecies have traditionally been recognised using fruit characteristics: *erectum, microcarpum, neglectum* and *oocarpum* (see Stace, 2019). Recent treatments (e.g. Schou *et al*., 2023) have shown that these subspecies represent three species, and a hybrid combination within *S. erectum s.l.*. Either way, there is a need for better recording of these taxa, with very few subspecies records in Scotland even of subsp. *neglectum*, which is the most widespread. BSBI Referee Richard Lansdown has recently requested specimens of flowering and fruiting material (see *BSBI News* 162). | | |
| ***Vicia sativa* subspecies** | **Common Vetch** | **WL (& LC)** |
| This species consists of one native subspecies (*nigra*), and two subspecies thought to be archaeophyte in origin (*sativa* and *segetalis*). Past taxonomic confusion is likely to have resulted in misapplication of the subspecies, blurring our understanding of their distribution. Subsp. *nigra* has heterophyllous leaves, the upper ones with much narrower leaflets than those of lower leaves, and a more or less concolorous flower – it was assessed as Least Concern on the new Red List. Subsp. *segetalis* and *sativa* are on the Waiting List, and have less narrow leaflets on the upper leaves and a bicolorous flower; *segetalis* has smooth, usually glabrous, brown to black fruits, whilst *sativa* has fruits constricted between the seeds, and are yellowish to brown, and often hairy - see Stace (2019). | | |

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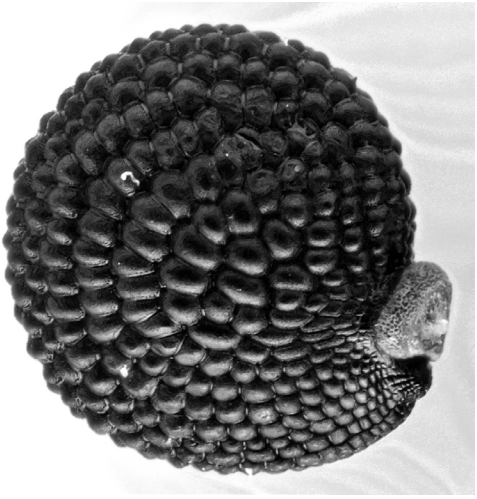
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*Montia fontana* subsp. *chondrosperma* viewed by microscope, collected in Aviemore, Moray. This subspecies has tubercles on the face and margins of the seeds.
*Andy Amphlett*



*Rhinanthus minor* subsp. *monticola* in Easterness. The flowers start yellow, but quickly change to the colour of treacle toffee.
*Andy Amphlett*

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## The botany of urban coastal defences in Easter Ross

*Brian Ballinger, Vice-County Recorder, VC106*

Many towns in Scotland are coastal, given the historic advantages of access to the sea for communication and fishing. There are disadvantages to this location however, as the sea can be a difficult neighbour. Recent climate change is making the problem worse with an increased frequency of storms and the ongoing issues that rising sea-level bring.

Sea defences are a common feature of towns, built to protect stone structures, as well as preventing coastal erosion. They are also a feature of many rural shores, but to a lesser extent.

Walls are often used for coastal protection, as are areas of rock armour, where boulders are used to protect the shore. Boulders are not an ideal habitat for plants, given their unforgiving surfaces, but some plants do succeed to establish a foothold. Likewise, walls often only provide hard surfaces and a typically vertical structure – not the most desirable home for many species.



Avoch sea wall with *Cochlearia*.
*Brian Ballinger*

### Method

10 coastal Easter Ross towns and villages were visited and 50 ten metre sections of sea defences surveyed. All vascular plant species growing on rock armour and sea walls were counted for. Unfortunately, some plants could only be identified to genus level.

### Results – rock armour

There were 27 species recorded growing on rock armour, often where there was a pocket of soil or a crevice in the surface. The most frequent rock armour species were *Cochlearia officinalis* (Common Scurvygrass). *Festuca* species (Fescues), *Leymus arenarius* (Lyme-grass), *Rumex crispus* (Curled Dock) and *Taraxacum* (Dandelion).



Cromarty sea defences (the man in the background is probably looking for fossil fish on the beach).
*Brian Ballinger*

### Results – sea walls

There were 24 vascular plant species on the sea walls. Some species grew where the wall was damaged or where there was a hole to provide a drainage outlet. Few species were widespread and the most frequent were *Festuca* species, *Rumex crispus* and *Taraxacum*, although *Cochlearia officinalis*, *Sonchus arvensis* (Perennial Sow-thistle) and *Tripleurospermum maritimum* (Sea Mayweed) were also present.

### Discussion

This survey shows that some plants manage to grow in these difficult and exposed habitats. The exposure to salt and the lack of suitable rooting sites make these places very unwelcoming to plants. Salt tolerant species were often prominent but others managed to survive at times. Where there was some shelter, as in harbours, plant growth was often more prominent.

If some pockets of soil can be left on sea defences the growth of vegetation can be encouraged and biodiversity supported.

## Some interesting bramble finds in 2025

*Angus Hannah, Scottish Brambles Referee*

Here are a few notes further to the poster I exhibited at the Scottish Botanists' Conference in November.

A new species for Scotland was recognised among photos Chris Miles sent from Johnstonebridge in Dumfriesshire. This is *Rubus insectifolius*, a bramble normally restricted to southern England and with its most northerly previous record in the neighbourhood of York. However, it was not altogether surprising, as the site is very close to the M74 service area, and adventive





*Rubus insectifolius.*
*Angus Hannah*

brambles from far-off places have begun turning up in such places in recent years, though the actual mechanism of their transportation remains unclear. This is a fairly new phenomenon, evidently related to the increased traffic of goods and people. Until recently the distributions of most brambles have remained very stable for many years, with only minor changes on the margins of their ranges, though it was noticed in the last century that one or two species, notably *R. tuberculatus*, seemed to avail themselves of railways.

*Rubus caesius* (Dewberry) is difficult to identify because of its propensity to hybridise with some bramble species, especially *R. latifolius*. It was quite widely recorded around Scotland in the past, but the bulk of these records have been shown to be of hybrids, and doubts were expressed as to whether any specimens of pure *caesius* were actually present in Scotland, though they must have been here in the past for hybrids to have arisen. This year a small colony of what seems to be true *caesius* was found by Gavin Ramsay at Kingoodie near Dundee, confirming its right to a place on the Scottish list, albeit as a rarer plant than had been once supposed.

Another species whose presence in Scotland has been confirmed is *R. cardiophyllus*, identified from photos taken by Chris Miles near Gretna. This, too, has quite often been recorded in the south-west of Scotland, but has remained unconfirmed in recent years, and there is a suspicion that some of the records may relate to a fairly similar species *R. boudiccae*, which was not recognised until 1980, when it was published from Norfolk by Alec Bull, who believed it to be a local endemic and named it accordingly. It soon began to turn up more widely in England, and was found on Arran by Tony Church. In recent years I have shown it to be one of the commonest species in the Firth of Clyde area. It remains to be seen if *cardiophyllus* will prove after all to have a significant population in Scotland.





*Rubus caesius* (Dewberry).
*Angus Hannah*

A couple of other refinds are worth noting. Both of the earlier records are mentioned in the Appendix of my *Brambles of Scotland* Handbook. *R. bartonii,* found by George Ballantyne in 1988 at Linlithgow Loch, was refound at the site by Marion Moir. It was also found by her and David Earl and determined by him in a large quantity below the Midmar allotments at Blackford in Edinburgh. This was a popular species for fruit-growing, and no doubt that population originated from there. The other species was *R. gratus*, found by the road on the north side of West Loch Tarbert by Eric Edees in 1972 and which I found in June in 2025, flowering handsomely in the same location. This too was once thought to be widespread in Scotland, but following some taxonomic revision the Scottish records were mostly reassigned to other species, and its presence here was thought to be doubtful.

In September, Sue Jury showed me around the grounds of Astley Ainslie Hospital, a former estate in Edinburgh, and at least three species there were unfamiliar to me and not identifiable at that late point in the season. When such places were being planted up, brambles were often imported with the trees, and adventives from afar are not unusual. I hope to return next year and get photos and specimens, so watch out for further additions to the Scottish list!

Angus' BSBI Handbook: *Brambles of Scotland* was published in 2025: bsbi.org/learn/publications/handbooks.









Above: *Rubus gratus,* Right (2): *R. bartonii,* Top right: *R. cardiophyllus.* *Angus Hannah*

# Butterfly Conservation, Species on the Edge Programme: *Oxytropis halleri* (Purple Oxytropis) in East Ross: an update

*Tracy Munro, East Coast Project Officer*

*Oxytropis halleri* (Purple Oxytropis) is a nationally rare plant in Scotland and is confined to just three locations on the east coast with all three falling within East Ross (VC106) and specifically the Rosemarkie to Shandwick SSSI. Purple Oxytropis is a hairy perennial with a tuft of leaflets up to 15 pairs long and ending in a single terminal leaflet. The flowers are usually a rich purple colour and occur in clusters. Throughout Europe this plant is associated with the mountains. It therefore has an unusual distribution in Scotland where it occurs on several mountain tops as well as on steep unstable slopes along the north and north-east coastline.



*Oxytropis halleri* (Purple Oxytropis). *Tracy Munro*

Like similar species, Purple Oxytropis is dependent on pollinators for successful seed production. Flowers usually appear between late May and late July and seeds are thought to remain viable in the soil for up to 50 years. This is a species which is sensitive to shade and being outcompeted, hence the increasing scrub levels of the Rosemarkie to Shandwick Coast SSSI have caused decline in all three east coast populations. In fact it is now known to be extinct at Eathie and reduced to perhaps two plants at Nigg leaving only the one key population at Shandwick viable.

As part of the Species on the Edge programme (SotE), Butterfly Conservation have been monitoring the three east coast populations of Purple Oxytropis and including the plant in multi-taxa site plans at both Shandwick and Nigg. Find out more at: speciesontheedge.co.uk.

## Eathie population

Assessments of this population by Brian Ballanger and others in the early 2000s showed decreasing plant numbers and the species was finally thought to have become extinct. The Eathie site was therefore the location of a reintroduction attempt by Scottish Natural Heritage (now NatureScot) and Royal Botanic Garden Edinburgh. Through the SotE programme I work closely with Plantlife who were interested to know if the plant still existed here. I first visited this site in early 2023 and found it almost impossible to negotiate my way through the conifer plantation and the thick gorse to reach the last known site.

Worried that I was not in quite the right place I enlisted the help of local botanist Mary Eagleson, and Ro Scott from NatureScot (who was involved in the reintroduction). We set off on our adventure and encountered some interesting plants along the way, *Atropa belladonna* (Deadly Nightshade) being one of them.



Assessing a possible route - looking up the Nigg cliffs, note all the gorse, ivy and bracken. *Tracy Munro*

With the aid of Ro and Mary we fought our way through the plantation and in deep shade we made it very close to the last known grid reference for Purple Oxytropis, to be confronted by a wall of gorse. The other two looked at each other and decided I should be the one to crawl through the tunnel of gorse! I duly got down on my hands and knees to absolutely confirm that there was sadly no Purple Oxytropis to be found.

### Nigg population

In late spring 2024 I made an attempt to climb up the cliffs of the North Sutor, but the area here is quite steep and rather crumbly so I soon had to backtrack and tried again from the top. Unfortunately due to the excessive amounts of gorse, ivy and bracken it is almost impossible to see where you are placing your feet and it felt somewhat hazardous. I had heard from Gus Routledge that he managed to find one plant here in 2023, so I will perhaps try one last time.

### Shandwick population

Here Purple Oxytropis used to be counted in its hundreds. One record from the early 1990s even quotes that there were possibly a thousand plants over about a hectare. How very sad that twenty years later that number was down to around forty plants. I first surveyed here for Purple Oxytropis in 2023 and counted about fifteen plants in a very limited area as the cliff is again quite unstable and is seriously blanketed in gorse. Speaking to the landowners whose boundary this small population straddles, both can remember from their youth that these cliffs used to be awash with the purple and yellow flowers of not just Purple Oxytropis but *Helianthemum nummularium* (Common Rock-rose), *Thymus drucei* (Wild Thyme), *Carlina vulgaris* (Carline Thistle) and *Anthyllis vulneraria* (Kidney Vetch).



Part of the Shandwick site before work. *Tracy Munro*

Late in 2023 we ran our first hab-



Rope work contractors in action.
*Tracy Munro*

itat maintenance work day here. Working with Butterfly Conservation volunteers, a small group worked by hand in the slight sheltered bowl of the cliff where the main Purple Oxytropis clump was. We returned again in March 2024 to expand the area in which we had previously been working. This is one of our multi-taxa sites for SotE and the work here will not only benefit Purple Oxytropis but also Kidney Vetch and Common Rock-rose, the sole caterpillar foodplants of Small Blue and Northern Brown Argus respectively, as well as a host of solitary bees which require bare exposed earth in which to nest.

Looking at the cliffs as a whole though, it felt like we were fighting a loosing battle with the gorse. Thankfully through the SotE funding there was a limited amount of money for contractor work, but the challenge was to find someone capable of working in such tricky terrain. After two years of searching I finally stumbled upon someone, at a habitat work party of all places!

After Claire and her rope team at Tich Access Service came along and assessed the site, we applied for consent from NatureScot and both landowners before embarking on a week long task of clearing scrub across a larger area of the cliff face. Once again we were supported by a small group of volunteers who assisted the rope contractors. Due to the delicate nature of the flora the cut scrub was carefully passed down the cliff face by means of a pulley system, this made for slow hard work but what a huge difference it has made to the cliff face.



Cleared area of site at Shandwick.
*Tracy Munro*

As an extra bonus I returned in summer 2025 to abseil carefully down and attempt a more thorough count of the Purple Oxytropis. I'm delighted to report that there still exists a small colony much higher up the cliff face (which was not previously visible to us). With around twenty plants here, and lower down there is now in the region of forty plants, so all in all a nice number of plants at around sixty.

Now that a significant area of gorse has been cleared it is possible to see where seedlings have been trying to establish following a line of crumbling cliff from the higher population. Perhaps now that the gorse has been cleared

these seedlings will have enough light and space to flourish. Without further work though, the gorse will reestablish over time. For now though let's enjoy the increased flora and fauna in this wonderful little area of the east coast.

It would be great if part of the legacy of SotE was to encourage botanists and BSBI members to keep a wary eye out and report their Purple Oxytropis sightings along this SSSI, enabling us to perhaps take action in a timely manner when the site starts to deteriorate again.

## *Polystichum x illyricum*

*James Merryweather*

It is the purpose of this article to ask some pressing questions in the hope that someone may respond to it by initiating a research project. This is an exploratory discussion, so apparent conclusions should be considered provisional.

Britain has three *Polystichum*, species between which there are three hybrids (Figures 1 and 2).

The two hybrids with *P. lonchitis* (Holly-fern) are rare and are found as individual plants, except for one controversial case at a site to the east of the A837 south of Inchnadamph in the Assynt region of Sutherland (NC 249200). The terrain there is blocky scree at the base of Durness limestone cliffs known as Sròn Chrùbaidh (Stronecruvie). The potential importance of this case is not only that *P. x illyricum* is extremely rare, occurring only in Sutherland, Wester Ross, Perthshire, and the Pennines: according to the collective opin-

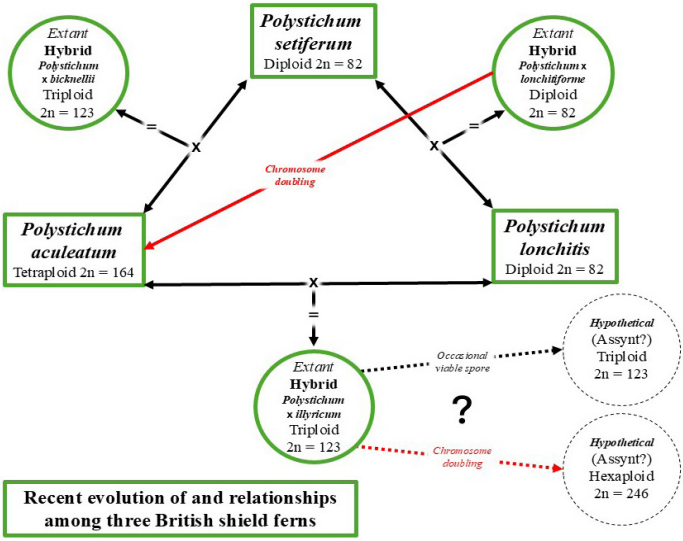



Figure 1. The three British *Polystichum* species, their three hybrids and hypothetical explanations of the Assynt population of *Polystichum x illyricum*.



Figure 2. Left to right: *Polystichum aculeatum* (Hard Shield-fern) vs. *P. setiferum* (Soft Shield-fern); *P. lonchitis* (Holly-fern); *P. lonchitis* adjacent to *P. aculeatum* on limestone, Glasnock, Wester Ross. *James Merryweather*

ion of a joint Assynt Field Club-British Pteridological Society group visiting on 29 August 2009, there are many plants at the site – i.e. a population. That defies the theoretical status of a triploid hybrid, which should be sterile and, therefore, incapable of forming a colony.

That being said, it has been determined (Sleep, 1966) that the common species *P. aculeatum* (Hard Shield-fern) was originally formed by doubling of the chromosome complement of *P. x lonchitiforme*, so the same sort of genetical event may allow the intriguing hypothesis that the Assynt *P. x illyricum* is indeed a colony, but not of conventional *P. x illyricum*. There is an alternative, perhaps more plausible hypothesis: that the occasional but significant viable spore over generations has given rise to a colony (Vida and Reichstein, 1975).

Whether either of these two hypotheses is true (or alternatively, that the corporate field diagnosis was wrong), we have questions that mandate cytogenetical investigation before we may be certain.

**Two intriguing hybrids compared**

I compare two British fern hybrids which exhibit signs of being partially fertile, and therefore, might deserve to be given nothospecies status:

*Dryopteris carthusiana* (Narrow Buckler-fern) x *Dryopteris dilatata* (Broad Buckler-fern) = *Dryopteris x deweveri*

*Polystichum aculeatum* (Hard Shield-fern) x *Polystichum lonchitis* (Holly-fern) = *Polystichum x illyricum*

[The prefix ‘notho-’ is literally ‘bastard’, meaning false or counterfeit, often applied to a species predicted to be of hybrid origin.]

I could find little modern research on these hybrids which would explain my own and others’ field observations that both have been found as populations of numerous individuals, rather than one-off specimens as is usual for non-reproductive hybrids.

Most sources (of which there are a few) state confidently that the spores of both of the above hybrids are abortive. Their ‘certainty’ is presumably because whoever first promulgated that ‘fact’ did not know the published

work well enough, and their error was then copied by others. However, it is interesting to note that although British *Dryopteris* and *Polystichum* hybrids are listed as infertile, or with abortive spores, possible exceptions for these two may be discussed here.

*D. x deweveri* – the parents of which are the wet fen *D. carthusiana* (Narrow Buckler-fern) and dry woodland *D. dilatata* (Broad Buckler-fern) – stands out as different from other hybrids. Firstly, it is the commonest Buckler-fern hybrid by far, occurring throughout the UK; and secondly, it might not be completely infertile, as implied by wild communities in which what is perceived with confidence by its morphological characters to be the hybrid is sometimes numerous.

The list of Buckler-fern hybrids provided by Rünk *et al*. (2012) gives the spores of all except *D. x deweveri* as 'abortive'. For *D. x deweveri* they state: "… and spores are mostly abortive". That is moderately informative, but Manton – whose book one naturally consults on matters of fern cytogenetics – had in

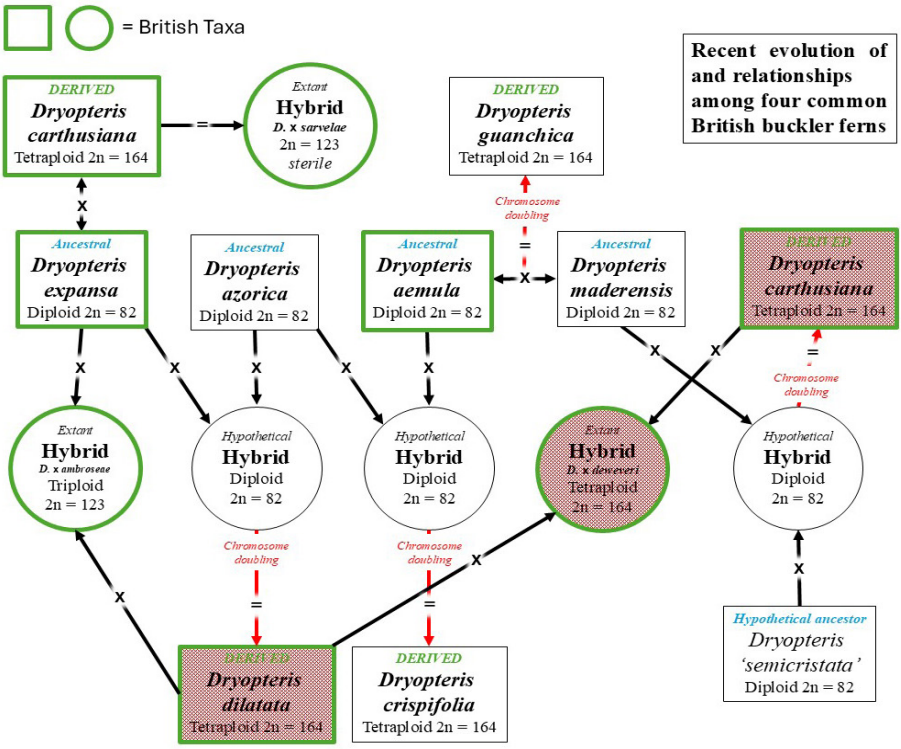



Figure 3. The recent evolution and relationships of the British Buckler-ferns, with the proposed origin of *D. x deweveri* shaded. The origins of its two parental species may also be detected. [N.B. The taxonomy of some of these ferns remains provisional. For instance, *D. maderensis* and *D. azorica* are considered by some to be conspecific and by others as subspecies of *D. intermedia*.]

1950 already considered the possibility that a few spores might be viable (Manton, 1950):

> The spores are mostly shrivelled, though it is not known whether a few might be viable. The general appearance of mixed populations suggests strongly that this is probably the case, and it is much to be desired that breeding work should be undertaken to test this point … – Manton (1950)



29/8/09 The late Ken Trewren examining an Assynt *P. x illyricum*. There are at least four plants of the hybrid in this small area of the site where there should theoretically be no more than one (more likely, none). *James Merryweather*

Each parent of *D. x deweveri* is a tetraploid (2n = 164), originally derived by hybridisation of two diploid species and chromosome doubling. It seems probable that *D. x deweveri*, also tetraploid, might be partially fertile even without chromosome doubling. If *D. x deweveri* is capable of limited reproduction, fertility could improve with subsequent generations, and a new subspecies, nothosubspecies or even a species will emerge.

This might also be the case with the rare hybrid between *Polystichum aculeatum* and *P. lonchitis*. Where the two species grow together in large numbers on limestone at the roadside site below the cliff at Sròn Chrùbaidh, there are countless plants showing intermediate characteristics which are indistinguishable from the hybrid *P. x illyricum*.

So many such plants occuring together is unlikely to be the result of rare individual hybridisation events, and is more likely to be due to a slight but ecologically significant degree of hybrid fertility. The identification is likely to have been competent: the party who found these plants, which consisted of experienced British Pteridological Society (BPS) members including myself, inspected many plants of mature putative *P. x illyricum* critically but were unable to consign them to either of the parental species. A review of photographs taken that day (29/8/09) confirms that BPS confidence. Morphologically, they were distinctly intermediate between the two *Polystichum* species present, matching published descriptions and confirming personal experiences of the hybrid elsewhere (such as my own find on limestone above Glasnock, Wester Ross).

Back in 1947 and 1948, Prof. Manton had visited the one known British *P. x illyricum* site, in the Pennines, and her observation of a single individual contrasts strongly with the Assynt population:

> [*Polystichum x illyricum*] is represented by single individuals (as opposed to homogeneous populations), which betray their hybrid nature both by the putative parents and also by the marked spore sterility. – Manton (1950)

Other available sources all attest to the sterility of *P. x illyricum*, possibly all

referring to Manton's conclusion, the main source of information about the hybrid. However, Page (1997) provides some support for the 2009 observations of the Assynt population:

There is a high degree of spore abortion in hybrid plants. But, in European material, a limited number of good spores have been reported to occur which can give rise to triploid or hexaploid F 2 progeny, at least under experimental conditions (Vida and Reichstein, 1975) – Christopher Page

I have been unable to consult Vida and Reichstein, 1975, but we may trust the late Chris Page's ability to interpret their results, which allows us to consider that the occasional spore of *triploid P. x illyricum* could give rise to a new fertile plant, and perhaps, over many generations, to numerous plants.

In the 1960s, cytogenetical research by Anne Sleep, a PhD student working in Manton's laboratory, explains this unusual situation. Firstly, she begins the *Polystichum* section of the summary in her thesis:

A phenomenon completely new to the ferns is the occurrence of widespread [chromosome] pairing at all levels of ploidy which has been found in hybrids involving species of *Polystichum* … Only when the number of paired chromosomes approximates to the monoploid number (in this case 41) can homologous pairing be safely inferred.

… and later continues:

Such evidence … has been found in the two triploid hybrids involving the diploids *P. lonchitis* and *P. setiferum* with the European tetraploid *P. aculeatum* [i.e. *P. x illyricum* and *P. x bicknellii* respectively], where c.41 bivalents are regularly recorded.

The chromosomes of most hybrids are mostly incompatible when pairing during the metaphase stage of meiosis, so that spores produced are either completely



Figure 4. Comparisons of parental species and hybrid. Top left: *Polystichum lonchitis*. Top right: *Polystichum aculeatum*. Bottom left: *Polystichum x illyricum*, Glasnock, Wester Ross. Bottom right: *Polystichum x illyricum*, Sròn Chrùbaidh, Assynt. Note that the pinnules of both *P. x illyricum* plants are all semi-fused, the main factor for differentiation from *P. aculeatum* in which the basal pinnules are ± stalked. *James Merryweather*

sterile or, as Page suggested, rarely viable. Then again, *P. x bicknellii* (*P. setiferum x P. aculeatum*) is quite a common hybrid in Britain, suggesting otherwise, while at the single field site discussed here, *P. x illyricum* (*P. lonchitis x P. aculeatum*) has turned out to be numerous. This is supported by Manton's (1937/1947) and Sleep's (1966) observations at Pont-de-Nant, Switzerland:

> *Polystichum x illyricum* is the commonest *Polystichum* hybrid occurring on the continent, and is often found, sometimes in profusion, in the mountainous regions of central Europe.

Thus, we have reports of multiple-plant populations of *P. x illyricum* on the continent to provide precedents for finding so many plants growing together at Sròn Chrùbaidh, as well as a cytogenetical explanation.

If studied in depth, the Assynt population might be found to consist of uniform fertile hybrids and perhaps some backcrossed progeny from either of their local parental *P. aculeatum* or *P. lonchitis*. Those backcrossed plants would probably be indistinguishable from *P. aculeatum*, but could be confirmed cytogenetically, through DNA sequencing or another suitable method. Such a study would be a fascinating PhD project in which I feel certain the Assynt Field Club would enthusiastically participate.

## Acknowledgements

I am grateful to Alison Paul and Fred Rumsey of the Natural History Museum for thoughtful, improving comments. However, I must accept full responsibility for inconsistencies or errors in the hypotheses discussed here.

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## Contacts and links

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Assynt Field Club: https://www.assyntwildlife.org.uk

British Pteridological Society: https://britishfernsociety.org.uk

YouTube video *The fern genus Polystichum in Britain & Ireland*: https://www.youtube.com/watch?v=EFq2Z6g_Y78

## Use of BSBI data by Butterfly Conservation

*Anthony McCluskey, Conservation Manager (Scotland)*

BSBI members and recorders might be pleased to know that their records are often used in the conservation of some of Scotland's rarest butterfly and moth species. I work for Butterfly Conservation, and a large part of my role is looking for certain species or sending volunteers out to search for them. All of the rarer butterflies and moths have particular plants that their larvae feed on, so their presence is very much tied to the growth of the plants. Sometimes we know where the species are, based on old records of the insect species themselves. However, other times require a bit of detective work to discover new colonies. Botanical records are a great resource for this work, and having access to the BSBI database has really helped narrow down our search for the foodplants of our target species.



Northern Brown Argus butterfly, *Aricia artaxerxes.*
*Anthony McCluskey*

Therefore, botanists can substantially contribute to our work by submitting records of certain plants. This article highlights some of the plants of particular interest. For these species, records with accurate grid references allow staff and volunteers at Butterfly Conservation to locate them, and hopefully discover new populations of the associated butterfly and moth species.

### ***Helianthemum nummularium*** **(Common Rock-rose)**

This plant typically grows in species-rich grasslands and rocky upland areas. It is the sole foodplant for larvae of the Northern Brown Argus butterfly (*Aricia artaxerxes*). This butterfly has declined greatly in Scotland due to loss of habitat through over- and under-grazing, and forestry plantations. Finding the colonies is important so that we can help avert some of these habitat changes. You may even see the butterfly itself – a dark brown butterfly, with white dots on its upperwings. When searching for the butterfly we also look for the tiny white eggs on the leaves of the plant. New colonies of this species have even been discovered by my colleagues looking at pictures of the leaves on iRecord!



*Helianthemum nummularium* (Common Rock-rose).
*Anthony McCluskey*

### ***Anthyllis vulneraria*** **(Kidney Vetch)**

Butterfly Conservation are particular-

ly interested in records of this plant from the east of Scotland. The Small Blue butterfly (*Cupido minimus*) is the UK's smallest butterfly species, and it lays its eggs only on Kidney Vetch here. It is mostly coastal in Berwickshire, Angus, Kincardineshire, Moray and Caithness. However it is also found further inland around the Cairngorms. New colonies of this tiny butterfly are discovered occasionally, and BSBI records of Kidney Vetch could help Butterfly Conservation staff and volunteers target new sites for thorough searches.

### *Arctostaphylos uva-ursi* (Bearberry)

This low-growing shrub is associated with a number of upland moths. It is prone to heavy grazing by sheep, but is overgrown by heather if grazing is abandoned altogether. One of the larger moths that depend upon it is the Small Dark Yellow Underwing (*Coranarta cordigera*). This moth is named for the striking yellow pattern on the wings that is usually concealed beneath a dark forewing, until the moths take flight on sunny days. The moth is mostly found in the Cairngorms and Highland Perthshire; therefore we are particularly interested in records of the plant from these locations.

### *Solidago virgaurea* (Goldenrod)

This lovely herbaceous plant really comes into its own in late summer, when the yellow flowers bloom. However, its interest for entomologists is much earlier in the year, when the White-spotted Sable moth (*Anania funebris*) is flying. This little moth is very striking, with white spots on black wings. Females lay their eggs on Goldenrod, especially near woodland glades. This is mostly a western species in Scotland, with records around Glasdrum, Taynuilt and Glen Etive. However it could be more widespread, and having records with exact locations of Goldenrod can help us to pinpoint more locations to search.



White-spotted Sable moth on *Solidago virgaurea* (Goldendrod).
*Anthony McCluskey*

This is just a selection of some of the plants associated with butterflies and moths. Knowing more about the distribution of certain plants and insects can help conserve both groups, and as we regularly work with landowners, we advise them on habitat management that can benefit both groups. At Butterfly Conservation we are providing training for volunteers to help look for butterflies, moths and their associated habitats. It's a great way to learn more about the insects that depend upon the wild plants that we see!

For more information, email me on amccluskey@butterfly-conservation.org or visit butterfly-conservation.org/in-your-area/scottish-office.

# *Saxifraga cespitosa* (Tufted Saxifrage) survey 2025

*Gus Routledge*

I'd hope that there are times in every botanist's career where an opportunity arises that just makes you think, "I have to do this." In 2025, myself and Matt Harding were fortunate enough to have such an opportunity arise as Plantlife Scotland were awarded funding by the Nature Restoration Fund (which has been so good for so many projects in Scotland over the past few years) to, amongst other things, resurvey all of Scotland's modern *Saxifraga cespitosa* (Tufted Saxifrage) sites. How could anyone pass up on that?!



*Saxifraga cespitosa* (Tufted saxifrage) on Ben Nevis.
*Matt Harding*

The idea was to resurvey all sites where the plant had been recorded post-1990, and use this data to inform decisions about potential future conservation work. Even if the outcome was, "we've had a look and really there's not much to be done," that's a great result with all that comprehensive data for this nationally rare plant.

Matt had the pleasure of taking on Ben Nevis and the Grey Corries, which I was quite happy for him to do as that left me with the task of covering An Teallach, Ben Alder, Ben Avon, Liathach and Seana Bhraigh; no mean feat. The site on Skye was just a little too much for us to fit into this project; if anyone's got some ropes and time in July 2026 then it'd be great to get an accurate, updated count from there! It will come as no surprise that we required some rope access for some sites, and so were ably assisted by Mike Pescod, Dave Anderson and Hadyn Park-Patterson on Ben Nevis, and Sasha Doyle and Ed Jude on Ben Alder and Liathach.

Our approach, simply put, was to revisit all records we could with priority given to the more accurate and more recent records and gradually work outwards from there. On sites where we had the time to do so, we'd also searched nearby seemingly suitable habitat in the hopes of discovering new plants, which was fruitful in some cases!

Of course, being botanists, we also had our eyes out for other things of interest which I'll give brief mention here: a new site for *Carex lachenalii* (Hare's-tail Sedge) on Ben Alder; records of *Saxifraga rivularis* (Highland Saxifrage) on Ben Nevis and An Teallach; *Poa flexuosa* (Wavy Meadow-grass), *Micranthes nivalis* (Alpine Saxifrage) and *Taraxacum clovense* (Glen Clova Dandelion) on Ben Nevis; *Draba norvegica* (Rock Whitlowgrass)… the list goes on! A spectacular summer of montane-alpine botany for myself and Matt.





Top: Hayden Park-Patterson searching for rosettes on Ben Nevis; Bottom: Matt Harding surveying the flank of Tower Ridge.
*Gus Routledge*

The Tufted Saxifrage… across all the sites we recorded 337 plants (176 of these being 'mature', 103 flowering/fruiting) with 75 flowers and 434 seedheads, and a whopping 1,381 rosettes. We'd tried timing the survey for peak flowering but perhaps it was the hot, dry spring that brought flowering forward a little. Hopefully those numbers give you a sense of scale of the survey, and if not then the photo (left) of Matt on the North Face of Ben Nevis should!

Plants varied in size from single rosettes to Matt's monster in the Grey Corries; 89 rosettes! Those small plants presented a challenge in terms of ageing, as some plants have been found to remain as just a few rosettes for over a decade, prompting us to question exactly what a 'juvenile' plant is. For the purpose of the survey, these were plants of three or fewer rosettes. The median plant size was 6.5 rosettes. Plants were found in quite a range of niches, all things considered. Geology ranges from epidote-impregnated granite through Torridonian sandstone to metamorphosed limestone, and plants were found on crags, in gullies and in scree. On the crags they were often restricted to either small ledges that are kept free of vegetation by environmental conditions, or small cracks in the rock, usually sharing space with a selection of bryophytes rather than any vascular plants. However, plants often found nearby included *Cerastium nigrescens* (Arctic Mouse-ear), *Luzula arcuata* (Curved Wood-rush), *Rhodiola rosea* (Roseroot) and *Veronica alpina* (Alpine Speedwell).

Average altitude sat at around 1,015 m (ranging from 690 m to 1,258 m) and nearly half the plants were on a north-westerly aspect, a further 23% being on a north-easterly aspect, The average slope angle was judged to be around 70°. Clearly there is a tendency for plants to grow on ground with some base-enrichment though this doesn't appear to be a hard-and-fast rule; some plants on An Teallach were growing in relatively acidic scree on thin, gravelly soil atop large boulders. Sites were also free-draining, despite some very classic north-west Highland weather making it difficult to imagine anything ever drying out up there. The locations the plants were growing in seemed to be more as a result of Tufted Saxifrage having a competitive advantage rather than only being capable of growing here. It is, after all, actually a pioneering species, and so any competition provided by other plants is likely to have negative impacts.

Speaking of which, we did our best to assess the trends at each site. There

seems to be a mixed picture. Plants have seemingly gone totally extinct on Ben Alder itself in the past few decades, whereas on nearby Geal-Chàrn there is a large population in one coire (this survey recorded double the number of plants ever recorded in any previous year here, at 86). Similarly on the North Face of Ben Nevis there is another large population of around 195 plants, nearly double the number recorded for the Ben Nevis North Face Survey in 2014-2016. It seems very likely that either greater access using the ropes, or more targeted searching, have resulted in more plants being found rather than a population increase.



*Saxifraga cespitosa* on Geal-Chàrn.
*Gus Routledge*

Elsewhere on Geal-Chàrn, we were unable to find any plants in the other coire where Tufted Saxifrage had been recorded recently. Partly due to lack of daylight but also it seems plants are far less abundant here anyway, judging by previous records.

Most other sites appear to have very small populations. Liathach had two mature plants each on either side of a friable spur of sandstone, with six and two juvenile plants, all recorded at the same locality first recorded back in 1976. An Teallach was found to have eight mature plants scattered over two locations, plus some juvenile plants almost directly between these. Ben Avon's small population continues to fluctuate with eight mature plants (plus 32 rosettes that didn't form a distinct tuft), up from seven in 2020 and 2014, and from six in 2010. The Grey Corries were thought to have possibly lost all their Tufted Saxifrage but Matt returned from his trip triumphant, with three plants recorded in one coire.



*Saxifraga cespitosa* on An Teallach.
*Gus Routledge*

Seana Bhraigh's record from 1991 appears to be erroneous. The grid reference given on the BSBI Distribution Database is 100 m east of where the recorders' field sketch depicts, the habitat description doesn't really match that of Tufted Saxifrage, and the recorders stated they saw "what appeared to be *Saxifraga cespitosa*? No flowers. We did not check the plants in detail in the field. It was only an afterthought that this may be *S. cespitosa*?" There was also a theory that the recorders may have in fact seen *Artemisia norvegica* (Norwegian Mugwort) and the description of "small weather-beaten steps/ridges with low-growing, patchy vegetation" would certainly match the niche of that species better.

So, what can we conclude from the survey? Clearly, this arctic-alpine gem is threatened in Scotland. Many of the sites, where possible to make compar-

ison with previous years, had clearly declined either in number of plants or size of plants. Competition with increasingly bulky vegetation seemed to be the most pressing issue for most plants, with species such as *Racomitrium lanuginosum* (Woolly Fringe-moss) seemingly benefiting from milder winters and other plants managing to stake claim to ground previously too unstable for anything other than bryophytes and our wee Tufted Saxifrage. Atmospheric nutrient deposition could also be a significant factor in increasing competition. Small population size is also clearly a threat as, despite the apparent stabilisation of many sites, plants are still susceptible to movement of screes or collapse of the small ledges they occupy.



Moderately more bryophyte growth in 2025 (right), compared to 2013 (left), Geal-Chàrn.
*Gus Routledge*

The next steps are yet to be decided, but I can certainly say that there's a good chance there are more plants to find out there. Tantalising old records away from the well-known sites on An Teallach, Liathach and the Cairngorms are begging for some intrepid botanists to get out there and have a good mooch about!

## Protecting Scotland's local plants: Local Nature Conservation Sites and the role of the BSBI

*Ian Francis (VCR, VC92) and Robin Payne (Joint VCR, VC90)*



Botanically rich LNCS at Beadoun, Tobermory, Mull.
*Lynne Farrell*

The BSBI in Scotland has been working with Local Nature Conservation Sites (LNCS) groups for some time, and we wanted to better understand our support for this system across the country and see what more could be done. We asked the BSBI's Vice-County Recorders (VCRs) in Scotland about the system and their involvement in it, and this article summarises what we found. It focuses on the

BSBI's actions to date and what more we could do to help.

This is a work in progress – we hope to update this, correct errors and consider further possible steps as other systems come into place, especially Scotland's evolving Nature Networks.

## What are LNCS?

Through legally embedded national planning policies, Local Development Plans produced by Local Authorities must identify and protect locally important assets such as LNCS, safeguard them, and take them into account in allocating land for development. This should help conserve plant habitats of local importance at Local Authority (LA) level, and LAs administer the system. Although not designated as SSSIs, LNCS should (through consultation) help defend against development such as afforestation, which may damage wildlife or botanical interest. The idea of local sites is not new. The Scottish Wildlife Trust established a system of Listed Wildlife Sites in the late 1970s. Updated guidance on LNCS was published by NatureScot in 2023 and is available online. LNCS cover both biological and geological interests and may be split into Local Biodiversity Sites (LBS) and Local Geology Sites (LGS). We use the term 'LNCS' throughout, although our focus is on biodiversity and, specifically, botany and plant habitats.

## LNCS in Scotland

A 2022 survey by NatureScot found that 27 of Scotland's 34 Local Authorities managed LNCS systems, with >3,400 sites designated. Our survey suggests this overstates the concept of "managed systems". Some LAs have well-established LNCS networks or are creating one, whilst other networks are outdated with little or no recent updates. Figure 1 summarises our findings.

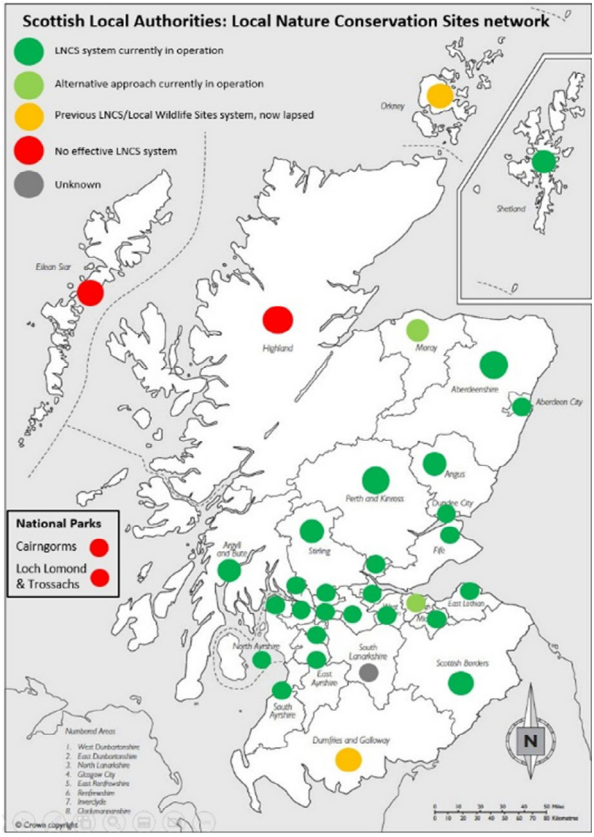



Figure 1: Map showing status of LNCS systems, according to this BSBI survey.

The most outstanding gaps in the network are in the Highlands and the Western Isles. In addition, neither of Scotland's National Parks has adopted the system. In Figure 2 we show an example LNCS network from Aberdeen City. Throughout Scotland, some LNCS are tiny, but some are up to 30 km² in extent!

### The BSBI in Scotland - supporting the LNCS system

VCRs play an active role in many LNCS networks across Scotland. Where there are active LA processes underway to identify a suite of LNCS, VCRs provide crucial botanical records, interpret the records and put them in context. Many VCRs input much time to this process (3-10+ days each year, unpaid) including site assessment and LNCS specific field surveys. Some had input previously, but have no ongoing role, and some are not engaged because they haven't been asked, or the LNCS system is inactive or is yet to start. LNCS are often used as a focus for field surveys. Less commonly, VCRs help with LA responses to development proposals affecting LNCS. The BSBI can further influence by encouraging LNCS systems where they are absent, and improving the use of BSBI records, including through local records centres.



Figure 2: Aberdeen City's LNCS contain most of the valuable botanical sites in the city.
*Aberdeen City Council*

### Wider biodiversity conservation policies

LNCS can make a direct contribution to the Scottish Biodiversity Strategy for both habitats and species and can also contribute to 30x30 - a target in the Global Biodiversity Framework to "Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas are effectively conserved and managed". However, currently, LNCS are not included within the 30% target as they do not match current criteria but do fit within the broad vision outlined in the 30x30 framework. The Scottish Government and NatureScot have set an objective to achieve this: "By 2030 Scotland will have evolving, flexible and resilient Nature Networks connecting nature-rich areas allowing wildlife and natural processes to move and adapt to land use and climate change pressures. The networks will help build people's connection to nature, providing biodiversity-rich spaces that deliver local benefits, and meet the priorities of local communities for nature." One method of achieving this is a 'nominated' 'Nature30' system (https://www.nature.scot/nature30) but

it is obvious and logical that many sites in the existing LNCS network could contribute.

### Can LNCS be improved for plant conservation?

We identified several ways in which LNCS systems could be strengthened in areas where they exist, and brought in where they do not.

- Some areas (especially Highland Council, the Western Isles and the two National Parks) do not operate a LNCS system. This should change as an urgent priority and the BSBI has a role in advocating this.
- Lack of LA staff with ecological expertise hampers LNCS development.
- LNCS networks need better publicity and profile in the planning system.
- Lack of monitoring and liaison with landowners also fails site conservation.
- Wider recognition of LNCS in land-use decisions is needed by forestry and agriculture authorities.
- Local Authorities should better exchange information and good practice.
- Some LNCS networks are outdated or poorly developed and lack robust selection criteria, therefore reducing credibility.
- LNCS could be developed to function properly under the 30x30 targets if the system was improved and supported.
- Recognition as an LNCS does not require management to maintain the interest but LAs, given resources, could address this.





LNCS can protect common and less common plants. Top: *Platanthera bifolia* (Lesser Butterfly Orchid); Bottom: *Eriophorum vaginatum* (Hare's-tail Cotton-grass). *Ian Francis*

The LNCS system, though perhaps little known, offers a real chance to extend and improve site protection across Scotland. With much political rhetoric about meeting global conservation targets, yet little real resourcing, here we have a ready-made system that can be adapted and widened to achieve government targets and help the survival of countless important botanical sites. The BSBI is well placed to play a part in this.

### Acknowledgements

We thank BSBI Vice-County Recorders in Scotland for their input to this project, and Judith Cox of Aberdeenshire Council for information.

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# Colvend Lochs Aquatic Plant Survey 2025, Kirkcudbrightshire

*Sarah White, Joint Vice-County Recorder, VC73*

## How the project came about

In the autumn of 2024, my husband Ken and I moved house to Colvend in Dumfries and Galloway. We soon discovered that we were lucky enough to have an extremely proactive Community Council. Within a week or two of arriving I learned that they had identified a source of funding for an ecological project, and I was asked if I could suggest something. The source of funding was from the Royal Society of Edinburgh, which was offering grants of £5K from their 'Healthy Planet, Healthy People' Award.

Colvend is notable for a group of small lochs with a rich marginal and aquatic flora, but they had not been comprehensively surveyed for several years. I remembered a botany group visit that David Hawker had arranged to Black Loch, which was exceptionally interesting, so I suggested a project to carry out a botanical survey of all the Colvend lochs. I had in mind that we could use the grant to employ an aquatic plant specialist while our botany group volunteers would survey the marginal and emergent plants, providing a good mix of professional expertise and voluntary effort. The results would enable us to compare the aquatic flora with previous records and provide a baseline for future monitoring. Public engagement with local people was an important part of the package. This was agreed to be a suitable project, and a joint application was submitted by the Colvend Community Council and the BSBI. We were lucky enough to be awarded the grant around Christmas time. I immediately asked Nick Stewart if he would be available to carry out the aquatic survey for us and I was delighted when he agreed.

## Background data

As I had thought, this was a significant recording gap for our vice-county of Kirkcudbrightshire. Matt Harding was kind enough to write a strong supporting statement in support of our application identifying three groups of aquatic plants that we should aim to re-find:

• The first group consists of four species in the top 10 most sharply declining plant species in Scotland over the short-term (Walker *et al*., 2025), updated records for which are needed to enable us to determine accurate national trends versus recording bias and properly assess potential impacts and threat status. With their last recorded dates in the Colvend area, these are:

*Callitriche brutia* (Pedunculate Water-starwort) - 2015, *Isoetes lacustris* (Quillwort) - 1996, *Potamogeton berchtoldii* (Small Pondweed) - 1996, and *P. obtusifolius* (Blunt-leaved Pondweed) - 1970.

• A second is a group of aquatics with no recent records, all of which show substantial short-term declines in Scotland in the Plant Atlas dataset, again clouded by recording bias. These are:

*Littorella uniflora* (Shoreweed) - 1996, *Nitella flexilis s.s.* (Smooth Stonewort) - 1975, *Potamogeton praelongus* (Long-stalked Pondweed) - 1905, *P. pusillus*

(Lesser Pondweed) - 1974, *P. crispus* (Curled Pondweed) - 1905, *Ranunculus aquatilis s.l.* (Common Water-crowfoot) - 1905 and *Sparganium natans* (Least Bur-reed) - 1996.

• In addition, he suggested that we should monitor the presence of introduced (and sometimes invasive) species e.g. *Elodea* (Waterweed) spp., *Hydrocharis morsus-ranae* (Frogbit) - non-native here, and *Aponogeton distachyos* (Cape-pondweed). All of these, except *E. canadensis (Canadian Waterweed)*, which may be being replaced by *E. nuttallii (Nuttall's Waterweed*) at some sites, have shown significant short-term increases in Scotland.

Over the winter I had the opportunity to research some of the historical plant data, carry out a map search of all the lochs and lochans in the Community Council area (22 in total), and find out ownership details. Nick Stewart had already compiled a very useful dataset of aquatic plant records across the whole vice-county. Other key sources were Olga Stewart's 1990 checklist, the BSBI Distribution Database, West's data from Murray and Pullar (1910), the SNH Scottish Lochs Survey of 1996 (although they had only included one of the Colvend lochs) and a BSBI field visit to two of the lochs in 2015.

In addition, I found some fascinating descriptions in the Transactions of the Dumfries and Galloway Natural History and Antiquarian Society. Nineteenth-century botanists James Fraser and Peter Gray had covered the area in some detail and recorded the plants that they found. A particularly useful local source was James Fraser's 1895 Handbook of the United Parishes of Colvend and Southwick. Fraser was the local minister at Colvend and a very keen botanist. The book contains lists of plants that Fraser had found in various habitats in the parish, one of which was 'Plants found in the Lochs, Marshes and Peat Mosses of the Parish'. For most of the plants listed, he gives a location and a useful comment on its abundance. Three rather special marginal species caught my eye:

• He describes *Osmunda regalis* (Royal Fern) as: 'Most abundant round the shore of the White Loch 50 years ago but now extirpated. Found in a dozen other places. Now nowhere to be seen.' (The first record for *Osmunda* in Kirkcudbrightshire was in the Colvend hectad in 1850, but it hadn't been recorded in this hectad since then. Loss of this plant, which was so abundant, might have been the result of a Victorian fern collection.)



Nick Stewart and Jim McLeary surveying the loch by boat. *Sarah White*

• Another plant that he mentions is *Cladium mariscus* (Great Fen-sedge), which he calls 'Prickly Twig Rush', and which he recorded from 'Barnhourie Loch'.

• He describes *Carex limosa* (Bog-sedge) as 'rare' but found 'in great abundance' at the foot of Barscraigh Loch.

In the absence of grid references, place



Nick Stewart surveying marginal vegetation.
*Sarah White*

names associated with these old records are of course critically important. At Colvend there have been changes to a number of the loch names and I had to consult the 1854 OS map to establish that Barnhourie is the loch now called Newbarns Loch and that Barscraigh Loch had unfortunately been drained in the mid twentieth century. Other old records required similar detective work.

### Survey methodology

The aim was to survey both true aquatic species and the emergent and marginal vegetation growing in the shallow water and wet ground around the edge of each loch.

Standard methods for aquatic macrophyte surveys are set out in the JNCC Guidelines (JNCC, 2005 and 2015). They consist of four components: a strandline survey of plants uprooted and washed onto the tideline; a survey of marginal and emergent species, a 'wader survey' of the shallow littoral zone and a boat survey of species growing in the open water. The JNCC guidance suggests sampling up to four discrete 100 m sections of shoreline considered representative of the lake using these survey techniques. However, on small sites like the Colvend lochs, Nick advised that it is preferable to undertake a survey of the whole shoreline and open water with the advantage of recording as far as possible a complete list of species. An assessment of the relative abundance of the plants recorded was estimated on the DAFOR scale: D=dominant, A=abundant, F=frequent, O=occasional, R=rare.

During the summer, local volunteer Jim McCleary and I surveyed the marginal vegetation of most of the 22 lochs and lochans that fall within the Community Council area. Then in September, Nick Stewart spent a week with us carrying out the aquatic survey and we completed the marginal surveys together. I would like to have involved more volunteers from our local botany group in the marginal survey work, but the ground conditions were challenging with very wet ground and tangles of fallen trees so that it was safer to keep the group small.

### Survey outputs

The outputs from the survey were a complete list of species recorded (147 species, including both aquatic and marginal species) plus individual species lists and sketch maps for each site. We were also able to produce tables for each of the main lochs showing aquatic plant records over time. For example, Barean Loch had been one of the least well recorded for aquatic plants up until now:

| Taxon | McAndrew 1882 | G. West 1910 | J.A Moore 1975 | J. McCleary 2022 | N.F. Stewart 2025 |
|---|---|---|---|---|---|
| *Chara virgata* | | | | | # |
| *Elodea canadensis* | | | | | # |
| *Helosciadium inundatum* | | # | | | |
| *Isoetes lacustris* | # | | | | |
| *Lemna minor* | | | | | # |
| *Littorella uniflora* | | | | | # |
| *Nitella flexilis* agg. | | | | | # |
| *Nitella flexilis s.s.* | | | # | | |
| *Nitella translucens* | | | | | # |
| *Nuphar lutea* | | | | # | # |
| *Nymphaea alba* | | # | | | # |
| *Potamogeton alpinus* | | | | | # |
| *Potamogeton natans* | | | | | # |
| *Potamogeton obtusifolius* | | | | | # |
| *Potamogeton polygonifolius* | | | | | # |
| *Sparganium* floating spp. | | | | | # |
| *Utricularia vulgaris* | | | | | # |

Of the declining aquatic species that Matt had picked out, the combined results from all the lochs were as follows:

| Taxon | Date of last record | Re-found 2025? | No. of sites 2025 |
|---|---|---|---|
| *Callitriche brutia* | 2015 | Yes | 4 |
| *Isoetes lacustris* | 1996 | No | |
| *Potamogeton berchtoldii* | 1996 | Yes | 5 |
| *P. obtusifolius* | 1970 | Yes | 8 |
| *Littorella uniflora* | 1996 | Yes | 1 |
| *Nitella flexilis s.s.* | 1975 | No | (but *N. flexilis* agg.from 4 sites) |
| *P. praelongus* | 1905 | No | |
| *P. crispus* | 1905 | Yes | 1 |
| *P. pusillus* | 1974 | No | |

| Taxon | Date of last record | Re-found 2025? | No. of sites 2025 |
|---|---|---|---|
| *Ranunculus aquatilis s.l.* | 1905 | Yes | 1 |
| *Sparganium natans* | 1996 | No | (but floating *Sparganium* sp. from 10 sites) |

## Three special marginal plants re-found

All three of the special marginal species that I had picked out from the list in Fraser (1895) were still present. Two of them had been recorded relatively recently: *Cladium mariscus* (at two sites, including Fraser's original site) and *Carex limosa* (at one site, now its only VC73 location). However, a single large plant of *Osmunda regalis* was a new record, and the first hectad record since 1850. At long last we have *Osmunda* back in the hectad in which it was first recorded in VC73!

## Public engagement

All owners of loch-side land were contacted prior to the survey and without exception they were helpful and welcoming.

We held two very successful events to publicise the survey.



Plant specimens being shown to the public.*Theo Stanning*

• During the survey week itself, we exhibited some of the plant specimens at an event outside the Community Hall in Colvend. We were delighted that around 25 people came to have a look at them, and that Nick was on hand to chat about the plants. We were particularly pleased that a group of young volunteers and staff from the nearby RSPB Mersehead reserve came along.

• In February, I gave a talk at Colvend Hall which was well attended and well received.

The report of the survey will be available on the Community Council website and copies will be given to all landowners of the lochs.

A very welcome and unexpected spinoff was that one of the local residents told me that her grandfather had been a keen amateur botanist and she generously gave me his notebooks, which contain a number of valuable vice-county records.

## Introduced plants

Inevitably we recorded several introduced aquatic plants including: *Hydrocharis morsus-ranae*, *Elodea canadensis*, *E. nuttallii*, *Lysichiton americanus* (American Skunk-cabbage), *Nymphoides peltata* (Fringed Water-lily), *Crassula helmsii* (New Zealand Pigmyweed), and *Aponogeton distachyos*.

The two species requiring urgent control are *Lysichiton americanus* and *Crassula helmsii*. Recommendations to this effect have been made to the Community Council.

**Acknowledgements**

The Royal Society of Edinburgh for the grant aid; all the local landowners surrounding the lochs who were so welcoming and helpful; The Colvend Community Council and the BSBI for sponsoring the project; Nick Stewart and Jim McCleary for their time and expertise.

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## The National Plant Monitoring Scheme in Scotland

*Rachel Murphy, Volunteering Manager, Plantlife*

Robust and systematic monitoring of plant species - the foundations of our habitats and ecosystems - is essential in un-

derstanding the effects of growing pressures on these species and our landscapes.

Built on partnership and government funded research, the National Plant Monitoring Scheme (NPMS) is a nationwide project, supported by hundreds of dedicated volunteers heading out twice a year to conduct plant surveys at their allocated sites. These long-term botanical surveys in randomly generated 1 km squares continue to provide a growing dataset across the UK, enabling us to study the abundance and diversity of plants through time.

The NPMS was designed and developed by the BSBI, Plantlife, the UK Centre for Ecology and Hydrology (UKCEH) and the Joint Nature Conservation Committee (JNCC). In more recent years, we have also been supported by the Department for Agriculture, Environment and Rural Affairs (DAERA), with the scheme's expansion to Northern Ireland.

Along with these partners, the Scheme was co-developed with volunteers on the ground, from a variety of backgrounds and experiences. It is important that the scheme is inclusive and accessible to all, while maintaining robust and standardised methodology and data standards.

NPMS volunteers, from beginners to experienced botanists, are asked to survey five smaller plots within their allocated 1 km survey square twice a year. They can do this at one of three different survey levels depending on their experience and confidence in botanical ID. Everyone is welcome!

The beginner level surveys, for example, ask volunteers to record around just 10-15 common and easily identifiable species at each plot, while the intermediate level surveys record an expanded list of around 30 species per plot, based on the habitat of that plot. The indicator species recorded within the scheme were chosen and named as such, as they are considered to be good indicators of the health of the habitat, whether they are positive indicators, or conversely, negative indicators.

All survey records submitted, from every level, are hugely valuable. For example, data from four of the scheme's best surveyed broad habitats have been used to create a new UK biodiversity indicator, "Plants of the wider countryside". These provide an annual view of how a variety of groups of wildlife have fared across the UK in recent years. The indicator is classified as an 'experimental' indicator, and work on this is ongoing. However, getting to that point in only five years of field surveys highlights the incredible value of NPMS volunteers in getting out into the countryside and surveying their plots, in order for us to understand changes to our environment. We have also been busy working on our large dataset investigating the impacts of cli-



Measuring a linear plot.
*Jo Mulholland (BSBI Botanical Skills NI project)*



Sand dune species training. *Rachel Murphy*

mate change and other environmental pressures on our habitats.

Volunteers have full access to their own data and the whole NPMS dataset, along with a raft of guidance and free training materials and opportunities, including online or in-person training and events.

In 2025, we had a great time celebrating the scheme's 10th Anniversary and the scheme's expanding dataset. From the recent NPMS climate exposure analysis, to Natural England's Living England Map, and more widely, NPMS data have been used in over 650 studies to date. To find out more about our ongoing work, see: www.npms.org.uk/content/conservation-and-research.

## NPMS in Scotland

Within Scotland there are over 200 NPMS survey squares with data attributed, and well over 40,000 species records submitted over last 10 years. This is a fantastic start to this young scheme. However, given that there are around 680 Scottish NPMS survey squares (approximately 24% of the total across all four nations), we are keen to see much greater representation within Scotland.

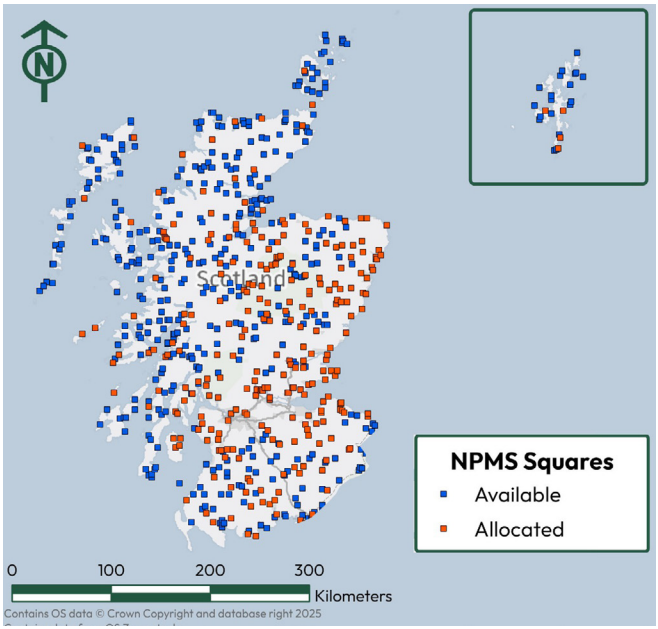



Figure 1: NPMS squares in Scotland - available and allocated.

There are currently over 400 NPMS survey squares in Scotland waiting for adoption by keen volunteers. NPMS survey monads are randomly generated, weighted for the semi-natural habitats the scheme is investigating, and to minimise surveyor selection bias. When 70% of

the survey monads are allocated within a region, more monads are released from the available pool. Squares can also be released by volunteers no longer able to survey them. These monads already have survey plots, ready to be adopted by new volunteers in the area for consistent long-term monitoring of the same sites.

There is an even greater need for survey uptake in more remote regions including the Scottish Highlands and Islands, as well as generally less surveyed habitats like montane habitats, certain coastal habitats such as saltmarsh and machair, and raised bog.

You can visit our 'Squares near me page' to check your local area for available NPMS survey squares waiting to be adopted: www.npms.org.uk/square-near-me-public.

We also love to hear from local recording groups, thinking about adopting one or more survey squares as a team effort. Please get in touch if your local group are interested in getting involved with the scheme, or if you would like to support a meet near you. Even if you would be interested in hosting an online talk for a local group, we'd love to help.

If you'd like to find out more about joining our fab community of volunteers, you can find lots of information about the scheme, our library of training and development resources, and how to get started here: www.npms.org.uk.

For any queries contact: support@npms.org.uk.

## *Lycopodiella inundata* (Marsh Clubmoss) populations around Lochan na h-Achlaise, Rannoch Moor

*Jim McIntosh, Vice-County Recorder, VC88*



A *Lycopodiella inundata* (Marsh Clubmoss) population, close-up. A 'stem' count unit is one or more stems apparently coming from a single point on, or just under, the substrate.
*Jim McIntosh*

Rannoch Moor Site of Special Scientific Interest (SSSI) is located in the central Highlands, approximately 10 km north of Bridge of Orchy. The SSSI lies in a high-level basin at about 300 m altitude and encompasses one of the most extensive and undisturbed blanket bog and fen complexes in Britain. The SSSI's notified features include freshwater and upland habitats, invertebrate groups and vascular plant assemblage. Notably the latter includes the Nationally Rare *Scheuchzeria palustris* (Rannoch-rush) and the Nationally Scarce *Lycopodiella inundata*

(Marsh Clubmoss). The latter was classed as Endangered in the 2005 GB Red Data List (Cheffings and Farrell, 2005); however it was revised to Least Concern in the 2025 GB Red Data List (Stroh *et al*., 2025).

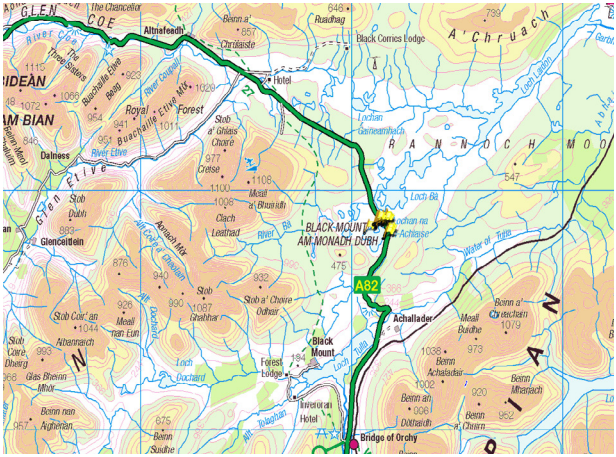



Figure 1: Location of *Lycopodiella inundata* populations around Lochan na h-Achlaise.

*L. inundata* has been known from loch margins on Rannoch Moor since 1950. Since then, there have been at least three surveys of populations in Rannoch Moor SSSI variously as part of the Scottish Rare Plant Project (Lusby and Rothero, 1998/9), and for Site Condition Monitoring (SCM) by Scottish Natural Heritage, who contracted surveyors in 2002 and again in 2013. The SCM surveys were sample surveys and while the 1998/9 survey only recorded populations to six figures and possibly not using GPS, it was, by far, the most comprehensive and systematic.

It is over 25 years since that survey was undertaken, and as the species is a target for the Species Recovery Trust's work in Scotland (see www.speciesrecoverytrust.org.uk/marsh-clubmoss), for whom I worked at the time, it was thought that it would be informative to undertake a comprehensive re-survey of the population around one particular loch in the SSSI. The loch chosen was Lochan na h-Achlaise, which is a shallow, irregularly shaped, 74-hectare, oligotrophic lake at 297 metres above sea level, surrounded by extensive blanket bog. It includes many large and small islands and the bottom of the lake in shallower places is covered by stones and boulders.

## Method

In 2024/5, the entire perimeter of Lochan na h-Achlaise was searched for *L. inundata* populations starting at the main A82 road-bridge over the outflow stream at NN314486 and going anticlockwise. The initial survey was undertaken on 1 October 2024 with further surveys on the 25 October 2024 and on 23 March 2025 to refind the 1998/9 survey populations that had not been found previously. These dates followed periods of relatively low rainfall, and most populations were just above the water level.

Generally, population counts were estimated by measuring the extent, counting the number of stems in a unit area of 50 x 50 cm and estimating a total pro-rata. The presence of fertile sporophytes, any threats and associate species were also noted for each population. In addition, all other vascular plant species encountered while circumnavigating the lochan were record-

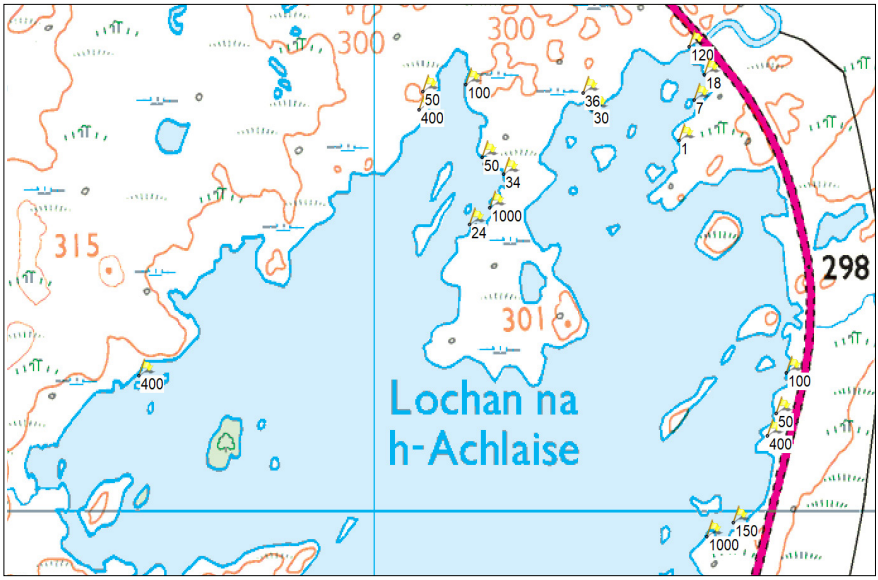



Figure 2: Distribution of *Lycopodiella inundata* around Lochan na h-Achlaise. Population size estimates are shown next to each marker. These populations were numbered strictly from left to right – starting with 1 on far left to 20 on the extreme right (by sorting the grid reference eastings). The populations are summarised in Table 1 by size (no. of stems).

ed. These records together with details of the *L. inundata* populations have been entered into the BSBI Distribution Database.

## Findings

Some 4,000 stems of *L. inundata* were found in a total of 20 populations on peaty margins around the lochan. 14 of these populations were along its northern margins, a single large population was found near the west end of the lochan and there were five populations on the east side of the lochan (see Figure 2).

Table 1: Populations varied from 1,000 stems to a single isolated stem:

| Population size (no. of stems) | Number of populations |
|---|---|
| <10 | 2 |
| 10-99 | 8 |
| 100-999 | 8 |
| 1,000 | 2 |

Nearly all of the populations were growing on rather wet, bare, slimy peaty margins that would be inundated after high rainfall that caused the loch level to rise. Many were covered in a thin layer of fine silt from previous inundations.

## Regeneration

The sporophytes break up and disappear over winter, so it was impossible to estimate what proportion of each population were sporulating for the five populations surveyed in late March 2025. However, a total of 2,364 stems were counted in the 15 populations surveyed in October 2024 and, of these, 24% were sporulating, which seems healthy. However, it was impossible to say whether any stems were juvenile plants and therefore a sign of regeneration. Interestingly, very few plants that were inundated at the time of the survey seemed to produce sporophytes.

Regeneration may also be caused by wave action that breaks or detaches stems that then wash-up elsewhere along the shoreline and root. However, there was a reasonable correlation between the locations recorded in this survey and those previously noted. Furthermore, no broken-off stems were seen - but it would be very easy to overlook them.



***L. inundata*** habitat at Lochan na h-Achlaise. *Jim McIntosh*

## Threats

There didn't seem to be any particular threats to the *L. inundata* populations. There are no sheep and there were no signs of deer grazing, trampling or droppings in the immediate vicinity of the *L. inundata* populations, though there were a few red deer some distance away. Many populations were covered in a thin layer of fine silt from previous inundations, and some were also covered in scattered leaves and scum – all of which would presumably wash-off when water levels rose.

## Associated species

A total of 25 taxa were recorded as associates of *Lycopodiella* populations. However, only the following 14 were recorded at more than one location (Table 2):

| Associate species | Number of locations |
|---|---|
| *Molinia caerulea* | 9 |
| *Erica tetralix* | 7 |
| *Calluna vulgaris* | 6 |
| *Carex panicea* | 6 |
| *Drosera anglica* | 6 |
| *Myrica gale* | 6 |

| Associate species | Number of locations |
|---|---|
| *Juncus squarrosus* | 5 |
| *Trichophorum germanicum* agg. | 5 |
| *Carex* spp. | 3 |
| *Huperzia selago* | 3 |
| *Carex demissa* | 2 |
| *Carex echinata* | 2 |
| *Eleocharis multicaulis* | 2 |
| *Euphrasia* agg. | 2 |

## Comparison with previous surveys

Comparing the excellent 1998/9 survey with this present survey is difficult because of the differing counting methods used by different surveyors. One particular difficulty was in deciding where one population stopped and another started, and so while the 1998/9 survey identified 11 populations, the present survey identified 20. However, if they are plotted on maps there was a clear correlation between the location and size of the populations in both surveys. Only one of the 1998/9 populations was not found despite searching, and there seems to have been a significant increase in the total population count.

Table 3: 1998/9 populations with estimates from 1998/9 and 2025:

| 1998/9 population ID | 1998/9 population estimate | 2025 population estimate |
|---|---|---|
| 1 | 30 | 120 |
| 2 | 6 patches | 7 |
| 3 | Several hundred | 66 |
| 4 | >200 | 1,100 |
| 5 | 5 | 100 |
| 6 | 150 | 450 |
| 7 | 50 | 400 |
| 8 | 100 | Not found hereabouts |
| 9 | 400-500 | 1,150 |
| 10 | 15-20 | 450 |
| 11 | 50-100 | 100 |

## Incidental records

Three hundred and fifty incidental records were made in four distinct 1 km squares - of a total of 113 species. The most notable species was *Vaccinium microcarpum* (Small Cranberry), which is a Nationally Scarce species that

is part of the SSSI vascular plant assemblage. There were two records of *Subularia aquatica* (Awlwort), which occurs in inundated margins of shallow lochans, and two large *Juniperus communis* (Juniper) bushes on separate islands in the loch, presumably protected from grazing. There were also records of three species classed as Vulnerable on the 2025 GB Red Data List: *Briza media* (Quaking-grass), *Solidago virgaurea* (Goldenrod) and *Succisa pratensis* (Devil's-bit Scabious).

## Discussion

The *Lycopodiella inundata* population seems to be thriving on the northern and north-eastern shores around Lochan na-h Achlaise with a single (large) outlying population on its western shore. According to the Bathymetric survey (1897-1909) there are two deeper basins in the loch – in the south and south-east of the loch where co-incidentally no populations of *Lycopodiella* were found, presumably due to lack of suitable habitat for it.

I regularly drive past Lochan na h-Achlaise and it is evident that the shoreline is completely submerged most winters and springs, and never completely dry during summers. Judging by the sparse surrounding emergent and aquatic vegetation, the loch is extremely nutrient-poor and the shoreline is completely unshaded. All of which, as Rasmussen and Lawesson (2002) note, corresponds well with the indicator values for the species.

Three other lochs in the SSSI are known to have *Lycopodiella* on their margins – Loch Ba, Lochan Beinn Chaoraich and the westernmost Dubh Lochan. All these populations are less than 1.1 km from the A82 (as are the Lochan na h-Achlaise populations) and it is likely that there is much suitable habitat around lochs further than this from the road on Rannoch Moor, but the terrain makes access difficult and may have discouraged fieldwork. So, it may be locally under-recorded.

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# *Lycopodiella inundata* (Marsh Clubmoss) – a 172-year Dunbartonshire refind

*Matt Harding, Scotland Officer*



The shoots of *Lycopodiella inundata* (Marsh Clubmoss) crawling through the open sward like so many yellow-green centipedes!
*Matt Harding*

Clubmosses are members of an ancient group of plants, more closely related to ferns and horsetails than mosses. Their ancestors included the tree-like lepidodendrons that dominated the world in the Carboniferous period, some 320 million years ago, forming great forests that fossilised to become the coal that was mined across central Scotland. Explore a disused coal mine spoil heap today and you have a good chance of spotting a fossil clubmoss ancestor, identifiable by its distinctive diamond-shaped scars where it once had leaves.

Today, there are seven species of clubmoss found in Scotland, and one of the rarest is the *Lycopodiella inundata* (Marsh Clubmoss). Found below 400 m, it prefers the wet, bare margins of lochs, flushes and trackways, where other plants are prevented from colonising and outcompeting it. However, it has been lost from many historic sites through drainage, lack of grazing and scrub encroachment.

Being more-or-less evergreen, clubmosses make great botanical targets all year round. With that in mind, on a rainy February morning I set out to hunt for Marsh Clubmoss near Inverarnan on the shore of Loch Lomond, at a site where monitoring had shown it in rapid decline, from an impressive 1,082 plants in 2003 to just 60 plants in 2013. Alas, a thorough search revealed no remaining plants, echoing the results of a search by Jim McIntosh in 2024 – it had been lost from this site in West Perthshire.

Disappointed, I crossed over the river into Dunbartonshire, where my research had revealed it had been collected from this area by one William Nichol in 1854, a mere 172 years previously. The chance of refinding the Marsh Clubmoss here was surely miniscule, but nevertheless... Tussocky and dense *Molinia caerulea* (Purple Moor-grass) and *Myrica gale* (Bog-myrtle) underfoot were off-putting, but on a hunch I turned up a pylon ride between *Picea sitchensis* (Sitka Spruce) plantations, following a drainage line that looked more promising. Suddenly, my eye was caught by a network of bright yellow-green, bottle-brush-like shoots trailing through the mud in one of the

most open patches of the flush. Marsh Clubmoss! With its thin leaves turning outwards from the sprawling stems, it looked for all the world like a collection of yellow-green centipedes crawling chaotically through the sparse, watery vegetation. Bracing against the strengthening rain, I counted the population – 150 plants or thereabouts, with the remains of some fertile 'cones' visible from last year (the reproductive structures that produce the spores that help the plant spread).

Alongside this star plant, I was also lucky enough to find three other species of clubmoss in the area – the trailing *Lycopodium clavatum* (Stag's-horn Clubmoss) with its distinctive, upright, antler-like cones; the small and delicate *Selaginella selaginoides* (Lesser Clubmoss), thin fingers sticking up in species-rich flushes; and *Huperzia selago* (Fir Clubmoss), a chunky, erect plant with spiky leaves that is the commonest clubmoss encountered by hillwalkers. A four clubmoss day – the Carboniferous lepidodendron forests were growing tall in my mind's eye!

Inspired, I tracked down some other old sites along the west of Loch Lomond, but had no success in finding Marsh Clubmoss again – despite some records being as 'recent' as the 1980s! This goes to show what a rarity my discovery was. Although I hope there are more populations out there waiting to be discovered, this small colony growing along just a few metres of a flush through wet heath above Inverarnan is one of just two extant Marsh Clubmoss sites in the whole of Dunbartonshire and Perthshire combined, and the first record from Dunbartonshire for 36 years.

After I shared news of the find on social media, Ben Averis celebrated with this rather nifty piece of doggerel!

Breaking news: planty fella
found some *Lycopodiella*
Someone saw it here before,
back in 1854
Since that day, the span of time
with no report of any sign
of such a species growing here
led to thoughts of "dear oh dear"
until this dazzling display
of yellow-green was seen today!

If you have an idea for a feature article for the next issue, please get in touch on scottishnewsletter@bsbi.org.

Whether it's ready to go, or you would like some guidance, we'd love to hear from you. The only stipulation is that it's about Scottish botany, botanists or related plant conservation news.

Deadline for submissions is normally January or February, for publication in Spring.

# Vice-county Reports 2025

## Angus (VC90) *Robin Payne and Theo Loizou*

Like many vice-counties, Angus saw a huge increase in records received via the BSBI Recording App in 2025. Close to 5,000 records in our case, a welcome boost to plant recording. Many records came from visiting botanists often, but not exclusively, drawn to the hotspots such as Glen Clova.

Theo Loizou spent much of the latter part of the field season carrying out habitat surveys for Angus Council as part of the Nature Networks and Local Nature Conservation Sites projects, often in company with Robin Payne recording at the species level. This work took the Vice-County Recorders to new locations in the upland margins which we had not visited before. We were genuinely surprised by what we found, especially by the discovery of a highly basic fen complex close to the Perthshire border.

Robin Payne continues to Chair the Local Nature Conservation Sites Group working on a second tranche of sites for designation which will achieve a degree of recognition and protection for our most important botanical sites not already within the SSSI system.



Lyn Jones held a successful BSBI field meeting to Meikle Kilrannoch and Liz Lavery a Perthshire Society of Natural Science field meeting to Corrie Fee.

We continue to be extremely grateful for the plant records we receive from Anne Burgess, Jo Parmenter, Dan Watson and many others.





Botanical finds: Top left: *Bidens cernua* (Nodding Bur-marigold) - a scarce plant in VC90 (only 22 records) so we were delighted to find it in the margin of a base-rich fen. Far left: *Equisetum hyemale* (Rough Horsetail) - another scarce plant in VC90, was also recorded in a basic fen. Left: *Trollius europaeus* (Globeflower) - Two locations were discovered on fragments of moorland in the Sidlaw Hills. *Robin Payne and Theo Loizou*

## Argyll (VC98)

*Ian Moir, Georgia Hancock and Jack Ravenscroft*

Records - 22,012

Species - 796

Georgia, Jack and Ian took over from Gordon Rothero as joint VCRs early in the year. We had a very good field meeting in Glencoe organised by Dan Watson from 16 to 20 June to find more records on the National Trust for Scotland property of Glencoe and Dalness. Three groups of three or four went out each day for the five days making over 2,500 records with 325 species. Some good re-finds, but no new species. *Carex atrata* (Black Alpine Sedge) *Carex saxatilis* (Russet Sedge), *Alchemilla glomerulans*(Clustered Lady's-mantle) and *Alchemilla wichurae* (Rock Lady's-mantle), *Arabis hirsuta* (Hairy Rock-cress) and *Botrychium lunaria* (Moonwort).

Georgia, Marion Moir and Ian had a visit to the south of the vice-county later in June. We had some good aquatic finds in Lochan Add. *Potamogeton x angustifolius* (Long-leaved Pondweed) and *Potamogeton gramineus* (Various-leaved Pondweed) a new find for Lochan Add, *Chara virgata* (Delicate Stonewort) (re-find from 1989) and *Nitella flexilis* (Smooth Stonewort).

Recording trips were also made to Glen Orchy, Glen Strae, Glen Lochy, Glen Ure, Glen Creran, Meall nan Tighearn crags, Kilchurn Castle, Lismore and Beinn Luibhean.

## Ayrshire (VC75)

*Dave Lang*

Other than the second year of monitoring the habitats in our National Plant Monitoring Scheme square, the Ayrshire BSBI recording group was not involved in any specific survey or monitoring projects in 2025. As such, our fortnightly field meetings mainly focussed on trying to botanise new seasonally appropriate sites. This resulted in a number of new locations being discovered for locally notable species such as only the fourth modern Ayrshire record for *Lathraea squamaria* (Toothwort) at Tairlaw in the south of the county and a new population of *Botrychium lunaria* (Moonwort) up in Ern Cleuch in East Ayrshire (the name of which suggests an occupation by eagles at some point in the past).





Left: A new Ayrshire site for *Lathraea squamaria* (Toothwort) in an old woodland at Tairlaw. Right: One of a colony of *Botrychium lunaria* (Moonwort) ferns high up in Ern Cleuch. *Dave Lang*



*Dactylorhiza viridis* (Frog Orchid) refound on the regularly botanised A77 road verge at Troax for the first time in 34 years.
*Carol Crawford*

2025 also turned out to be a pretty spectacular year for refinds of plants that had long been thought lost to us locally. On midsummer's day *Dactylorhiza viridis* (Frog Orchid) re-appeared at Troax – a regularly botanised site and one of only three locations that this GB Vulnerable species has been known from in Ayrshire over the last 40 years – for the first time since 1991. It was also the first record of the species anywhere in Ayrshire for 14 years. Coincidentally, on the very same day a local member (accompanied by one of our Joint VCRs) refound *Linum radiola* (Allseed) at Gailes in North Ayrshire after an absence of at least 39 years – the only site it has been known from anywhere at all in Ayrshire since the end of the 19th century. And finally, another species thought locally extinct was refound in August at its only ever Ayrshire location – *Pinguicula lusitanica* (Pale Butterwort) at Fence of Knockdon in the far southeast of the county after a period of fully 65 years.



*Pinguicula lusitanica* (Pale Butterwort) - Thought to be extinct in Ayrshire with no records from the vice-county for 65 years, it was found exactly where it last was at Fence of Knockdon in 2025.
*Malcolm Haddow of the Southwest Scotland Environmental Information Centre*

The last of these refinds was made during the undoubted highlight of our year - our publicised field excursion to the lochs of the northern/Ayrshire end of the Galloway Forest Park during a scorching hot weekend in August. These varied waterbodies are all fed by runnels dominated by patrolling dragonflies and insectivorous plants such as *Drosera anglica* (Great Sundew), *D. intermedia* (Oblong-leaved Sundew), *U. stygia* (Nordic Bladderwort) and *U. minor* (Lesser Bladderwort) – all four of which are Ayrshire Scarce. *D. anglica* and *Utricularia stygia* dominated the wetland around the many lochs. It was great to be able to compare the characters of all three native sundew species growing together in the north of the Galloway Forest Park. For *D. intermedia*, the flower stem arises from the side of the leaf rosette - rather than from the centre as with *D. anglica*.

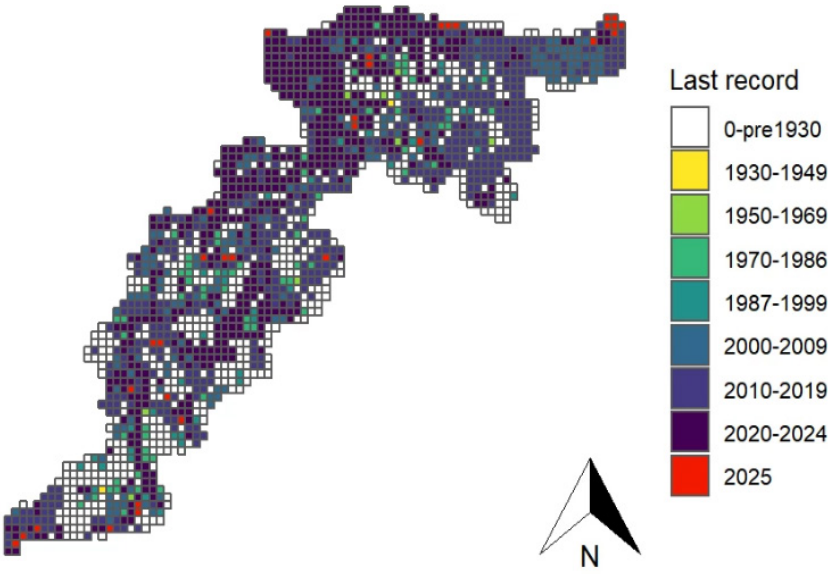
A total of 404 new records were made over the two days of this excursion, with the other main highlight being a new location for the Ayrshire Rare species *Thalictrum minus* (Lesser Meadow-rue).

## Banffshire (VC94)

*Dr Flora Donald*

Thank you to everybody who submitted records in Banffshire this year! I've spoken or replied to many of you but to those who haven't heard from me, every record is welcome and thank you for taking the time to submit. Over the course of 2025, 1799 records were added to the database in Banffshire.

Of the 894 observations recorded in 2025, 20% were new monad records, demonstrating that all skill levels make valuable contributions to our knowledge of plant distributions in the vice-county.




Most recent year of recording by monad in VC94.

Just over half of the records collected in 2025 were, for the first time, collected using the BSBI Recording App (381 accepted records at the time of writing). I'm still verifying observations submitted to iRecord but this could add another 270 records to the overall tally!

As always, I'm indebted to Anne Burgess for topping the leader board of submitted records. Mary Traynor, Gus Routledge and Simon Thomas also made significant contributions. Our investigations were well spread throughout the whole county in 17 different hectads.

David Elston totted up a good number of records supporting Deveron Wildlands to create a plant species list for Beldorney Estate following a request from their ranger.

Anne and I spent an enjoyable day together at Troup Head in July with spectacular views of gannets and peregrine falcons occasionally distracting

us from botany. We made some beginner errors using the BSBI app in earnest for the first time, but understanding the pitfalls is always useful and thank you to everybody who helped troubleshoot!

Our second outing pursuing records made by Scottish Wildlife Trust in 1999 revealed considerable habitat change at Foggie Moss, with new housing and a developing woodland. When Anne struck up conversation with a local resident, we were invited to record Marsh Orchids and other associated species in their previously unrecorded field.

Twenty species on the Banffshire Rare Plant Register were recorded last year, including *Carex lachenalii* (Hare's-foot Sedge), *Neottia ovata* (Common Twayblade), *Lycopodium annotinum* (Interrupted Clubmoss) and *Scilla verna* (Spring Squill).

Gus Routledge found a population of *Goodyera repens* (Creeping Lady's-tresses) still growing in the moss of Rothiemay, 31 years since the last observation and the longest period between refinds identified in 2025.

**Botanical finds**

- *Carex lachenalii* (Hare's-foot Sedge) - Only recorded in eight hectads in the UK since 2000, Jacob Davies found a sizeable patch of this rare species in a pool in the Garbh Uisge Mor on the north-east flank of Ben Macdui in August.

- *Galium album* (Hedge Bedstraw) - New hectad record for this species, found by Macolm MacGarvin in Strath Avon in July.

- *Campanula latifolia* var. *alba* (Giant Bellflower, white form) - Giant Bellflower is recorded fairly regularly but a white form spotted by Gillian Herman near Rothiemay in July was a VC94 first!







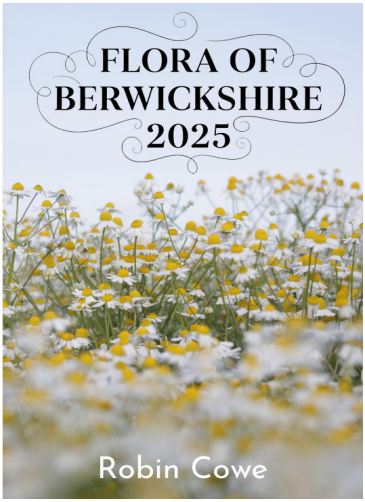
Above: *Campanula latifolia* var. *alba* (Giant Bellflower, white form).
*Gillian Herman*
Top left: *Carex lachenalii* (Hare's-foot Sedge.
*Jacob Davies*
Bottom left: *Galium album* (Hedge Bedstraw).
*Malcolm MacGarvin*

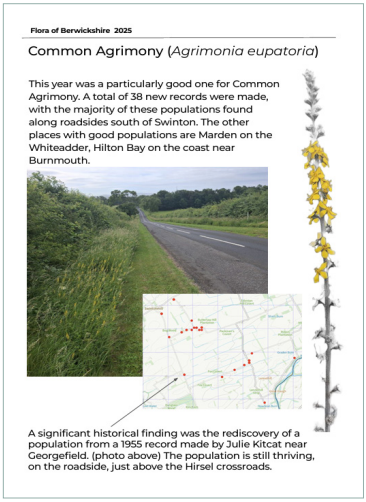
## Berwickshire (VC81) *Mr Robin Cowe*

Another wonderful and spectacular year in Berwickshire, from the depths of Dunglass Dean to the top of Black Hill. The botanical year started with me sitting on the beach at Coldingham, hugging a flask and coughing at the New Year Flower Hunt. It was all worth it with though, a new record for Berwickshire of 53 flowering plants on the day.

The first significant record comes from Dr David Long, who re-recorded his *Lycopodium clavatum* (Stag's-horn Clubmoss) for a second time, 62 years after he first documented the plant in a quarry just outside of Duns in 1963.

Just over 10,000 records were submitted from 30-plus recorders, including a large list of Berwickshire rares on the coast, the banks of the Tweed, potato fields and on the streets of Eyemouth. *Platanthera bifolia* (Lesser Butterfly-orchid) was searched for at Gordon Moss, but it wasn't found, six years after it was last sighted. However, the day saw the largest gathering of Berwickshire BSBI members ever, with three attending. I released a small Orchid guide for Berwickshire; and the usual fully illustrated end-of-year report, for people who had recorded in the area, is on the Berwickshire VC reports page of the BSBI website.





Flora of Berwickshire 2025

Common Agrimony (*Agrimonia eupatoria*)

This year was a particularly good one for Common Agrimony. A total of 38 new records were made, with the majority of these populations found along roadsides south of Swinton. The other places with good populations are Marden on the Whiteadder, Hilton Bay on the coast near Burnmouth.

A significant historical finding was the rediscovery of a population from a 1955 record made by Julie Kitcat near Georgefield. (photo above) The population is still thriving, on the roadside, just above the Hirsel crossroads.

Front cover and a sample of an illustrated page from the full *Flora of Berwickshire 2025* report. *Robin Cowe*

## Caithness (VC109) *Matt Harding*

Vice-county recorders Francis and Margaret Higgins retired in 2025, leaving Caithness vacant. If you are interested in becoming the Vice-County Recorder, or want to know more about what is involved, please email Matt Harding (matt.harding@bsbi.org).

Records were submitted in 2025 by John Crossley, Ian Green, Audrey and Bob Turner, and Philip Wright – many thanks all. These included one

new vice-county record, for the non-native *Cotula alpina* (Alpine Cotula) at John O' Groats by Ian – a significant range extension with the closest known population on the Coigach Peninsula in Wester Ross, and a handful of new hectad records including *Euphrasia scottica* (Scottish Eyebright) at Links of Greenland by John.

Other special plants recorded at Links of Greenland included the endemic Caithness speciality *Primula scotica* (Scottish Primrose), *Carex capillaris* (Hair Sedge), *Dactylorhiza viridis* (Frog Orchid), *Gentianella campestris* (Field Gentian), *Gymnadenia densiflora* (Marsh Fragrant-orchid), *Juncus balticus* (Baltic Rush) and *Trollius europaeus* (Globeflower).



*Cotula alpina* (Alpine Cotula) at John O' Groats.
*Ian Green*

## Clyde Islands (VC100) — *Matt Harding*

In 2025 Angus Hannah stepped down as Vice-County Recorder for the Clyde Islands to focus on his work as Scottish *Rubus* (Bramble) and now also *Circaea* (Enchanter's-nightshade) referee – thank you Angus for your fantastic work! We are now looking for new joint VCRs to support Sarah Cowan in the vice-county, so if you are interested in taking this on, or want to know more about what is involved, please email Matt Harding matt.harding@bsbi.org.



*Inula orientalis* (Eastern Fleabane) at Newton.
*John Poland*

A relatively small number of records were submitted for the vice-county in 2025, but there were some interesting finds amongst them. Angus added *Rubus sciocharis* to the vice-county flora, the first western Scotland record for this recent adventive – the specimen in question a large bush in the corner of the Rothesay Co-op car park on Bute, present for 15+ years and probably introduced with shrubs. John Poland discovered *Inula orientalis* (Eastern Fleabane) naturalised in Newton in north Arran, a rare alien and also new to the vice-county. On Cumbrae, Peter Bullard recorded *Allium scorodoprasum* (Sand Leek), a second vice-county record and first for the island. Other notable records included Susan King's survey of *Mertensia maritima* (Oysterplant) at Kilmory, which included four young

plants not present in 2024; a first *Glebionis segetum* (Corn Marigold) record in the vice-county since 2017 by John Poland; and records of local specialities *Circaea alpina* (Alpine Enchanter's-nightshade) and *Rhynchospora fusca* (Brown Beak-sedge) at known sites by visiting botanists Matthew Jones and Marco Dobson.





*Left: Mertensia maritima* (Oysterplant) at Kilmory. *Susan King*

Right: *Rhynchospora fusca* (Brown Beak-sedge). *Matthew Jones*

## Dumfriesshire (VC72) *Christopher Miles*

Just under 9,000 records were added to the DDb all via the BSBI Recording App.

In February we held a joint meeting with Kircudbright recorders to look back at 2024 highlights and then there were 10 Dumfriesshire group meetings between April and September including a saltmarsh day with WWT rangers. Accounts of these meetings and their highlights are available in group meeting reports here: bsbi.org/dumfriesshire.

Among species highlights for long established native species (archaeophytes) were first VC records for *Dryopteris lacunosa* (Alpine Male-fern) and *Carex x involuta*, a third VC record for *Alchemilla glomerulans* (Clustered Lady's-mantle) and a fourth VC record for *Dryopteris expansa (*Northern Buckler-fern). Interesting newly arrived species (neophytes) include first records for *Apera spica-venti* (Loose Silky-bent), *Polypogon viridis* (Water Bent) and *Erigeron sumatrensis* (Guernsey Fleabane), and a second record for *Lathyrus nissola* (Grass Vetchling).

About 150 Bramble microspecies were determined or confirmed by Angus Hannah. Among these were new species for Dumfriesshire, *Rubus insectifolius* (Drooping-flowered Bramble) and *R. lanaticaulis* (Lanate-stemmed Bramble) and refinds for *R. anisacanthos* (Densely-armed Bramble), *R. cardiophyllus* (Round-fruited Bramble) and *R. eboracensis* (Sowerby's Bramble). A couple more possibilities still need to be confirmed including a probable *R. caesius* (Dewberry).

Following recent detailed surveys I wrote a paper summarising the current

status of the montane and submontane plants of the Moffat Hills which was published in *British & Irish Botany* Vol 7 No. 2 https://britishandirishbotany.org/index.php/bib/article/view/176.

I joined both the Summer BSBI and Autumn BPS meetings in the Moffat Hills. At the former we were able to visit one of the Moffat Hills botanical hotspots and see some of the montane species highlighted in the paper above including *Alopecurus magellanicus* (Alpine Foxtail), *Carex vaginata* (Sheathed Sedge) and *Carex atrata* (Black Alpine-sedge). At the BPS meeting I was able to show the group the *Woodsia ilvensis* (Oblong Woodsia) transplants set out on the Grey Mares Tail by the RBGE and NTS team this year as part of the ongoing efforts to establish a few more populations in these hills.

I collected specimens for three FISCs and from three populations of *Hierochloe odorata* (Holy-grass) for an ongoing genetics study initiated due to a generous legacy from Michael Braithwaite. With Aileen Meek I gave a workshop on a Beginners Introduction to Rushes at the Scottish Botanists' Conference.









New VC records:
Above top: *Dryopteris lacunosa* (Alpine Male-fern) determined by Roger Golding. Above bottom: *Apera spica-venti* (Loose Silky-bent) confirmed by M Wilcox. Left top: *Carex x involuta* confirmed by Mike Porter. Left bottom: *Erigeron sumatrensis* (Guernsey Fleabane) confirmed by Martin Rand. *Christopher Miles*

## Dunbartonshire (VC99) *Michael Philip*

### Dunbartonshire 10-Year Project

The current 10-year project to visit all 704 monads in our vice-county is at its halfway point. More than 50 people were involved in fieldwork in 2025, either on our 16 field days or, increasingly, by contributing records on their own. There was a special emphasis on recording in the higher hills and we're grateful to several experienced mountain recorders joining us at different points.

### Loch Lomond islands

We've been targeting one of the major islands in Loch Lomond each year. This time it was the turn of Inchtavannach, on a perfect day.

As an interesting side project, Catriona and Nigel Scriven have been using kayaks to record plants on some of the very small islets in the Loch: this dataset of seldom-disturbed places is particularly valuable.



A hardy group about to set off for Parlan Hill. *Matt Harding*

### Partnerships

We continue to enjoy partnerships with Luss Estates, RSPB, West Dunbartonshire Council - and this year we have linked up with local woodland projects in the Rhu area. This included a recording day and a Workshop at Ardenconnel Wood. We also took part in a 'bioblitz' at Peaton Hill Nature Reserve, hosted by the MOD (who kindly provided catering).

### Records

We added over 14,000 monad records in 2025, making over 76,000 for our project at its halfway point. This means that over half of the all-time Dunbartonshire record has been made in the last five years. Some of this year's first vice-county records are listed below. Input from specialist referees has been much appreciated.

*Panicum virgatum* (Switch Grass) was spotted in Helensburgh by the ever-vigilant Alison Rutherford. It is only the second record of this taxon in Scotland. *Anthriscus caucalis* (Bur Chervil) was found as a 'weed' in a new housing scheme. *Symphyotrichum puniceum* (Purple-stemmed Michaelmas-daisy) - a presumed garden escape on the bank of the River Leven. *Taraxacum caloschistum* (Brilliant-stalked Dandelion) was one of 13 Dandelion species new to VC99 in 2025. *Tofieldia pusilla* (Scottish Asphodel) was unexpected find that brightened a very soggy day on a hillside above the West Highland Way. Also *Thalictrum alpinum* (Alpine Meadow-rue) and *Carex pauciflora* (Few-flowered Sedge).







Above: *Panicum virgatum* (Switch Grass). *Alison Rutherford*
Left top: *Tofieldia pusilla* (Scottish Asphodel). *Fiona Merrilees, taken on iPhone through a hand lens*
Left bottom: *Symphyotrichum puniceum* (Purple-stemmed Michaelmas-daisy). *Michael Philip*

## Easterness (VC96)

*Andy Amphlett*

### Recording in 2025

In 2025, 29,797 new records were collected and added to the main DDb workspace. All the records have been verified and validated. Some additional records are still to arrive, so the total is expected to exceed 30,000, an exceptional total for this vice-county. More than 25,000 records were entered via the BSBI Recording App, with iRecord, iNaturalist and MapMate providing most of the remainder. Records came from 61 hectads, 438 tetrads and 819 monads. Records were made on 266 days. 934 taxa (at species rank and below) were recorded, the highest number in a single year post-1999. There were 19,511 distinct taxon-monad records, of which 61% were new. There were 369 new taxon-hectad records.

Records from iNaturalist required especially careful scrutiny, and overall I excluded 5% of the records from this data source as being in non-wild locations (gardens), ID errors, genus only records or at very low precision.

While the VCR collected 74% of the records, c.400 individuals contributed records, c.290 via the iNaturalist app. Most recorders collected very few records: median number of records per recorder was 2 (inter-quartile range 1-6). 12 recorders provided >100 records.

2,231 records of 151 taxa included in the current VC96 Rare Plant Register were collected. Of these, 58% were of new taxon-monad records.

25 taxa new to the vice-county were recorded: 15 species, 1 subspecies, 4 hybrids, 2 varieties and 3 formas.

### Digitisation of historic records

In addition to new recording, 23,852 pre-2025 records were added to the DDb. These ranged from the earliest (1839) up to 2024, with 65% of the records being from the 1970s. The DDb now has all currently available VC96 records back as far as 1960, which is a great achievement.

There remain two major ongoing tasks: 1) adding accurate dates (at year or better precision), and locality details, to c.11,500 records that currently only have a date range and lack a locality name, and 2) Mary McCallum Webster's 1978 Flora of VC96 and her card index contain many historic, pre-1950 records from literature and herbaria sources. Much of this information has yet to be added to the DDb.

### Publications

The *Coire na Ciste Montane Woodland Project – What went wrong, and what lessons might be learnt for the future?* ParkswatchScotland blog post (September 28, 2025).

*The near total destruction of a Twinflower population at Creag Bheithe Bheag in the Cairngorms National Park – What went wrong, and what lessons might be learnt for the future?* ParkswatchScotland blog post (October 10, 2025).

*The destruction of Twinflower at Creag Bheithe Bheag – positive responses from Cairngorms National Park, Plantlife and Scottish Forestry*. ParkswatchScotland blog post (November 19, 2025).



Image of bud of *Sorbus commixta* (Japanese Rowan).
*Andy Amphlett*

### Botanical finds

- *Atriplex glabriuscula x longipes* = *A. x taschereaui* (Taschereau's Orache). Confirmed by John Akeroyd. Strandline, west of Nairn. 1st VC96 record.

- *Betula nana x pubescens* = *B. x intermedia* (a hybrid Birch). A good candidate for the F1 hybrid was found by Gus Routledge near the upper reaches of the River Feshie. Unfortunately no catkins were present, which would have provided additional confirmatory ID features. 1st VC96 record.

- *Bromopsis inermis* subsp. *inermis* (Hungarian Brome). A large population in un-mown vegetation beside un-named tributary of the Mill Burn, in Inverness. A tall, very striking grass. 1st VC96 record.

- *Cerastium arvense x tomentosum* = *C. x maueri* (a hybrid Mouse-ear). Two large stands; on a roadside bank at Broomton, and in rough grassland near Loch Flemington. 1st VC96 record.

- *Crataegus rhipidophylla* (Large-sepalled Hawthorn). A single bush beside the River Nairn, at Nairn. Confirmed by Cameron Crook. 1st VC96 record.

- *Crocus speciosus* (Bieberstein's Crocus). On bank of River Ness at Inverness. Confirmed by Ian Green. 1st VC96 record.

- *Dryopteris affinis* subsp. *paleaceolobata*. A probably under recorded taxon within the Scaly Male-fern complex of taxa. Found by Gus Routledge and confirmed by Alison Evans. One large plant near the junction of the Craggie Burn and the River Nairn. 1st VC96 record.



Image of *Taraxacum nitidum* (Shining Dandelion). *Finley Hutchinson*

- *Muscari latifolium* (Broad-leaved Grape-hyacinth). Several plants on bank, under trees, beside minor road to Gartally. 1st VC96 record.

- *Phyteuma spicatum* (Spiked Rampion). At least 14 amongst grass under trees just to the east of the driveway to Aigas Field Centre. Found by Louis Parkerson. Thought to have been introduced by the Victorian owners of the estate. Naturalised. 1st VC96 record.

- *Prunella vulgaris* f. *leucantha* (Selfheal). The white-flowered form. Two plants on verge of track in forestry plantation at Carr Ban. 1st VC96 record.

- *Pyrus salicifolia* (Willow-leaved Pear). In a hedgerow beside Newton Road, north of Cawdor. Confirmed by Cameron Crook. 1st VC96 record.

- *Rosa glauca* (Red-leaved Rose). Possibly self-sown on the border of a disused graveyard in Kingussie. Found by Sue Thomas. 1st VC96 record.

- *Sorbus commixta* (Japanese Rowan). Beside Loch Pityoulish. Not obviously planted and in a 'wild' location. ID confirmed by Hugh McAllister. A rare alien, this is one of only two or three 'wild' locations for this species in GB. 1st VC96 record.

- *Taraxacum nitidum* (Shining Dandelion). Finley Hutchinson, det. John Richards. Aigas Field Centre. The first record for Scotland.

- *Asplenium adiantum-nigrum* (serpentine form) (Black Spleenwort). The first VC record since 1976. The serpentine form of this fern was discovered in VC96 in 1974, and one of those locations was re-found in June (at Milton of Drumnadrochit). In addition a new population was found NW of Torr Buidhe, in the same hectad. Both records confirmed by Fred Rumsey. In VC96, serpentine rocks have a very restricted distribution, and unfortunately almost

the whole of their extent in Glen Urquhart is now under conifers. The evolutionary ancestry of these serpentine plants is now known to be different from *A. adiantum-nigrum s.s.*, and warrant recognition at least at sub-species level.

- *Hieracium stewartii* (Stewart's Hawkweed). The first VC record since 1967. Finley Hutchinson, det. by Brian Burrow. A small colony comprising c.19 flowering stems (c.6 separate mature plants), was found beside a woodland path at RSPB Insh Marshes NNR.

- *Lycopodiella inundata* (Marsh Clubmoss). The first VC record since 1970. In a mire west of Eskadale, in the valley of the River Beauly. Many shoots over a c.1 x 1 m area in a small depression in the mire surface. The mire also had *Drosera anglica* (Great Sundew), the hybrid Sundew *D. x obovata*, and *Utricularia minor* (Lesser Bladderwort).

- *Corallorhiza trifida* (Coralroot Orchid). 81 counted in the wooded lagg zone of Blar nam Fiadh, a raised bog bisected by the Inverness to Nairn railway line. A new site for this species and a site with no previous plant records.

- *Calamagrostis epigejos* (Wood Small-reed). Along a 5 m length of verge, beside the road up to Coire Cas. At 582 m, this is the highest altitude recorded for this species in GB.

- *Diphasiastrum alpinum x complanatum = D. x issleri* (Issler's Clubmoss). An extensive population was found on the eastern side of Coire an t-Sneachda, between 905-927 m altitude. Given how well botanised this coire is, this was a pretty remarkable find.

- *Dryopteris aemula* (Hay-scented Buckler-fern). Gus Routledge recorded this hyper-oceanic fern in 5 monads, including by far the largest population yet found in VC96, in woodland on the SE side of Loch Ness, c.4 km SW of Foyers. At one location he described it as co-dominant with *Pteridium*!



Luxuriant stand of *Dryopteris aemula*. *Gus Routledge*

- *Dryopteris oreades* (Mountain Male-fern). A large clump at the edge of the boulder field in Coire an t-Sneachda. Confirmed by Fred Rumsey. Not previously recorded in this well botanised coire, and a species with rather few modern records in the vice-county.

- *Lycopodium lagopus* (Hare's-foot Clubmoss). The small population in upper Coire na Ciste now appears to be almost extinct. However the previously known population in Invereshie and Inshriach NNR is thriving, and Gus Routledge found a new population c.2 km to the SE, also within the NNR. Plants intermediate between *L. lagopus* and *L. clavatum* were found at two

sites within the RSPB Abernethy NNR.

- *Puccinellia distans* subsp. *borealis* (Northern Saltmarsh-grass). An extraordinarily large population was discovered growing at the edge of the road up to Coire Cas, between 478-617 m altitude. Here it was recorded in 18 100 m grid cells. A few plants also occur further down the road as far as Inverdruie. Having visited a number of the coastal populations in NE Scotland, this roadside may support the largest population in Scotland.

*Rubus tuberculatus* (a Bramble). Det. by Angus Hannah. An extensive stand in woodland between the Sugar Bowl car park and the road up to Cairngorm. This bramble is growing here at an unusually high altitude, 467 m, one of the highest altitudes for any Bramble identified to species.



*Puccinellia distans* subsp. *borealis* (Northern Saltmarsh-grass) along verge of road up to Coire Cas. *Andy Amphlett*

## East Lothian (VC82) *Marion Moir*

Records for 2025: 21,725

The year has been busy with refinding old records, and the Lothian Botany Group contributed to this by recording on their own. We also had two outings, one to Dunbar coast and one to Traprain, along with instruction on using the BSBI Recording App. The Dunglass Gorge was tackled by a group of four including recorders from Berwickshire and Peebleshire. It was recorded last in 1990s, and no new species recorded were in 2025. The quantity of *Ophrys apifera* (Bee Orchid) was very poor this year after a cold Spring. Four types of *Salicornia* at Aberlady and Tyninghame were recorded in October, the incentive was a *Salicornia* workshop planned for the Scottish Botanists' Conference in November.

Becoming Verifier for iRecord, and looking at iNaturalist and Plantlife records has been an interesting step and produced a lot of records to check in 2026. East Lothian Council have asked for help with rare species for their Biodiversity Project for 75 areas, and habitat improvement where they are making ponds for wildlife.

**VC82 held three BSBI meetings this year:**

- In early July, a Bramble meeting at Dunbar with Angus Hannah and David Earl, recording brambles around and especially ones for the east coast, and taking specimens for the RBGE Herbarium. Previous records had been for the hectad.

- In mid July, the BSBI Summer Meeting in Melrose held a day at Aberlady looking at the special plants on the saltmarshes.

- In September, all Scottish VCRs were invited to a Rose identification day

at Longniddry with the Rose referee, Roger Maskew. He was accompanied by Gareth Knass as his successor. This was followed in November by their publication of *Wild Roses of Great Britain and Ireland*.

Les Tucker came to help us to look at Willows and especially *Salix repens* (Creeping Willow). He has also produced a spreadsheet of *Taraxacum* firsts for VC82, which will be a working sheet for 2026.

**New county records**

- *Rubus atrebatum* at the old Saltoun Station, ID by David Earl. *Rubus cardiophyllus* in Binning Wood, ID by David Earl. *Rubus errabundus* in Dunbar, ID by Angus Hannah and David Earl.

- *Rosa x dumalis* (*Rosa squarrosus x vosagiaca*) west of Longniddry CP no 1.

- *Atriplex longipes x prostrata = A. x gustafssoniana* (Kattegat Orache), *Atriplex longipes* (Long-stalked Orache), *A. littoralis x prostrata = A. x hulmeana*, *Atriplex portulacoides* (Sea-purslane), on the coast of the Aberlady Reserve, all found by Matt Harding.

**Interesting new finds**

- *Ornithogalum umbellatum* (Garden Star-of-Bethlehem) several finds on waysides in May.

- *Orobanche hederae* (Ivy Broomrape) in Ivy on cliff top below Dunbar, 2nd for VC82. Other record in Spott village which may disappear with garden tidying.

**Interesting refinds**

- *Ornithogalum nutans* (Drooping Star-of-Bethlehem) along the Prora roadside, deliberate planting of a garden plant, flowering in late March.

- *Fuchsia magellanica* (Fuchsia) is naturalised in Dunglass Gorge, unusual for the east coast.

- *Ophioglossum vulgatum* (Adder's-tongue) in quantity on heath at St Baldred's Point, old record from 1990s refound.

- *Genista anglica* (Petty Whin) at Faseny Water, near Whiteadder Reservoir, and another on Lammer Law, west of Hopes Reservoir. Not seen since 1990s. Muirburn may be the cause of its decline. In the 1890s, Mary Balfour writes in her botany notes that it was common above Whiteadder.

- *Ceratochloa carinata* (California Brome) on The Strip at Yellowcraig, first found in 1983 and may have come from horses being grazed there before WW2.

- *Salix repens* (Creeping Willow) on St Baldred's Point, Tyninghame, another patch at Lochhouses not recorded before. Erect stems 2 - 3 feet high.

- *Salicornia europaea s.s*. (Common Glasswort), *S. fragilis* (Yellow Glasswort), *S. ramosissima* (Purple Glasswort) and *S. dolichostachya* (Long-spiked Glasswort) at Aberlady and Tyninghame. On my refind list for Aberlady is *Sarcocornia perennis* (Perennial Glasswort), a perennial, which mainly grows on the south and Essex coast, so unusual for Scotland.

## East Perthshire (VC89) *Martin Robinson and Matt Harding*

Following 2024's publication of *The Special Plants of East Perthshire: Register of the Vice-County's Rare and Scarce Plants*, 2025 was a quieter year for recording in the vice-county.

A little over 2,500 records were made, including a handful of new vice-county records: *Fumaria capreolata* (White Ramping-fumitory), found by Liz Lavery, Faith Anstey, Aileen Meek and Polly Spencer-Vellacott during a BSBI Scottish Outreach field meeting at Kinnoull Hill; *Rubus sprengelii* by the path to Ben Vrackie, found by Finley Hutchins and determined by Angus Hannah, BSBI Scottish *Rubus* referee; and *Daphne mezereum* (Mezereon), introduced at Straloch and recorded as regenerating by Kevin Walker.



*Phyllodoce caerulea* (Blue Heath) on the Sow of Atholl.
*Matt Harding*

Two new populations of *Saxifraga hirculus* (Marsh Saxifrage) were found by Dan Watson, Andrew Painting, Aline Finger and Becca Drew high on Carn a' Bhutha, taking the total sites discovered in this hectad since 2016 to seven! Twenty-one patches of *Phyllodoce caerulea* (Blue Heath) were counted at the known site on the Sow of Atholl by Matt Harding, including a monad refind from 1985.

Over 20 new hectad records were also made, notably for *Trichophorum cespitosum* (Northern Deergrass) by Matt, and records of vice-county specialities including *Schoenus ferrugineus* (Brown Bog-rush) at known sites were submitted by Finlay. A visit to the locally rare *Vicia orobus* (Wood Bitter-vetch) at Straloch found the main colony going strong, with at least nine clumps/plants present.

After 24 years as VCR, Martin is looking to pass on the baton! If you are interested in becoming a VCR for one of the most exciting vice-counties in Scotland, please do get in touch with Matt Harding (matt.harding@bsbi.org).

## East Ross (VC106) *Brian R Ballinger and Mary Dean*

The number of records added for 2025 is over 7,500 and we thank all those who have contributed records. There are several botanists who regularly submit records, greatly helping the recording effort. A good number of records from the more remote and less accessible parts of the vice-county were received and greatly help to update pre-2020 records. We are receiving an increasing number of records from iRecord and iNaturalist, indicating a rising level of interest in botanical recording in the area. In addition there were

tranches of records received via iRecord dated pre-2020, which have added to earlier date classes.

A joint BSBI / BSS / Inverness Botany Group field meeting was held on the Kiltearn coast, close to the small town of Evanton, in July. Thirteen botanists enjoyed a hot summer day exploring the saltmarsh, coastal grasslands and riverside. The botanical highlight of the meeting was a new hectad for *Zannichellia palustris* (Horned-pondweed).

We helped the Maryburgh Community Woodland Group at a botanical recording event, and they have subsequently submitted records for the woodland via iNaturalist.

**Presentation (BRB)**

24 January 2025. Tain Field Club. "20 Years of recording the flora of Easter Ross: Change and Persistence"

**Exhibits at Scottish Botanical Conference 2025 (BRB)**

1. Urban and rural Railway vegetation in Easter Ross.

2. Between the Lines in Easter Ross.

Abstracts can be found in the archive of the conference webpage.

**Publications (BRB)**

Recording Strategy - the experience of one recorder. *BSBI News* 158. 7-8.

The flora of bus stops. *BSS News* 124. 28-29.

Easter Ross stations - an update. *Highland Naturalist* 21. 27-28.

Urban Walls - A Plant Count and Zonation. Dundee Naturalists' Society Bulletin 49. 34-25.



*Datura stramonium* (Thorn-apple) at Dingwall.
*Alex Liddle*

**Botanical finds**

- *Rubus pictorum* (The Picts' Bramble) was found at Strath Garve in July by Finley Hutchinson and is new to Easter Ross. The record was determined by Angus Hannah. This specimen is well north of other sites for this taxon.

- *Zannichellia palustris* (Horned-pondweed) was found by Tom Dargie in a brackish stream during the field meeting near Evanton. It is a new hectad for an Easter Ross Rare Plant Register species.

- We confirmed a 2024 record by Louis Parkerson of *Luzula luzuloides* (White Wood-rush), found at Silver Bridge. This is the only recent record for this species in the vice-county.

- We received what is only the third vice-county record for *Datura stramonium* (Thorn-apple). It was recorded by Alex Liddle at Dingwall in August.

## Fife and Kinross (VC85) *Sandy Edwards*

The number of records for 2025, including records from iRecord and the BSBI App, was 5,780, which were added to the DDb. 30 of these new for 2025. Herbarium catalogue updated and improved. Copy sent to BSBI Herbarium

There were outings this year on the last Saturday of each month. An average of 18 people took part and 100-200 species were recorded for each location. Some highlights were:

**Burleigh Sands,Loch Leven to Kinross**

*Cerastium arvense* (Field Mouse-ear), *Carex distcha* (Brown Sedge), *Potamogeton crispus* (Curled Pondweed), *Salix pentandra* (Bay Willow) and *Hierochloe odorata* (Holy-grass) which has spread to a few more locations.

**Balmerino**

We covered 5 monads. *Festuca heterophylla* (Various-leaved Fescue) was a new record for VC85. The *Potentilla argentea* (Hoary Cinquefoil) was still there after many decades, at its only site in VC85.

**Dalbeath Reserve**

*Platanthera chlorantha* (Greater Butterfly-orchid), *Carex paniculata* (Greater Tussock-sedge) and a new record for *Alnus incana* (Grey Alder).

**Careshall Bog**

Joint walk with the BSS. *Jacobea aquatica* (Marsh Ragwort), at its only site in VC85. *Catabrosa aquatica* (Whorl-grass), scarce in VC85.

**Tentsmuir**

Always worth visiting every year as it rapidly changes. New dunes have diverted the burn into the dune slack and the *Rumex hydrolapathum* (Water Dock) has spread a lot. The rare *Juncus balticus* (Baltic Rush) was the main find, a new record and furthest south. *Lathyrus japonicus* (Sea Pea) spreading and a most northerly record. A flowering *Hydrocotyle vulgaris* (Marsh Pennywort), another new record for the area.

**Lochore Meadows**

*Trifolium medium* (Zig-Zag Clover), *Myriophyllum verticillatum* (Whorled Water-milfoil), but did not find *Laphangium luteoalbum* (Jersey Cudweed), which we had found before.

## Kincardineshire (VC91) *David Elston*

Selected sheets from David Welch's collection of pressed specimens were catalogued prior to collection by the University of Aberdeen Herbarium. Most were *Taraxacum* sp. (Dandelions), *Hieracium* sp. (Hawkweeds) and *Rubus* sp. (Brambles), but also included were species that are locally rare or recent arrivals. A box of Dandelion and Bramble specimens was also delivered to the Royal Botanic Garden Edinburgh Herbarium.

With help from Alison Peaker, Carol Blow, David Plant and Judy Leslie, records on species index cards are being compared with the BSBI Distribution Database and discrepancies reconciled.

The first Field Identification Skills Certificate (FISC) assessment in Scotland was held at Banchory in July, organised by Jake Brendish. The VCR acted as

Gold Standard Surveyor in the field test.

An informal gathering of the North East Scotland Botanical Recording Network took a critical look at conifers in the grounds of NTS Crathes Castle.

Alison Peaker and Carol Blow have undertaken recording at Fetteresso Local Nature Conservation Site (LNCS) to help Aberdeenshire Council maintain up-to-date species lists for their LNCSs.

With help from referee John Richards, a total of 61 new *Taraxacum* (Dandelion) records were obtained.

Recording took place at St Fittick's Park, Aberdeen, to provide information for a community group, Friends of St Fittick's Park, which is trying to protect the site from development.

Three priority tetrads were recorded in, these being entirely in Kincardineshire but with fewer than 10 previous records in each.

The VCR is grateful for all contributions of assistance and records during the year.

**Botanical finds**

- *Centaurea debeauxii* (Slender Knapweed) New to Kincardineshire. Discovered by visiting botanist Jo Parmenter, growing with other calcicoles in coastal grassland at Johnshaven.

- *Dryopteris expansa* (Mountain Buckler-fern) New to Kincardineshire. Discovered amongst rocks at ca. 420 m a.s.l. on the shoulder of Sturdy Hill, near Fettercairn, when









Above top: *Centaurea debeauxii* (Slender Knapweed); Above bottom: *Melica nutans* (Mountain Melick); Left top: *Dryopteris expansa* (Mountain Buckler-fern); Left bottom: *Asplenium ceterach* (Rustyback). *David Elston*

surveying the Kincardineshire fraction of a tetrad mostly in VC 90 Angus. Identification was confirmed by referee Fred Rumsey.

- *Trocdaris verticillata* (Whorled Caraway) Last recorded in Kincardineshire in 2002. Four well-established plants were found in marshy ground by the River Dee at Cairnton. The perilously small population at its previous VC91 site, ca. 2.5 km distant, was destroyed during path construction.

- *Asplenium ceterach* (Rustyback) 2nd site in Kincardineshire. Found on a roadside wall at Barras, south-west of Stonehaven, when surveying a tetrad from which only 46 taxa had previously been recorded.

- *Melica nutans* (Mountain Melick) Last recorded in Kincardineshire in 2010. Refound at its only modern site in Kincardineshire, the gorge of the River North Esk, on a rock face well above the usual water level.

## Kintyre (VC101)

*Ian Moir, Georgia Hancock and Jack Ravenscroft*

Records - 1,893

Separate species – 419

Georgia, Jack and Ian took over from David and Pat Batty as joint VCRs early in the year.

We had a visit to the vice-county in late June. Firstly, to the Taynish area where we re-found *Hymenophyllum tunbrigense* (Tunbridge Filmy-fern) and some good aquatic finds in Lochan Taynish: *Chara virgata* (Delicate Stonewort), *Nitella translucens* (Transluscent Stonewort) and *Eleogiton fluitans* (Floating Club-rush).

Another trip took us to Kilberry, where we re-found *Lathyrus palustris* (Marsh Pea) and *Cirsium dissectum* (Meadow Thistle) in flower.

We also re-found *Carex buxbaumii* (Club Sedge) in Lochan na Torrnlaich.

## Kirkcudbrightshire (VC73)

*Sarah White*

Our main recording effort is through the regular outings of the Kirkcudbrightshire Botany Group. We held 10 meetings across a range of habitats, focusing on under-recorded areas. Besides recording, our meetings offer shared enjoyment in finding and identifying wild plants and an opportunity for learning.

Our group was featured in a 7-page article in Dumfries and Galloway Life magazine in September, providing some valuable local publicity.

Our new data manager, Jan, has been



*Asplenium ceterach* (Rustyback).
*Sarah White*

working hard to catch up on the backlog of data entry. Most of the data, comprising approximately 16,500 records for the period 2020 to 2024, has now been entered.

The VC73 Rare Plant Register (RPR), prepared by David Hawker, will shortly be on the webpage. This year has produced four New County Records, and new sites for at least 20 of our locally Rare and Scarce plants.

Jointly with Colvend Community Council, we carried out a project to survey the aquatic and marginal plants of all the lochs and lochans in the Colvend area within NX58. The work was funded by a grant from the Royal Society of Edinburgh and fieldwork was led by Nick Stewart. A total of 22 sites were covered and around 150 species of marginal and aquatic species were recorded.



*Najas flexilis* (Slender Naiad).
*Sarah White*



*Osmunda regalis* (Royal Fern).
*Sarah White*

There was considerable local interest in the project and a display of plants outside the Community Hall was attended by 25-30 people. Further details about this project can be found in the feature articles section of this newsletter.

Jointly with RSPB, we undertook monitoring of *Thelypteris palustris* (Marsh Fern) at Mersehead, one of only two sites in the vice-county.

### Botanical finds

- *Asplenium ceterach* (Rustyback). A large new colony of this fern, scarce in VC73, was found this year.

- *Osmunda regalis* (Royal Fern). Two new sites found for Royal Fern this year.

- *Najas flexilis* (Slender Naiad). This Nationally Scarce plant was re-found this year at its only Kirkcudbrightshire site.

## Lanarkshire (VC77) *Peter Wiggins and Michael Philip*

### Recording

Last year we had 13 organised outings across VC77 aiming to record, educate and engage in interesting botanical sites and under recorded areas. They were well attended and yielded over 2,600 records. This was only about a fifth of the total records for the year (13,000), this was because we had many people recording solo or in small groups in monads suggested by the VCRs.

We found 22 new species for the VC, including one new to Scotland. We

recorded in 23 previously unrecorded monads and over 50 monads previously with few records. This continued our long-term aim to record in all 2,492 monads in Lanarkshire. We had 969 blank monads at the start of the decade, and we have visited 337 of them since, only 632 to go!



At Roughrigg Reservoir.
*Liz McTeague*

During this year we built on the work and connections we have been building since the pandemic.

### Working with councils

The vice-county includes most of Glasgow and North Lanarkshire, plus all of South Lanarkshire. Alongside existing Local Nature Reserves (LNR), councils are required to establish Local Nature Conservation Sites (LNCS) and Green Networks by the Scottish Government. We have prioritised the local nature reserves for outings for recording in South and North Lanarkshire and recorded in some of the LNCS in South Lanarkshire. In Glasgow we have visited some of the LNRs and also sites of the many former estates in the city, part of the "Big Hooses" project, celebrating Glasgow's 850th birthday. We are developing with the three councils further plans for the next season.

### Wind farms

Lanarkshire has part of the largest onshore wind farm in the UK and all of the second largest along with many other wind farms across the county. They are often poorly recorded, partly due to access difficulties, which the wind farm development helps.

We teamed up with the wind farm ecologist and another ecologist, and their knowledge helped with choosing the areas to survey with the monads. The ecologists used these days for their continued professional development. We were allowed to drive into the wind farm and so dropped a pair off at a monad border then drove on to another monad border and recorded there. We then regrouped and repeated, which allowed us to record in 12 monads in two days and identified some 'nice' flushes in the Clyde South Wind Farm. Over the year we recorded in 26 monads in wind farms which previously had few or no records. This approach to wind farms has proved successful and will continue next season.

### Other activities

In Lanarkshire we work along with Renfrewshire and Dunbartonshire as the West Central Scotland Botany Network. This enables us to share resources and skills, and offer a wider range of opportunities.

We had four virtual Zoom meetings for the Network. Matt Harding told us about his role as Scotland Officer and his future plans; Peter Stroh told us all about *Plant Atlas 2020* and generated much interest and enthusiasm; Keith Watson discussed plans to mark the centenary of Lee's *Flora of the Clyde* and

the series ended with an amazing quiz looking at the roots of plant names by Jim Blackwood, one of our Network and a classicist. We have planned a series of virtual workshops looking at recording, the DDb and the BSBI Recording App for the Network.

We are planning to finalise a Rare Plant Register for the vice-county and this may help us target outings this season to re-find some interesting plants.

Work continues on reviewing and accepting the records coming from iRecord and other sources, including the BSBI Recording App and using this to engage with botanists in the vice-county and develop and widen the Network.

An encouraging development in 2025 was increasing numbers of younger people on the outings and getting involved. Many are professional ecologists involved in environmental work and want to learn more about botany. They bring with them a wider natural history knowledge, enthusiasm and energy.

**Botanical finds**

- *Sonchus tenerrimus* (Slender Sow-thistle). Found in amongst discarded rubbish in an area of waste ground in Glasgow city centre. It is the first record for Scotland.

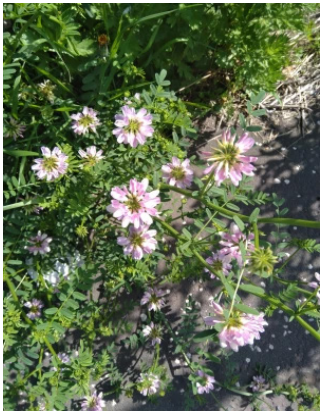
- *Agastache rugosa* (Korean Mint). Two plants were found growing at the edge of the pavement in Glasgow city centre. First record for the vice-county.

- *Cordyline australis* (Cabbage-palm). This was an unexpected find some way away from the back of a row of houses, in woods beside a former railway line. It had been there for at least three years and was a first vice-county record.

- *Galanthus elwesii* (Greater Snowdrop). This is beside the path in some reclaimed land and is spreading.

- *Laphangium luteoalbum* (Jersey Cudweed). Early in the season, some





Left to right: *Sonchus tenerrimus* (Slender Sow-thistle), *Malcolm Macneill*; *Cordyline australis* (Cabbage-palm), *Peter Wiggins*; *Securigera varia* (Crown Vetch), *Malcolm Macneill*

rosettes were spotted and we thought it was this plant, however later in the season, a few hundred metres away many plants were found in flower. It is a new vice-county record, but has been recorded for a few years in Edinburgh and we think has ventured along the motorway.

- *Lysimachia arvensis* (Scarlet Pimpernel). Although common elsewhere, this is the first record in the vice-county. It was in an area of bare ground a few yards away from a disused garden.

- *Perovskia atriplicifolia* (Russian Sage). This stunning plant was growing and widely spreading in some bare earth in a town centre. It is very aromatic and has distinctive bright white stems. First record for the vice-county.

- *Securigera varia* (Crown Vetch). This was surviving, even thriving, close a garden abandoned many years ago and is a first record for the vice-county.

## Mid Ebudes (VC103) — *Lynne Farrell*



Ro Scott and Jonathan Keefe admiring the *Rhynchospora fusca* (Brown Beak-sedge) on Coladoir bog.
*Lynne Farrell*

Ro Scott, Jonathan Keefe and I re-surveyed *Rhynchospora fusca* (Brown Beak-sedge), on Coladoir bog, finding it more widespread than when I last surveyed it with Gordon Rothero in 2006. But it could not be relocated at its only other previously known site at Brolass, on the Ross of Mull, where the ladder mires are drying out.

We also confirmed the survival of the hybrid sedge *Carex x boenninghausiana* (*C. paniculata x C. remota*) at Aros Park lochan near Tobermory, and *Umbilicus rupestris* (Navelwort) on the outskirts of Tobermory at its second Mull location. Near Lochnameal, a challenging site, which is very difficult to access now, and resulted in my damaging my knees, we found *Carex aquatilis* (Water Sedge) and *Lysimachia vulgaris* (Yellow Loosestrife) plentiful in the deep, boggy, tussocky ground. Nearby along the track *Calamagrostis epigejos* (Wood Small-reed) was in flower.

After careful searching, we located several small plants of *Pyrola minor* (Common Wintergreen) along the coastal path south of Tobermory, although the population is rapidly declining owing to competition from vigorous species and increased trampling along the path.



*Pseudorchis albida* (Small-white Orchid).
*Jonathan Keefe*

*Pseudorchis albida* (Small-white Orchid) seems to have fared well in various parts of the country this year, and several fruiting plants were found

in the heathy grassland around Loch an Torr, which we rowed across trying to fish out some interesting aquatics, but failing, owing to extra high water levels in this and the other lochs we investigated.

Work continued during 2025 on an updated edition of the Mid Ebudes Rare Plant Register, assisted by Jonathan Keefe, and we hope to publish it in the coming year.





Left: *Carex x boenninghausiana* at Aros Park lochan near Tobermory; Right: *Rhynchospora fusca* (Brown Beak-sedge) on Coladoir bog. *Jonathan Keefe*

## Midlothian (VC83) *Sue Jury*

It has been a busy year in 2025. Over 36,000 records have been collected and added to the DDb. There are many new vice-county records. The continuing challenge being to re-record areas and re-find species for the next Plant Atlas. Now over 75% of the VC has been re-recorded since July 2022. A new checklist for the VC is nearly complete. All new records are determined or confirmed by experts where appropriate.

The Lothian Botany Group has been active with walks throughout the year (see the Midlothian Botany Report). In these walks we have also engaged with Park Rangers or other organisations such as The Edinburgh Natural History Society (ENHS) and The Wildlife Information Centre (TWIC).



Dalkeith Country Park to see the oldest tree in the SSSI oak wood: 'The Michael'. *Sue Jury*

Separate recording has been done for TWIC to update Local Biodiversity Sites (LBS) within the vice-county.

Meetings with the Council regarding LBS sites have been attended and we are in contact with the Biodiversity Officer. We recorded rare plants on the Wester Craiglockhart Hill.

The Vice-County Recorder (VCR) has also been supporting and encouraging botany members to attend Botanical Society of Scotland (BSS) outdoor and indoor meetings.

Paties Hill Wildlife Garden was recorded for The Friends of the Pentlands with the ENHS. This was completed on separate outings as I was unable to attend on the same day as them. There is an article in the Friends of the Pentlands report.

We continue to work with the Pentlands rangers. Zuzana one of the rangers is a botanist and always keen to go out. One of the Botany Group outings was to Bonaly Reservoir with the rangers who are working on improving the biodiversity in the area. This part of the Pentlands is owned by the Council. *Platanthera chlorantha* (Greater Butterfly-orchid) was found flowering behind the dam - a new record for the site.



Les Tucker leading a *Taraxacum* (Dandelion) event at RBGE.
*Sue Jury*

**The Modern Art Galleries and *Viscum album* (Mistletoe)**

Both of the galleries were recorded with ENHS and the new Biodiversity Officer, so that they may improve the biodiversity of this area. It was noted at the beginning of the year the *Viscum album* (Mistletoe) had been removed from all the trees, bar one sprig from a tree at the entrance of Modern 2. No real explanation has been given. An article of complaint has been written by Douglas McKean to the galleries and various newspapers. Finally 'The Times' newspaper agreed to print to an article.

**Recording of challenging taxa**

- *Taraxacum* (Dandelions) - An outing with Les Tucker in the Royal Botanic Garden Edinburgh (RGBE) to record *Taraxacum* was organised this year. The VCR continued, during the *Taraxacum* season, to add some records to the VC. This will be continued with Les in 2026 where a series of meetings will be planned in different habitats.

- *Rubus* (Brambles) - This genus was seriously tackled in 2025, with a week-long visit from Angus Hannah in September. The idea was to tackle the black hole for this genus within Midlothian. Several of the Botany Group members attended the days out. Days out were scattered through the VC to get a widespread coverage. It was challenging, however, now some of the common species for the area can be identified alone. Angus is keen to re-visit in the spring. Most of the species on the DDb that were pre-2000 records have been re-found within Midlothian. New vice-county records were *R. anisocanthos* found with Angus in the west of the VC in 3 monads. This is also a new unexpected area of Scotland for this species. The VCR has found *R. infestus* and a possible *R.conjungens,* to be checked in the spring, both of which are new vice-county records.

30 *Rubus* species in total were identified. David Earl also visited Midlothian for a day, leading to new vice-county records for *R. bartonii*, *R. hindii*, *R.*



*Nicotiana rustica* (Wild Tobacco).
*Sue Jury*

*halsteadensis*. *R. phoenicolasius*, another new vice-county record, was found at 2 sites (introduced). We have planned a *Rubus* recording event with the ENHS next year.

- *Rosa* (Roses) - a few roses have been recorded, including one rare one: *R. corbifera x R. vosaigaica*. A training session on Roses for Vice-County Recorders in East Lothian was attended, so will now be better equipped to tackle this genus.

- *Salix* (Willows) - this genus is fairly-well covered now in the VC. New vice-county records are *S. udensis* (Sachelin Willow) and *S. aegyptiaca* (Musk Willow). Both were found by the VCR, and both are introduced.

**Botanical finds**

- *Verbascum phlomoides* (Orange Mullein). New vice-county record found by Heather Kinnin at Millerhill.

- *Althaea officinalis* (Marsh-mallow). New vice-county record found at a pond created outside Saughton Park. Introduced.

- *Orobanche hederae* (Ivy Broomrape). Found growing abundantly at Warriston.

- *Lysichiton americanus* (American Skunk-cabbage). Found growing in the River South Esk at Braidwood. It has spread from temple where it is abundant behind. TWIC have been informed.

- *Nicotiana rustica* (Wild Tobacco). Found by David Merrick at Meadowbank Shopping Centre. I managed to see it and photograph it, but it was routed out a few days later.

- *Pilosella caespitosa* (Yellow Fox-and-cubs) and *Chaenorhinum minus* (Small Toadflax). The wind farms of Paties Hill and Harburn have both produced records of these species, where there are many plants.



*Pilosella caespitosa* (Yellow Fox-and-cubs).
*Sue Jury*

- *Platanthera chlorantha* (Greater Butterfly-orchid). New record for Bonaly Reservoir.

- *Erodium maritimum* (Sea Stork's-bill). New vice-county record. An iNaturalist record drawn to my attention by David Merrick who is now keeping an eye on iNaturalist records of interest.

- *Anemanthele lessoniana* (Pheasant's-tail) and *Nassella tenuissima* (Argentine Needle-grass). New vice-county records. Two new grasses that I am now familiar with and that are starting to naturalise in urban areas; hence now being added to the records.

- *Juncus ensifolius* (Sword-leaved Rush). New vice-county record. An interesting find recorded by Richard Milne. Naturalised in the Damhead Nursery.

## Mid Perthshire (VC88) *Jim McIntosh and Neale Taylor*



The Glen Lyon Recording Week Team.
*Jim McIntosh and Neale Taylor*

In 2025, 24,210 new records were collected and added to the DDb – itself a new record! And, for the first time ever, all the records have been verified and validated. Nearly all the records were entered via the BSBI Recording App. Records came from 51 (out of 55) hectads, 263 tetrads and 412 monads. 928 taxa (at species rank and below) were recorded, the highest number in a single year. There were 22,450 distinct taxon-monad records, of which 79% were new. There were 458 new taxon-hectad records. In addition 1,150 records variously from iRecord or iNaturalist are currently being verified by Neale and will appear in the BSBI Database at the next update.

Thanks are due to everyone who participated in the Glen Lyon Recording week and helped record some 8,800 records in this remote area. Thanks are also due to Innes Manders for records made while surveying three large proposed Sites of Importance for Nature Conservation and to our friends at National Trust for Scotland (NTS) for their annual batch of records from Ben Lawers. We are also grateful for big contributions from Faith Anstey, Dan Watson, Matt Harding, Lindsay Mackinlay and Oliver Moore.

Talking about Sites of Importance for Nature Conservation, we collaborated with Perth and Kinross Council (PKC) and NatureScot staff in the assessment of dozens of proposed sites. Approved sites will hopefully appear on the next PKC Local Plan and be given a degree of protection by it.

Neale made great progress identifying Hawkweeds – both in the field and of specimens left by Alistair Godfrey. Some 29 field records of 18 taxa were made in 2025. We also made good progress recording critical Bramble species with 29 field records of 12 taxa.

281 records of 114 taxa included in the Mid-Perth Rare Plant Register list were collected. Of these, 85% were of new taxon-monad records. 24 taxa new to the vice-county were recorded including 19 species, one subspecies, one hybrid, one variety and two formas.



A single flowering spike of *Alopecurus magellanicus* (Alpine Foxtail).
*Dan Watson*

## Botanical finds



Flowering *Pratia pedunculata* (Blue Lawn-lobelia). *Faith Anstey*

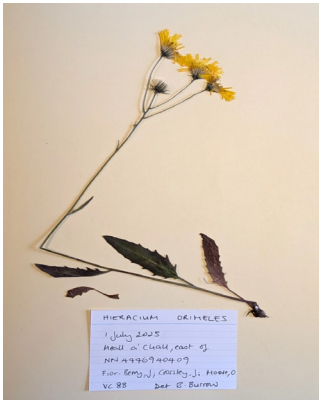
- *Luzula forsteri* (Southern Wood-rush). This species is native in the south of England but has never been recorded in Scotland before. It was found in the parkland of Taymouth Castle, near Kenmore, with *Luzula luzuloides* (White Wood-rush) nearby. The latter is one of several species that were popular amongst gardeners setting out designed landscapes. 1st Scottish Record and 1st Mid-Perth record. Confirmed by Tim Rich.

- *Alopecurus magellanicus* (Alpine Foxtail). This was one of the most exciting finds in 2025. There has only ever been one record of *Alopecurus magellanicus* in Mid-Perth – 61 years ago. In 2025 Lindsay MacKinlay and Dan Watson found 25 spikes on Ben Chonzie and a few weeks later, on the Recording Week, Dan and Jen Towill found a single spike on Cairn Mairg, 22 km to the north.

- *Chenopodium ficifolium* (Fig-leaved Goosefoot). Found by Matt Harding on the verge of the A9 near Auchterarder. Confirmed by John Akeroyd. 1st Mid-Perth record.

- *Ulex gallii* (Western Gorse). Found by Jim on Kinnaird estate near Logierait in a lovely bit of heath with *Genista anglica* (Petty Whin), *Arctostaphylos uva-ursa* (Bearberry)and *Lycopodium clavatum* (Stag's-horn Clubmoss) so may be native, or at least naturally-occurring, despite being a long way from its strongholds. 1st Mid-Perth record.

- *Rhus typhina* (Stag's-horn Sumach). Found by Matt Harding suckering at edge of ornamental shrubbery (where it presumably originated) beside Perth Leisure Pool. 1st Mid-Perth record.




A pressed *Hieracium orimeles* (Pale Hawkweed) specimen. *Neale Taylor*

- *Pratia pedunculata* (Blue Lawn-lobelia). Found by Faith Anstey at Dalguise. 1st Mid-Perth record.

- *Malus baccata* (Siberian Crab Apple). Found by Jim on the A85 roadverge beside Loch Earn a long way from any garden. So presumably planted. 1st Mid-Perth record.

- *Hepatica nobilis* (Liverleaf). Found by Faith Anstey near Dalguise in Strath Tay. Only the 5th record in the wild in Scotland and the first in Mid-Perth.

- *Fallopia baldschuanica* (Russian-vine). Found by Jim near a house on the banks of the south Loch Tay road, at Cambusurich, near Killin. 1st

Mid-Perth record.

- *Euphorbia griffithii* (Griffith's Spurge). Found by Jim, on the verges of the minor road near Croftchois, Killin. 1st Mid-Perth record.

- *Cotoneaster ignescens* (Firebird Cotoneaster). Found by Jim on Moncrieffe Island, in the middle of the River Tay, in Perth in late autumn, with brilliant fiery-red leaves and orange berries. 1st Mid-Perth record.

- *Barbarea verna* (American Winter-cress) - Recorded on recently disturbed ground near new house near Lix Toll, Killin by Jim in early spring. Confirmed by Tim Rich. 1st Mid-Perth record.

- *Hieracium orimeles* (Pale Hawkweed). Found by Jessica Fior-Berry, John Crossley and Oliver Moore on Meall a' Chall during the Glen Lyon Recording Week. Determined by Brian Burrow. 1st Mid-Perth record.

- *Gentiana nivalis* (Alpine Gentian). Dan Watson, NTS, reports that monitoring at Ben Lawers found record numbers at several sites in 2025. Batty's Boulder, below Creag Loisgte, which had a lowest ever count of three plants last year, went up to a staggering 606 this year. Fixed quadrats in grassland below Creag Loisgte had 23 plants (in 3 of the 8 quadrats) compared with none last year. The last good count was of 24 in 2022.

## Moray (VC95) *Mr Ian Green*

Lots of monad surveying took place across the vice-county trying to have all the monads surveyed by the end of 2029, so an atlas flora can be produced for the vice-county. In total 30,417 records were made with twelve new species being added to the vice-county list. Three botany field meetings were held during 2025. Two evening meetings and one all day meeting. The aim of these meetings were to check on or try to re-find rare and interesting species.

**Botanical finds**

- *Acanthus spinosus* (Spiny Bear's-breech). Couple of plants on waste ground in old quarry, Sweethillocks NJ1382 6155. First record for VC95.

- *Arum italicum* ssp. *italicum* (Italian Lords-and-Ladies). Patch under trees, Waterford NJ0260 6008 and also on edge of field where dumped from a nearby garden, Brodie NH9746 5695. First and second records for VC95.

- *Darmera peltata* (Indian-rhubarb). Edge of pond, Burgie Arboretum NJ0898 5985. First record for VC95.

- *Mauranthemum paludosum* (Annual Marguerite). Several plants self-sown in pavement cracks, Tolbooth Street, Forres NJ0374 5893. First record for VC95.

- *Nicotiana x sanderae* (*N. alata x N. forgetiana*). One plant on disturbed ground in old quarry, Sweethillocks NJ1384 6154. First record for VC95.

- *Oenothera stricta* (Fragrant Evening-primrose). One plant by path, Findhorn NJ0356 6468. First record for VC95.

- *Oxalis dillenii* (Sussex Yellow-sorrel). Garden weed, Burdshaugh, Forres.

First record for VC95. First found at this site in 2020 but incorrectly named as *Oxalis stricta* (Upright Yellow-sorrel).

- *Primula x pruhonicensis* 'Wanda'. Single plant on verge of lane, Inverallan. First record for VC95.

- *Rubus nessensis*. River bank by the Spey Bridge, Grantown-on-Spey NJ0343 2683 and Craigellachie NH8919 1201. First and second records for VC95.

- *Sedum dasyphyllum* (Thick-leaved Stonecrop). Garden wall, Duffus. First record for VC95.

- *Taraxacum quadrans* (Fleshy-lobed Dandelion). Grassy bank of the River Spey, Inverallan NJ0257 2593. First record for VC95.

- *Vitis vinifera* (Grape-vine). At the rear of the Fire Station, Rothes NJ2849. First record for VC95.

- *Rubus dasyphyllus* (Well-armed Bramble). Boat of Garten NH9412 1872. Only the second record for VC95.

- *Hypopitys monotropa* (Yellow Bird's-nest). Four spikes plus one dead spike from 2024. Cothall NJ0117 5595. First record from this site since 1972. First record for VC95 since 1975.









Above left:
*Vitis vinifera* (Grape-vine);
Above right:
*Hypopitys monotropa* (Yellow Bird's-nest);
Far left:
*Oenothera stricta* (Fragrant Evening-primrose);
Left:
*Taraxacum quadrans* (Fleshy-lobed Dandelion).
*Ian Green*

## North Aberdeenshire (VC93) *David Elston*

Selected sheets from David Welch's collection of pressed specimens were catalogued prior to collection by the University of Aberdeen Herbarium. Most were *Taraxacum* sp. (Dandelions), *Hieracium* sp. (Hawkweeds) and *Rubus* sp. (Brambles), but also included were species that are locally rare or recent arrivals. A box of Dandelion and Bramble specimens was also delivered to the Royal Botanic Garden Edinburgh Herbarium.

With help from Alison Peaker, Carol Blow, David Plant and Judy Leslie, records on species index cards are being compared with the BSBI Distribution Database and discrepancies reconciled.

Alison Peaker and Carol Blow have undertaken recording at Fraserburgh Bay Local Nature Conservation Site (LNCS) and Rattray Head to Peterhead LNCS to help Aberdeenshire Council maintain up-to-date species lists for their LNCSs.

A North East Scotland Botanical Recording Network visit to the estuary of the River Ythan made the first species-level identification of a *Salicornia* (Glasswort) in North Aberdeenshire, *S. ramosissima* (Purple Glasswort) being confirmed later by referee Fred Rumsey.



*Fumaria purpurea* (Purple Ramping-fumitory).
*David Elston*

The Vice-County Recorder (VCR) led a walk for the local Scottish Wildlife Trust (SWT) Members Group to the SWT Gight Woods nature reserve, stimulating the renewal of several old records.

The campaign to plug gaping holes in records at tetrad level, started in earnest in 2024, has continued. At the current rate of progress, completion of the campaign will happen in 2030.



*Tripolium pannonicum* (Sea Aster).
*David Elston*

With help from referee John Richards, a total of 83 new *Taraxacum* (Dandelion) records were obtained.

The VCR is grateful for all contributions of assistance and records during the year.

### Botanical finds

- *Fumaria purpurea* (Purple Ramping-fumitory). New to North Aberdeenshire. Photos of plants growing in a field margin near Insch were posted on social media by the VCR as portraying *F. capreolata* (White Ramping-Fumitory). Alex Prendergast suspected an error, Tristan Norton who was holidaying in Aberdeenshire visited the site to see for himself and to take more pho-

tos, from which referee Tim Rich confirmed *F. purpurea*. A true team effort.

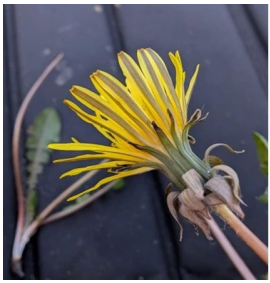
- *Tripolium pannonicum* (Sea Aster) New to North Aberdeenshire. Discovered in September 2024 on the estuary of the River Ythan but not recognised as an addition to the native flora of North Aberdeenshire until August 2025.

- *Pyrola rotundifolia* (Round-leaved Wintergreen). Last recorded in North Aberdeenshire in 2004. A substantial colony with 12 flowering spikes was found on Meikle Turf Hill, near Cabrach, whilst surveying all known patches of *Betula nana* (Dwarf Birch) in North Aberdeenshire.

- *Botrychium lunaria* (Moonwort). Rediscovery at Fraserburgh Bay where last recorded in 1983. A small cluster of tiny plants was discovered by Alison Peaker and Carol Blow during their survey of Fraserburgh Bay Local Nature Conservation Site.

- *Taraxacum obtusifrons* (Obtuse-leaved Dandelion). New to North Aberdeenshire. Several plants of this distinctive dandelion, later identified by referee John Richards, were found in sand dunes at Fraserburgh Bay. Prior to 2025 there were only four records for this species from Scotland.







Left: *Botrychium lunaria* (Moonwort); Right (2): *Taraxacum obtusifrons* (Obtuse-leaved Dandelion). *David Elston*

## North Ebudes (VC104)

*Stephen Bungard and Joanna Walmisley*



Awaiting the return trip after a hard day botanising on Rona.
*Stephen Bungard and Joanna Walmisley*

• About 5,000 VC104 records from 2025, eight of which are new to the VC, are on the DDb. Five are shown below.

• SJB gave a talk to Skye Group of u3a entitled “Rare Plants of Skye”.

• SJB assisted a group from Tennessee Tech University surveying parts of Raasay, in connection with a *Rhododendron ponticum* (Rhododendron) reduction programme.

• JW produced a report for NatureScot on the presence/absence of *Hya-*

*cinthoides non-scripta* (Bluebell) and/or *Hyacinthoides x massartiana* (Hybrid Bluebell) on and around a Skye croft.

• The Skye Botany Group met five times during the season:

**May** – Ben Aslak, Kyleakin Hills - searching in vain for old records of *Kalmia procumbens* (Trailing Azalea) and *Saxifraga hypnoides* (Mossy Saxifrage). However, *Trollius europaeus* (Globeflower) and *Thalictrum alpinum* (Alpine Meadow-rue) were abundant.

**June** – Lyndale peninsula, under-recorded monads in NG35T. Habitats comprised farmland; moorland and coastal sections. Ferns, including *Hymenophyllum wilsonii* (Wilson's Filmy-fern) abounded on the cliffs.

**July** - Raasay, east coast, via Brochel, alongside massive calcareous sandstone cliffs. Interesting finds included *Carex laevigata* (Smooth-stalked Sedge) and *Equisetum telmateia* (Great Horsetail).

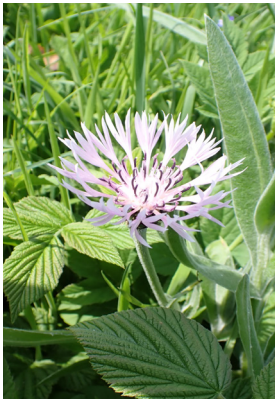
**August** - Rona, a small, uninhabited island to the north of Raasay. A fruitless search for *Ophioglossum azoricum* (Small Adder's-tongue). Nevertheless, *Dryopteris aemula* (Hay-scented Buckler-fern) was prolific, likewise *Populus tremula* (Aspen) and a new record of *Cirsium heterophyllum* (Melancholy Thistle).

**September** - Loch a' Ghlinne Bhig, NG4144, in the centre of a spruce plantation. Most of the aquatic species, (excluding *Lobelia dortmanna* (Water Lobelia), which was new) that had last been noted in the Scottish Freshwater Lochs Survey of 1989, were re-found.

## Botanical finds







Left to right:
- *Hypericum maculatum x perforatum = H. x desetangsii* (Des Etangs' St John's-wort), *Joanna Walmisley*;
- *Blechnum cordatum* (Greater Hard-fern), *SJD Gibson*;
- *Centaurea montana* (Perennial Cornflower 'Amethyst in Snow' [Cultivar]), *Joanna Walmisley*.

Also:
- *Acaena ovalifolia* (Two-spined Acaena)
- *Genista anglica* (Petty Whin)

## Orkney Islands (VC111)

*Mr John Crossley*

Projects and expeditions included:

• Collection of *Hierochloe odorata* (Holy-grass) at several sites for molecular analysis, part of a joint BSBI-RBGE (Royal Botanic Garden Edinburgh) project to attempt to trace the origin of this species in Britain.

• A community effort with the Rousay ranger to introduce local people to moorland flora on that island.

• Continued monitoring of *Primula scotica* (Scottish Primrose) populations in the outer isles.



*Hieracium aithense* (Bain's Hole Hawkweed).
*John Crossley*

• A visit to the tiny island of Auskerry to update records, especially for *Ophioglossum azoricum* (Small Adder's-tongue).

• Another offshore island visit to Black Holm, one of the Copinsay group, a place, it turned out, with an odd but depauperate flora due to enrichment with guano and the geology – hard black lava, exceptional in this archipelago of sandstone.

A planned visit to the remote Sule Skerry, 40 miles west of Orkney mainland and the only part of the VC I have never visited, failed because of several consecutive windy days.

Generalised recording effort is much reduced following the thorough coverage for Atlas 2020, but has not been entirely neglected, while records continue to flow in from some local plant enthusiasts, also visitors to the islands who use iRecord and iNaturalist.

Progress with a new county Flora is continuing, albeit more slowly than planned, mainly due to the large archive of historical material spanning three centuries - a fascinating study in itself, also offering some surprising insights, for instance the suggestion that *Vicia cracca* (Tufted Vetch) is not native in the northern isles.

### Botanical finds

There have been some outstanding finds, including an entirely new species of *Hieracium* (Hawkweed) and a novel *Salix* (Willow) hybrid.

- *Hieracium aithense* (Bain's Hole Hawkweed). A new species in section Stelligera on grassy cliffs near Longhope, Hoy, with other Hawkweeds but caught my eye as more robust,



*Salix hookeriana x cinerea* (Hooker's Willow x Grey Willow).
*Brian Ribbands*

with dense stellate hairs on peduncles, and flowering earlier. Described in *British & Irish Botany* No. 2 (August) 2025.

- *Salix hookeriana x cinerea* (Hooker's Willow x Grey Willow) was confirmed by the BSBI *Salix* referee Irina Belyaeva, but not yet formally described. This new hybrid was found near both parents by BSBI member Brian Ribbands near his home. *S. hookeriana* is native to northwestern north America; it is very tolerant of salt-laden winds and is frequently planted in Orkney.



*Ajuga pyramidalis* (Pyramidal Bugle).
*John Crossley*

- *Ajuga pyramidalis* (Pyramidal Bugle). On a calcareous sandstone outcrop in Hoy. Last seen more than 50 years ago and feared extinct in Orkney. Reports suggest that it can survive in reduced form beneath long heather, so perhaps there are more hiding away.



*Gladiolus communis* (Eastern Gladiolus).
*John Crossley*

- *Beta vulgaris* ssp. *maritima* (Sea Beet). New for the VC, a single large plant above the shore in Pierowall, Westray, discovered by local BSBI members on the way home after a successful hunt for *Primula scotica* at one of its old sites. A rare plant in the north of Scotland, with no records for West Sutherland or Caithness, one for Shetland. It will be interesting to see if it establishes.

- *Gladiolus communis* (Eastern Gladiolus). A bizarre find – a single plant, not near a garden or built-up area but in natural marshy grassland with *Filipendula ulmaria* (Meadowsweet), *Juncus* (Rush) and *Carex* (Sedge) species.

## Outer Hebrides (VC110) *Paul A Smith*

Most of the botanical recording was undertaken in conjunction with the Vice-County Recorder (VCR), in two visits – in spring particularly surveying *Hierochloe odorata* (Holy-grass) and *Cicuta virosa* (Cowbane) in South Uist, including new sites and a refind of a 19th century record respectively. There was also tetrad recording in Lewis including a range of records for *Taraxacum* (Dandelion) microspecies, four of which were new vice-county records.

In the summer the VCR was joined by a group of intrepid botanists to record around Loch Hamanavay and the north edge of Loch Reasort, Lewis – some territory very far from easy access. We recorded lists in eight completely un-

recorded tetrads, and added species in several more with very few records. The best find was a new county record of *Rhynchospora fusca* (Brown Beak-sedge), but there were also interesting records for *Hammarbya paludosa* (Bog Orchid) and several new hectad records.

The VCR stayed on and covered another under-recorded part of Lewis around Barvas. Many tetrads on Barvas Moor have a few records from surveying to support a wind farm proposal some years ago, but this was the first comprehensive list for most. Barvas township was also poorly recorded, so many species of anthropic habitats were added there.

Several visitors also contributed records, of which two new localities for *Botrychium lunaria* (Moonwort) were particularly nice. These are all valuable contributions to ongoing recording towards a tetrad flora.

5,841 records were added in 2025.

**Botanical finds**

- *Rhynchospora fusca* (Brown Beak-sedge). Dan Watson gets a medal for being alert to the possibility of *R. fusca* during recording north of Loch Reasort, Lewis, and for noticing it in quite small quantites in an area otherwise largely populated with *Carex limosa* (Bog-sedge). Now that it is known to occur in VC110 the challenge (and hope) will be to find it elsewhere, as there seems to be lots of suitable habitat.

- *Hierochloe odorata* (Holy-grass). Surveying for *H. odorata* in known sites





Far left: *Rhynchospora fusca* (Brown Beak-sedge). *Dan Watson.*

Left: *Hierochloe odorata* (Holy-grass); Below left: *Catabrosa aquatica* (Whorl-grass); Below right: *Sagina procumbens* (Procumbent Pearlwort). *Paul Smith*





around Loch Hallan led to its discovery in several new locations near existing sites, so it was not such a surprise when it was found in a completely new site a little further afield at Loch Eilean an Staoir. There are plans for a wider survey in 2026.

- *Catabrosa aquatica* (Whorl-grass). *C. aquatica* is a plant of sandy beaches and ditches in VC110, so it was a surprise to come across a population in an acidic flush well out on the moorland. The BSBI grasses handbook does indicate that it can be found in this habitat, but it's a first for me.

- *Sagina procumbens* (Procumbent Pearlwort). *S. procumbens* (Procumbent Pearlwort) is a common plant, but in this image we see it it is behaving uncharacteristically, but apparently very happily, as a flush plant - it is completely absent from the surrounding moorland, usually appearing at most on old shielings where the ground is elevated and drier.

## Peeblesshire (VC78) *Luke Gaskell*

There were 3,848 records made using the excellent BSBI Recording App. These have been verified and transferred to the DDb.

I have been recording crocuses, naturalised along the River Tweed, between Peebles (VC78) through VC79 (Selkirk) and down to Melrose in VC80. In the spring *Crocus tommasinianus* (Early Crocus) is quite frequent and the most widely naturalised species. It is usually found in the flood zone of the river in open areas among unmanaged vegetation, often where woodland is adjacent to the river. *C. neapolitanus* (Spring Crocus) is generally less common and usually found above the upper flood zone of the river and it also occasionally planted. *C. x stellaris* (Dutch Hybrid Crocus) where it occurs, is invariably planted and does not persist.

In the autumn the most commonly occurring crocus species is *C. speciousus* (Autumn Crocus). It usually occupies the same habitat as *C. tommasinianus*. *C. nudiflorus* (Naked-flowered Crocus) prefers slightly drier ground and is a shy flowerer. I recorded a large group of this species in flower on the riverbank of my farm (Kittyfield, Melrose) two years ago, but I have not seen either leaves nor flowers since.

I have continued to target monads that have few or no records. The majority of these are on acid hill ground and have little diversity. However, it does seem worth recording these areas, especially since so much of this habitat is being lost to forestry. For example, at Polmood Burn in the upper Tweed Valley, I found *Epilobium alsinifolium* (Chickweed Willowherb), which was last recorded nearby in 1972. That location appears to be now lost under trees.

I also botanise in my local area, VC80, and was pleased to find *Polypogon fugax* (Perennial Beard-grass), an alien grass new to Scotland adjacent to a demolition site in Galashiels. This grass was first found in VC8 (Trowbridge, South Wiltshire) in 2006. Last year it was recorded for the first time in the neighbouring vice-county (VC7, in Chippenham, North Wiltshire). However, this year it turned up in a Cambridgeshire RSPB nature reserve (VC29, Ouse

Fen) a distance of approximately 140 miles. Curiously I recorded it the same day in Galashiels, which is 355 miles from Trowbridge. It clearly is expanding its range, but by what means? One possible way is via unintentional movement by humans either from walking boots or vehicles. Ouse Fen has been working with a construction company to transform a 'working sand and gravel quarry' and one can assume building work is also taking place in the Trowbridge area. It is possible that the same machinery was used at the Galashiels site.

Lastly, I have been working with a local conservation charity who manage 24 hectares of herb-rich pasture. I have also taken part in various field meetings and led excursions at the BSBI Annual Summer Meeting, including one on my farm focussing on arable plants and regenerative agriculture.

## Renfrewshire (VC76) — *Mr Keith Watson*

2025 was another great year for botanical recording in Renfrewshire, building on the good progress of recent years. In total nearly 10,000 records from recording by local network botanists have been added to the DDb for the last year. Recording took place in 155 monads, with fourteen organised excursions.

There were an impressive 23 new vice-county records made last year. Once again Malcolm Macneill's wanderings about urban sites produced many rare and unusual finds, including nearly half of the new VC records.



*Rubus nessensis* (Bramble).
*Keith Watson*

Efforts were once again focussed on the diminishing number of monads with few or no records pre-2000; there are now only a few of these remaining, so hopefully they will be tackled in the coming season.

Another bumper batch of Dandelion specimens and images have been determined by John Richards, further helping to to develop a better picture of the range and distribution of local Dandelions. A few more Bramble records, including quite a few made by Angus Hannah, is also helping us to get a better idea of the distribution of the commonest dozen or so taxa.



Austrian Yellow-cress (*Rorippa austriaca*).
*Keith Watson*

### Botanical finds

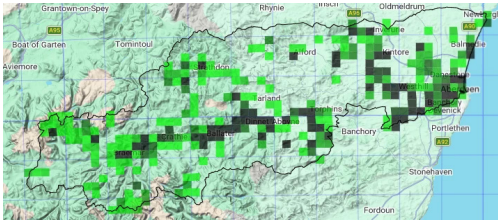
- Austrian Yellow-cress (*Rorippa austriaca*). A few patches of this species were discovered near Blythswood. This crucifer was a celebrated find during

the Glasgow Flora surveys (in VC77) but has not been recorded in central Scotland for many years.

- *Ceratophyllum demersum* (Rigid Hornwort). It was pleasing to find this aquatic plant frequent along the margins of Houstonhead Dam.

- *Rubus nessensis* (Bramble). Not far away, at the edge of the Houston Policy Estate there was a small patch of this 'sub-erect' Bramble, the first localised record for the VC.

## South Aberdeenshire (VC92) *Ian Francis*




Recording intensity and distribution in VC92 in 2025, by number of records per tetrad.

2025 saw a good level of recording in VC92, especially with much fieldwork by an active local recording group set up by Alison Peaker and Carol Blow. At least 6,100 plant records were received into the main DDb workspace. Few came via traditional lists or spreadsheets; instead, at least 5,300 came from sources including iRecord (3,148), iNaturalist (960), the BSBI Recording App (944), National Plant Monitoring Scheme (330) and the New Year Plant Hunt (31). Much effort was put into validation and transfer to the DDb, including the backlog from previous years. Other records went directly to the North-East Scotland Biological Records Centre (NESBReC), and an updated data exchange is planned. An indication of the distribution and intensity of recording in 2025 is given below.

Through all pathways, over 180 observers submitted botanical records during the year; in past years the number of contributors has numbered in the low tens, thus, the increased use of recording apps has clearly enormously boosted participation in botanical recording. I thank all observers, along with Andy Amphlett and David Elston for advice and assistance. Two outreach events were organised by Aileen Meek, and an aquatic plants training and recording weekend at Muir of Dinnet in August led by Kathy Dale and Olivia Lassiere attracted 17 botanists and recorded 80 species of broadly aquatic plants. David Elston also led a walk at Scotstown Moor LNR for Aberdeen City Ranger Service and volunteers to assist management activities.



*Rubus tricolor* (Chinese Bramble), 2025, Aberdeen.
*Graeme Baxter*

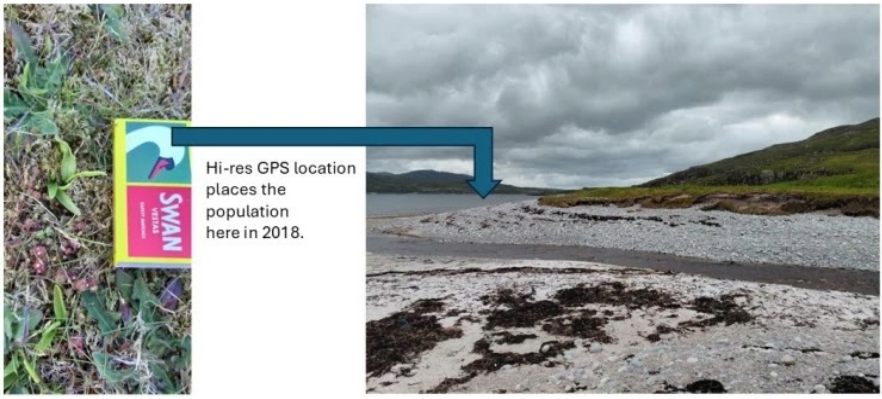
Along with many new hectad and red list records, there were four first records for the vice-county, all of ne-

ophytes. A confirmed record of *Rubus tricolor* (Chinese Bramble) in Aberdeen by Graeme Baxter was the first for all North-East Scotland vice-counties.

## South Ebudes (VC102) *Dr Simon Smart*

It was a relatively busy year for recording in the vice-county. The author collected 945 records mainly from four days hiking and wild camping around the south-west coast of Jura and then with a day's recording around Craighouse before heading home. The recording strategy was to repeat monads visited during the period 2015 to 2019 for Atlas 2020.

The most notable loss was that the sole Jura population of *Ophioglossum azoricum* (Small Adder's-tongue) had been washed away by high seas between the attempt to refind it in 2025 and 2018 when it was first recorded at




*Ophioglossum azoricum* (Small Adder's-tongue) was here in 2018. The remnant fixed dune grassland and the entire population have been washed away as shown here in 2025. *Simon Smart*

the mouth of the Glenbatrick river (see image). The species has 18 post-2000 records elsewhere in the vice-county on Colonsay, Oronsay and Islay where fixed dune grassland is more extensive.

The most notable new record was a healthy population of some 150 *Dactylorhiza viridis* (Frog Orchid) on fixed dune grassland north of Inver Cottage. Again, this species is more plentiful elsewhere on the other islands but has only one old record on Jura at Brosdale south of Jura House, which has not been recently refound.

In addition to recording on Jura, 580 records for other islands were also submitted via the BSBI Recording App for 2025. My thanks to the people who spent time recording plants in the vice-county including Fiona Cameron, Grahame Preston, Chris Scaife, Jeremy and Margaret Roberts, Audrey and Bob Turner, Anne Middleton and Jean Richardson. An interesting new record was made for *Cirsium dissectum* (Meadow Thistle) on Islay, and I look forward to visiting the population in 2026.

## Stirlingshire (VC86) *Matt Harding and Phil Sansum*

Botanical activities in 2025 included:

• Targeted surveys for *Andromeda polifolia* (Bog-rosemary), refinding it at three lowland raised bog sites.

• Saltmarsh surveys, focusing on identifying the *Salicornia* (Glassworts) and *Atriplex* (Oraches) along the Inner Forth Estuary.

• Stirlingshire Botany Group excursions – mostly in West Perthshire this year but with one to Skinflats RSPB Reserve on the Inner Forth.

• More *Rubus* (Bramble) recording, including finds for locally rare and scarce species: *R. dasyphyllus*, *furvicolor, nessensis, polyanthemus, tuberculatus, ulmifolius, vestitus* (new to the vice-county) and *wirralensis*.



*Andromeda polifolia* (Bog-rosemary).
*Matt Harding*

• Talks to the Stirling and Callendar SWT groups on local botany, including the ongoing Rare Plant Register work.

• Verifying the backlog of iRecord and iNaturalist records, revealing some significant finds (backed up with photos) including a new site for *Sedum villosum* (Hairy Stonecrop) and a second vice-county record for *Osmunda regalis* (Royal Fern).

Over 3,000 records were made in 2025, including 79 new hectad records. The headline find of the year was *Salicornia emerici* (Shiny Glasswort) at Skinflats – a first for Scotland. The saltmarsh surveys also found *S. dolichostachya* (Long-spiked Glasswort) and *S. europaea* s.s. (Common Glasswort), and a new site for A*triplex longipes* (Long-stalked Orache). *Atriplex x hulmeana* was also recorded, new to the vice-county.



*Salicornia emerici* (Shiny Glasswort).
*Matt Harding*

Keith Watson found five new *Taraxacum* (Dandelion) taxa for Stirlingshire: *T. subnaevosum* (a British endemic), *intumescens, vastisectum, naevosiforme* and *macranthoides*. Keith also made the first vice-county records for three *Hieracium* (Hawkweed) species for over 50 years: *H. stewartii* (last recorded 1968), *H. subhirtum* (1973) and *H. dasythrix* (1970). Wonderful work, and our thanks to BSBI Referees Fred Rumsey, John Akeroyd, John Richards and Brian Burrow for their determinations.

The *Andromeda* surveys also found new sites for *Rhynchospora alba* (White Beak-sedge), *Vaccinium microcarpum* (Small Cranberry), last recorded in Stirlingshire in 1998, and an unex-

pected record of *V. macrocarpon* (American Cranberry) – a rare alien and new vice-county record.

Thanks to everyone who made records this year!



Stirlingshire Botany Group exploring the saltmarsh at Skinflats RSPB reserve.
*Matt Harding*

### Botanical finds

- *Salicornia emerici* (Shiny Glasswort). Growing on tidal saltmarsh pans at Skinflats RSPB reserve, new for Stirlingshire and Scotland.

- *Salicornia doliostachya* (Long-spiked Glasswort). Found in several sites, usually growing on bare mud on the lower saltmarsh of the Inner Forth Estuary.

- *Atriplex longipes* (Long-stalked Orache). Growing at the upper saltmarsh margin of the Inner Forth Estuary at Skinflats. A new site for this species, at the northern edge of its known range.

- *Andromeda polifolia* (Bog-rosemary). Refound on Lenzie Moss, on both sides of the Stirlingshire and Lanarkshire border.

- *Rhynchospora alba* (White Beak-sedge). Flowering abundantly at a newly discovered site on Flanders Moss lowland raised bog.

- *Vaccinium macrocarpon* (American Cranberry). Growing on Latham Moss, a remnant of lowland raised bog where it was presumably introduced by birds.

- *Verbascum lychnitis* (White Mullein). Found in 2024 by Luke Gaskell at the Church of the Holy Rude, Stirling - last recorded here in 1883! 51 plants were counted this year.

- *Callitriche palustris* (Narrow-fruited Water-starwort). Refound at Crom Mhin on the east of Loch Lomond, the black ripe fruits distinctive.

- *Impatiens noli-tangere* (Touch-me-not Balsam). Spreading over a sizeable area at Burghmuir Ponds, Stirling, where it was presumably introduced.





Left: *Verbascum lychnitis* (White Mullein).
Above: *Callitriche palustris* (Narrow-fruited Water-starwort).
*Matt Harding*

## West Perthshire (VC87) *Jane Jones*

In 2025, just under 5,000 records were added to the BSBI DDb. Many of which have come through the BSBI Recording App.



*Salix arbuscula* (Mountain Willow). *Innes Manders*

It has been a year when some of the rarer species in the VC have been refound. *Salix arbuscula* (Mountain Willow) was last recorded on Ben Ledi in 1956. Six sites were found on the mountain this year by Innes Manders as part of a willow survey.

Matt Harding and Nick Stewart, hired a boat on the Lake of Menteith in September and had a successful day finding many of the lake's aquatic plants, including *Elatine hexandra* (Six-stamened Waterwort), *Potamogeton gramineus* (Various-leaved Pondweed), *P. lucens* (Shining Pondweed) and *P. obtusifolius* (Blunt-leaved pondweed) They also found *Ceratophyllum demersum* (Rigid Hornwort) and *Pilularia globulifera* (Pillwort), which were new records for the Lake of Menteith.

*Hymenophyllum wilsonii* (Wilson's Filmy-fern) is proving to be much more common in the area round Loch Katrine due to the efforts of Anne Gilchrist. Anne also spotted several clumps of *Dryopteris aemula* (Hay-scented Buckler Fern) on the Woodland Trust Estate at Glenfinglas. There were vague records for the area, but it is good to have more precise locations.



*Hymenophyllum wilsonii* (Wilson's Filmy-fern). *Anne Gilchrist*



*Dryopteris aemula* (Hay-scented Buckler-fern). *Anne Gilchrist*

John Gallacher had a successful trip to Ben Buck in the Ochils and found *Alopecurus magellanicus* (Alpine Foxtail) still well established in a flush where it has been recorded on several occasions.

Jane Jones visited Ochtertyre Moss, to the west of Stirling with Forestry and Land Scotland staff and found several sites for *Andromeda polifolia* (Bog-rosemary) in a monad where it had not been previously recorded.

## West Ross (VC105) *Duncan Donald*

With the dearth in active, local field-botanists, I never thought systematic, monad-level recording might prove possible hereabouts, so it is wonderful to be able to thank Marcus Yeo, now resident here, for his tremendous submission of over 1,800 records for 2025, from 26 tetrads across 8 hectads, mainly around where he lives.

These included new sites for rarities like *Lycopodiella inundata* (Marsh Clubmoss) and *Carex saxatilis* (Russet Sedge); as well as valued re-finds such as *Draba incana* (Hoary Whitlowgrass) from the Kishorn limestone, the first such since that area was surveyed in detail by Slack and Stirling in 1960. Even for commonplace plants he has shown much can be achieved by tackling hitherto under-recorded areas. For example, if you can resist the usual lure of 'summit syndrome', it is very often possible to make useful records at lower levels – as Marcus did on Moruisg, adding 30 plants either new or not reported since at least 1987.

I must also thank Gus Routledge who, while carrying out an exemplary survey of sites for [Scheduled] *Saxifraga cespitosa* (Tufted Saxifrage), also reported some new sites for neighbouring, rare arctic-alpines such as *S. rivularis* (Highland Saxifrage) and *Luzula arcuata* (Curved Wood-rush).

The Inverness Botany Group kindly visited twice in 2025. In June, we surveyed Kirkton Meadows north of Loch Alsh, owned by the National Trust for Scotland. These contain one of the best colonies hereabouts of *Dryopteris carthusiana* (Narrow Buckler-fern) – common throughout most of the British Isles but distinctly local here, restricted to a few, slightly basic, wet meadows (like Kirkton) or in crevices high on mountains (perhaps survivors from ancient forests?). Then, in August, we tackled Beinn Eilideach just east of Ullapool, re-finding *Polystichum lonchitis* (Holly-fern) last recorded here in 1994, and a good range of other calcicoles – as well as an impressive population of *Campanula rotundifolia* (Harebell), which is also surprisingly local in West Ross. However, we failed to locate *Salix myrsinites* (Whortle-leaved Willow), found there by Rod Corner in 1968 – so it's on the target list for 2026's recording week based at nearby Inverbroom.



*Ambrosia artemisiifolia* (Ragweed).
*Duncan Donald*

It is also very heartening to be able to report on the success of the BSBI Recording App, iNaturalist and iRecord in encouraging aspiring field botanists to submit their finds. More work for the VCR undoubtedly, but already demonstrating their potential to turn up some very interesting records.

Finally, as I move towards my goal of publishing a new Flora for West Ross (the first in a hundred years!), I am minded to appeal for observations of





bird-seed aliens. For example, *Ambrosia artemisiifolia* (Ragweed) in my own garden proved to be a new vice-county record. Most of these will undoubtedly prove to be ephemeral, but it would be interesting to know more about how often they are germinating hereabouts.

**Botanical finds**

- *Cephalanthera longifolia* (Narrow-leaved Helleborine). A small colony of this very local, Nationally Scarce orchid is still clinging on beside Loch Torridon - at a site first discovered in 1968, but then not reported between 1974 and 2023.

- *Epipactis helleborine* (Broad-leaved Helleborine). A colony of about a hundred plants was found by Ian McDonald at a much-botanised limestone hotspot near Ullapool: a 'first' record, which goes to show that even good sites can be well worth further investigation.

- *Ambrosia artemisiifolia* (Ragweed). Found as a bird-seed alien, it proved to be a new vice-county record.

Top left: *Cephalanthera longifolia* (Narrow-leaved Helleborine). *G. Clegg*
*Bottom left: Epipactis helleborine* (Broad-leaved Helleborine). *Duncan Donald*

## Wigtownshire (VC74) *Michael Jeeves*

During 2025, I:

• Continued to work on a Rare Plant Register, which is nearly complete but needs revision for the many changes necessary following the publication of the new GB Red List before I make it available.

• Attended two meetings of the West Freugh M.O.D. Conservation Group.

• Attended a field meeting on the Rhins peninsula organised by the local records centre.

• Attended an indoor meeting in Dumfries, where I provided an update to local botanists on botanical recording in Wigtownshire.

• Joined Angus Hannah on a further visit to look for Brambles in Wigtownshire.

• Attended a visit to Kilsture Forest by the local community group to help them identify vascular plants.

• Provided advice to the Galloway Fisheries Trust on a habitat creation project they are running on the River Bladnoch SAC (Special Area of Conservation).

• Carried out fieldwork that produced just over 2,000 records. The knowledge and assistance of local botanist Jim McCleary was invaluable in achieving this.

**Botanical finds**

The first records in VC74 for nearly 30 years of *Hymenophyllum wilsonii* (Wilson's Filmy-fern) and *Apium graveolens* (Wild Celery) were particularly notable.

## A note on the vice-county reports

To view all of the vice-county reports from Scotland for the year, you can you go to: bsbi.org/in-your-area/countries/scotland/vice-county-reports.

Some reports have many more botanical images to view online.

# Scottish Botanists' Conference 2025

*Matt Harding, Scotland Officer*

The annual Scottish Botanists' Conference (SBC) was held at Royal Botanic Garden Edinburgh in November, with 230 botanists gathered to enjoy a range of talks, workshops and exhibits.

Highlights included talks on blending research and practice to restore Scotland's mountain woodlands by Sarah Watts, the challenges of surveying *Saxifraga cespitosa* (Tufted Saxifrage) in the Scottish mountains by Gus Routledge, and a fascinating account of work towards a new *Euphrasia* (Eyebright) taxonomy by Team *Euphrasia* (Chris Metherell, Fred Rumsey, Alex Twyford and Max Carter-Brown).

The afternoon workshops included offerings for botanists of all skill levels, with introductory workshops on conifer and rush identification, more challenging offerings on mountain *Taraxacum* (Dandelion) and *Salicornia* (Glasswort) identification, and a very popular introductory workshop on lichens.

Alistair Whyte of Plantlife Scotland also hosted a really interesting and informed discussion session on conservation translocations in Scotland, inviting thoughts on a range of aspects of this complex topic from the wider Scottish botanical community.

The SBC returns to Edinburgh on 7 November 2026 - see the full BSBI events calendar for booking details for this and other events: bsbi.org/take-part/events/calendar.

# Get involved with the BSBI in Scotland

To find out about local activities, please contact your Vice-County Recorder (VCR) or local botany group. Find your vice-county and the relevant contact details at bsbi.org/in-your-area/local-botany.

You can also go to the BSBI website for more information on our active projects, activities and volunteering opportunities across Britain and Ireland.

# Annual Summer Meeting 2025

*Matt Harding, Scotland Officer*

August 2025 saw the BSBI's rotating Annual Summer Meeting (ASM) come to Scotland after a long break, Covid having scuppered plans for the Scottish Borders in 2020. Based in Roxburghshire but with field excursions held at 16 sites across five vice-counties, the 2025 ASM saw 55 botanists, beginners to expert referees, from all over Britain and Ireland, descend on Melrose for four days of cracking botany.

Roxburghshire (VC80) and Selkirkshire (VC79)'s basin mires and mesotrophic lochs formed the core attraction of the meeting, with unusual species such as *Potamogeton coloratus* (Fen Pondweed), *Carex appropinquata* (Fibrous Tussock-sedge), *Calamagrostis stricta* (Narrow Small-reed), *Hierochloe odorata* (Holy-grass), *Cicuta virosa* (Cowbane) and *Juncus alpinoarticulatus* (Alpine Rush) enjoyed by many. The charophyte flora of these sites is notable, and highlights included the rare *Chara subspinosa* (Rugged Stonewort) and a 41 year refind for *C. aculeolata* (Hedgehog Stonewort). Further afield, groups visited the coastal sites of St Abb's Head (VC81) and Aberlady Bay (VC82), and the Grey Mare's Tail in Dumfriesshire (VC72) – the finest site for arctic-alpine plants in southern Scotland, with *Woodsia ilvensis* (Oblong Woodsia), *Alopecurus magellanicus* (Alpine Foxtail), *Carex atrata* (Black Alpine-sedge), *C. capillaris* (Hair Sedge) and many more special plants present.



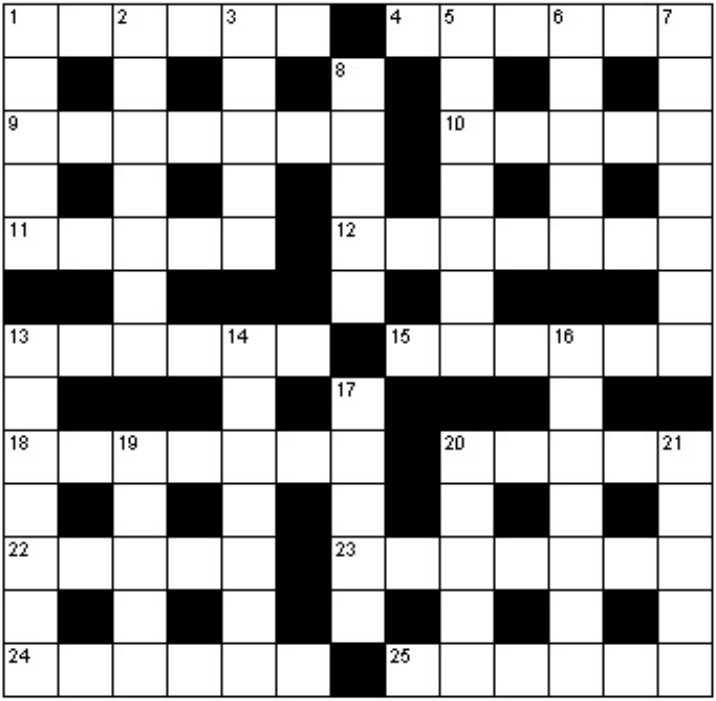
Dan Watson of National Trust for Scotland briefs the group on the botanical delights of the Grey Mare's Tail, Dumfriesshire.
*Matt Harding*

The evening activities included a talk on the Scottish Rare Plant Project by Max Coleman, and a botanical pub quiz – setting a new bar for ASM entertainment (I never said it was a high bar…). Huge thanks are due to the organising team, led by local Vice-County Recorder Jeff Waddell, BSBI Hon. Field Meetings Secretary Jonathan Shanklin and Scottish Field Meeting Secretary Beccy Middleton, and to all the botanists who led excursions and shared their knowledge and enthusiasm throughout.

The 2026 ASM is being held in south Wales on 17-19 July, in combination with the Wales Annual Meeting & AGM. See: bsbi.org/take-part/events/browse/annual-events/annual-summer-meeting.

# Crossword No. 10

*by Cruciada*



**ACROSS**

1. Soak up kids' production of leaf disease (6)
4. Make more wild *Sherardia* (6)
9. Loiter around original flower of *Medicago*, for example (7)
10. Egg gets popular introduction pertaining to sheep (5)
11. Sharp syrupy succulent prepared in cooker on day of celebration (5)
12. Estimated time of arrival at Emergency Ward 10 with aggregate fruit (7)
13,15. National drink French maid brought with tea, I hear, and hot pepper (6,6)
18. At ease round about *Symphytum* (7)
20. Cuts down Polygonaceae (5)
22. Heath flower I can pick out (5)
23. *Prunella* commonly the Spanish associated with Islamic food (4-3)
24. Always green, perhaps, as *Sequoia* (6)
25. Forbid access to all and sundry at fig tree (6)

**DOWN**

1. Flame of the forest on Angus's Isle (5)
2. Putting specs on, Lear's daughter sees herb (7)
3. Aromatic bud obtained by removing root from 9 (5)
5. Have limitless access to online groceries such as *Persea americana* (7)

6. Motorist misses sign less suitable for 19, perhaps (5)
7. Peruse, choose, and espouse once more (7)
8. Reduces speed, we hear, seeing makings of gin etc (5)
13. Shoots mugs (7)
14. Cared to fashion in heart shape (7)
16. Cretan wanders over to hostel to find source of sweet refreshment (7)
17. Bulrushes seen where path winds around at fork (5)
19. Moss does minimum, not on motorway in reverse (5)
20. Whitlowgrass is dull on first appearance (5)
21. Bittersweet, perhaps, having no hesitation – what a goose! (5)

*For answers, see page 112.*

# Scottish AGM 2025 - Minutes

**12.10 Saturday 1 November 2025 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 2024**

Minutes of the 2024 AGM were proposed by Ian Strachan, seconded by Ian Francis and accepted at the meeting without further discussion.

**3. Chair's report**

a) On 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 been involved in the collection of records.

Francis Higgins & Margaret Higgins (Caithness), Sarah Cowan (Clyde Islands) had stepped down as VCRs, whilst Angus Hannah (Clyde Islands), Stephen Bungard (North Edubes), Martin Robinson (East Perthshire) wished to step down but would provide cover until replacements were found. All were thanked for their important contributions.

Lyn Jones (Fifeshire), John Gallacher (West Perthshire), Georgia Hancock, Ian Moir, and Jack Ravenscroft (collectively covering both Argyll and Kintyre) had been formally appointed as VCRs by the Science and Data Committee and were welcomed into their new roles.

b) There was one Scottish recipient amongst the awards for "An outstanding contribution to botany in your area (county, region or country)" and Faith Anstey was congratulated for this well deserved accolade.

c) The Chair intended to thank (but, due to the relevant Powerpoint slide being jumped, regrettably did not thank at the meeting) 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 Meet-

ings Secretary and Aileen Meek as Chair of the Outreach Committee. Of particular note was the Annual Summer Meeting in Melrose, organised as by a team guided by Field Meetings Secretary Jonathan Shanklin and with expert local input from Jeff Waddell.

e) Thanks were given to John Crossley as Editor of, and all contributors to, another splendid edition of the Scottish Newsletter. A replacement Editor was now sought, some aspects of the task being simplified by the offer of staff input for formatting out top copy.

f) No national consultations had been responded to during the year, but contributions had been made to: NatureScot's proposed modification of the Scottish Biodiversity List; development of an Implementation Plan for the Scottish Plant Biodiversity Strategy; and the Mountain Plants Alliance.

g) On data, the Board of Trustees had approved the reduction of the time lag to NBN to 2 years, and given permission to CfS to reduce this further without reference to the Board. We were waiting for a suitable opportunity to promote the availability of data to consultancies with payment of an appropriate fee. There had been tremendous uptake of the Recording App, and members were encouraged to use the opportunity to shape its future development.

h) A Field Identification Skills Certificate assessment was held in Scotland for the first time, and Jake Brendish was thanked for organising this.

i) A record 38 students had followed the Identiplant course this year. This total was constrained by the number of tutors, and further tutors were sought.

j) 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). High praise for the extent and quality of the work undertaken by Matt Harding as Scotland Officer during the year was recognised by all present.

**4. Committee for Scotland 2025-26 – composition and elections**

Amelia Hodnett and Caspian Richards had completed the 3 years for which they had been elected and were not standing for re-election. The Chair thanked both for their contributions, noting that Caspian had also served an additional year as co-optee.

Three new members were proposed for election: Rebecca Cheape (nominated by M. Philip, seconded by Matt Harding), Paul Smith (nominated by the Committee for Scotland) and Meng Lu (nominated by the Committee for Scotland). These new members were proposed at the meeting by Liz Kungu, seconded by Lynne Farrell and their election was supported by the meeting without opposition.

**5. Looking forward to 2025-26**

The Chair outlined several areas of activity anticipated during 2025-26. Aspects not mentioned in the report for the year to date were as follows.

a) Members were encouraged to undertake recording at the many unallo-

cated NPMS squares in Scotland, noting that it was hoped to provide some training to help people feel better equipped to act as NPMS recorders.

b) On future science projects, it was noted that the phenology project which had some trialling during 2025 would be extended during 2026. A repeat of the Local Change project, based on tetrad visits, was under development. Likewise, the proposed monitoring of mountain summits was still under development and Matt Harding may invite volunteers to trial the method during 2026.

c) The development activities led by Sarah Woods towards a new BSBI website were noted as going to lead to a considerable improvement on the current website. All involved were thanked. Comments and feedback on the website are welcomed, using the email address websitefeedback@bsbi.org.

**6. Date of 2026 AGM**

The next AGM will be at the Scottish Botanists' Conference in 2026, date TBA.

**7. AOB**

Ian Strachan wanted to raise some concerns about increasing numbers of conservation translocations, and in particular requested that

a) Input should be sought from VCRs

b) VCRs should get records of what has been planted.

This was seen as timely, as Matt Harding had already timetabled a discussion session later in this day, with Alastair Whyte (Plantlife).

# Crossword Answers

**SOLUTION**

ACROSS: 1. BLOTCH, 4. MADDER, 9. TREFOIL, 10. OVINA, 11. AGAVE, 12. ETAERIO, 13,15. SCOTCH BONNET, 18. COMFREY, 20. DOCKS, 22. ERICA, 23. HEAL-ALL, 24. SEMPER, 25. BANYAN

DOWN: 1. BUTEA, 2. OREGANO, 3. CLOVE, 5. AVOCADO, 6. DRIER, 7. READOPT, 8. SLOES, 13. SUCKERS, 14. CORDATE, 16. NECTARY, 17. TYPHA, 19. MNIUM, 20. DRABA, 21. SOLAN

**CRIB**

ACROSS: 1. BLOT/CH, 4. double definition, 9. anagram LOITER + F, 10. OV<IN>A, 11. AGA/VE, 12. ETA/ER10, 13,15. SCOTCH/BONNE/T, 18. COM-F<RE>Y , 20. dd, 22. flowER I CAn, 23. H<E>ALAL<L>, 24. Sequoia SEMPER-virens, 25. B<ANY>AN

DOWN: 1. BUTE/A, 2. O<REGAN>O, 3. CLOVE(R), 5. (H)AV(E)OCADO, 6. DRI(V)ER, 7. READ/OPT, 8. slows, 13. dd, 14. anag CARED TO, 16. anag CRETAN + Y, 17. anag PATH + Y, 19. M(I)NI(M)UM, 20. DRAB/A, 21. SOLAN(UM)

# BSBI Scottish Field Events 2026 (from July)

Please see the website for full details: bsbi.org/take-part/events/calendar

**Saturday 18 and Sunday 19 Jul (Recording)**
Roxburghshire recording weekend, Newcastleton (VC80)
Contact: Jeff Waddell, jeffwaddell11@yahoo.co.uk

**Sunday 19 Jul (Training)**
Wildflower Families, Doune Ponds, Perthshire (VC87)
Faith Anstey and Liz Lavery. Contact: faithanstey@gmail.com

**Saturday 25 Jul (Training)**
Identifying Composites Workshop, Stirling (VC86).
Matt Harding. Contact: matt.harding@bsbi.org

**Saturday 25 and Sunday 26 Jul (General, Recording)**
Glen Lochy, Argyllshire (VC98). Ian Moir. Contact: vcr98.101@gmail.com

**Saturday 1 Aug (Training)**
Grasses, Sedges and Rushes, Ben Lawers, Mid Perthshire, (VC88)
(joint with NTS and Perthshire Society of Natural Science). Dan Watson and Faith Anstey. Contact faithanstey@gmail.com

**Friday 7 to Sunday 9 Aug (Recording)**
Dalnacardoch Estate, nr Pitlochry (VC89). Matt Harding and Martin Robinson. Contact: matt.harding@bsbi.org

# Botanical Society of Scotland (BSS) Field Events 2026 (from July)

Website: botsoc.scot/events-2/

**Thursday 2 Jul:** Lesmahagow Water Meadows, Lanarkshire

**Sunday 19 Jul:** Black Law Wind Farm, botanical walk

**Sunday 26 Jul:** Bryophytes of Red Moss, Pentlands near Edinburgh
Part of International Bog Day 2026, Scottish Wildlife Trust

**Saturday 15 Aug:** Grasses, sedges, rushes workshop, Ben Lawers

**Sunday 23 Aug:** Lichen walk, Dawyck Botanic Garden

**Sunday 6 Sep:** Tentsmuir Forest, East Fife fungus foray (joint with ELFE)

**Sunday 27 Sep** Fossils, Kingsbarns, Fife