

## BSBI SCOTTISH NEWSLETTER 46 Spring 2024



### Contents BSBI Scottish Newsletter No 46. Spring 2024

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

1	Scotland Officer's Report 2023	Matt Harding
	Features	
5	Carex norvegica (Close-headed Alpine-sedge) found new to Lochaber	Gus Routledge and Jim
9	Dryopteris aemula (Hay-scented Buckler-fern) recent records near Inverness	McIntosh  Andy Amphlett
11	Rassal Ashwood: under attack from Chalara ash die-back	
13	Near your house - wild plants near houses in Easter Ross	
16	Observations on <i>Neottia nidus-avis</i> (Bird's-nest Orchid) beside Loch Aline over 12 years	·
20	Missing in the Ochil Hills	•
26	A walk east from Caputh	
28	A visit to Creag Mhor and Creag na Gualainn, Argyll	Marion Moir and Jim McIntosh
	Viscum album (Mistletoe) in East Lothian	
31	Scottish Bramble Project	Angus Hannah
33	VCR Reports 2023	
67	Michael Braithwaite — an appreciation	Jim McIntosh
68	Alan Silverside — an appreciation	Jim McIntosh

## 69 Scottish Botanists' Conference 2023

Talks, exhibits and workshops AGM minutes

- 81 Crossword
- 82 BSS Field meetings 2024
- 83 BPS Scottish Field meetings 2024

Back BSBI Field Meetings programme 2024 cover

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Cover photo Saxifraga aizoides (Yellow Saxifrage) in Fisherfield by Bert Barnett

## Scotland Officer's Report for 2023 Matt Harding

### Plant Atlas 2020

2023 saw the launch of *Plant Atlas 2020*, the most powerful statement ever produced on the state of our wild and naturalised plants, and a remarkable testament to the efforts of BSBI vice-county recorders, members and botanists across Britain and Ireland! The results paint a concerning picture of the state of Scotland's flora, with 47% of native species in decline and 66% of Scotland's archaeophytes also declining.



The Scottish launch of Plant Atlas 2020 was held at the Royal Botanic Garden Edinburgh (RBGE) in March, amidst widespread publicity and high levels of public interest. We welcomed **Lorna Slater MSP**, the Minister for Green Skills, Biodiversity and Circular Economy, as our keynote speaker, and she spoke eloquently about the importance of evidence-based policy and the crucial role projects such as Plant Atlas 2020 have to play.

Following the launch, BSBI were invited to the Scottish Parliament in December to hold a *Plant Atlas 2020* drop-in event for MSPs, sponsored by Mark Ruskell MSP, Scottish Green Party Spokesperson for Environment, Climate and Transport. It was attended by MSPs from all five major parties, and two *Plant Atlas 2020* authors joined us, Pete Stroh and Oli Pescott. Key BSBI

partners in Scotland were also present in support, including representatives from NatureScot, the Botanical Society of Scotland (BSS), Plantlife Scotland and RBGE. Mark also lodged this <u>Parliamentary Motion</u> in support of the *Plant Atlas 2020* project, welcoming its publication, celebrating the work of the thousands of volunteers contributing to it, and acknowledging the role it can play in supporting Scotland's ambitions to restore and regenerate biodiversity.

Over the course of 2023, *Plant Atlas 2020* events have had significant cut-through to the general public and to decision makers, and it is pleasing to note that 24 MSPs, including three Ministers, have engaged positively with the project and BSBI in Scotland during this period, either through attending events or supporting the Parliamentary Motion.

### **Scottish Botanists' Conference**

Two hundred botanists gathered at the RBGE in November for this year's <u>Scottish Botanists' Conference</u> (SBC), with a fascinating range of talks, workshops and exhibits. We were delighted to be joined by Prof. Mat Williams, Chief Scientific Advisor for Environment, Natural Resources and Agriculture to the Scottish Government, who opened the conference with a talk on *Plant Atlas 2020*, describing it as an extraordinary achievement for biodiversity mapping and change detection – quite a tribute to the efforts of the Scottish botanical community!

Highlights included Aline Finger presenting fascinating results from a conservation translocation trial with *Cicerbita alpina* (Alpine Blue-sow-thistle), Gus Routledge giving a wonderful overview of his year as a self-employed botanist, with superb images of terrific finds, Richard Milne entertaining and educating us on how molecular data impacts classification and can conflict with established plant taxonomies, and James Rainey and Jane Sayers from Trees for Life introducing the Wild Pine Project, which aims to identify, map and survey ancient Caledonian Pinewood sites missing from the official inventory.

I'm incredibly grateful to all the fantastic speakers, the workshop leaders who delivered a really varied training programme, the exhibitors and all the volunteers who pitched in, our partners at the BSS for their support, and of course RBGE for hosting!

### **General Recording and SHARPP**

As of February 2024, a total of 202,386 records have been submitted to the DDb for Scotland in 2023. Six vice-counties have submitted over 10,000 records for 2023 so far, with a further 11 vice-counties submitting over 5,000+ records for 2023.

A preliminary analysis of data for the <u>Scottish HectAd Rare Plant Project</u> (SHARPP) from 2021-2023 indicates that over the course of the project 246 hectad refinds were made for species of national and local conservation concern, from 35 vice-counties – a fantastic result! The project aims to gather detailed records of rare plant populations not recorded since before 2000 (despite Atlas recording), and will continue into 2024.

Recorders can use <u>this BSBI Distribution Database search</u> to identify targets to search for. My SHARPP highlight of 2023 was re-finding *Atriplex longipes* (Longstalked Orache) on the Firth of Forth, at its most northerly British location, where it was last recorded in 1984. However, even when target species aren't found, null recording for rare species populations is also very valuable from a monitoring and conservation perspective.

### Field meetings, training workshops and New Year Plant Hunt

Fourteen meetings and training workshops were held in Scotland in 2023. Workshops covered an introduction to plant families, grass identification and ferns for complete beginners, whilst beginners' field meetings were held in Perthshire and Stirlingshire. For the more adventurous botanist, a week recording the Barra Islands by boat was a highlight, whilst a weekend in the Fannichs was a great opportunity to find montane plants in a relatively accessible, but poorly recorded area.

An introduction to brambles workshop and follow-up weekend meeting in Ayrshire was led by Angus Hannah, whose Scottish Brambles project aims to promote interest in batology (the study of brambles) and help Scottish botanists develop the identification skills needed to record and enjoy this fascinating group of taxa.

A joint botanical recording week on Mar Lodge was held in July, a great example of collaboration between National Trust for Scotland and the BSBI. A varied and vibrant team of botanists made some brilliant discoveries, such as an enormous colony of *Diphasiastrum x issleri* (Issler's Clubmoss) on the north-eastern slopes of Cairn Toul, as well as a sackful of altitudinal records on Ben Macdui, including *Carex canescens* (White Sedge) in the summit shelter at 1308m.



At the more accessible venue of **Holyrood Park**, the Scottish Outreach Committee were invited to hold a **plant families training workshop** for the ranger service staff and volunteers – another great example of collaboration to help develop botanical skills. Meanwhile, the thirteenth <u>BSBI New Year Plant Hunt</u> was by far

the largest to date, with a record 3,336 people taking part across Britain and Ireland! Participation nearly doubled in Scotland from 2022-2023, and this increase in participation was in part the result of a drive to publicise it with partner organisations in the conservation and environmental sector. The New Year Plant Hunt can provide a fun entry event for new botanists, and it is hoped we can continue to develop this in future years.

### **Vice-county Recorders (VCRs)**

We were delighted to welcome Sarah White (joint VCR for Kirkcudbrightshire), Neale Taylor (joint VCR for Mid-Perthshire) and Jon Dunn (VCR for Shetland) to the Scotland vice-county recorder team in 2024! I would like to thank Paul Harvey, retiring Shetland VCR, for his work, along with all the continuing vice-county recorders, whose phenomenal efforts year on year have done so much to advance our understanding of Scotland's flora. Sadly, we lost some very significant figures in Scottish botany during 2023, notably David Welch, Michael Braithwaite and Alan Silverside, all of whom held vice-county recorder roles during their careers.

Vice-county recorders have submitted 32 annual reports across Scotland for 2023, and as always they make fascinating reading. A huge thank you to all who have submitted one, and any additional reports would be warmly welcomed! Several new or updated Rare Plant Registers (RPRs) have also been produced by VCRs in 2023, and there are now RPRs for 21 Scottish vice-counties available on the BSBI Distribution Database. Following the example of BSBI in Ireland, we also launched a Scotland WhatsApp group for VCRs in December 2023.

### **Identiplant**

A successful workshop for prospective Identiplant tutors was held in Stirling in September, leading to the tutor pool in Scotland increasing from five in 2023 to twelve in 2024. This has enabled us to offer places to 39 students in 2024, a great result! However, 27 prospective students were left on the waiting list due to lack of capacity, so it would be brilliant to continue to build the tutor pool here and help support even more botanists to build their skills. If you might be interested in tutoring in the future, please do get in touch with <a href="Chantal Helm">Chantal Helm</a>, BSBI Training Coordinator, to find out more.

### Membership

BSBI membership in Scotland passed 500 for the first time in 2023, reaching 523 members! This is a testament to the hard work of Committee for Scotland and the Outreach Committee, the success of events such as field meetings and the Scottish Botanists' Conference, and perhaps also the increased profile of BSBI as a result of the publication of *Plant Atlas 2020*.

## FEATURE ARTICLES

# Carex norvegica (Close-headed Alpine-sedge) found new to Lochaber (VC97): a significant westerly range expansion Gus Routledge & Jim McIntosh\*

\*Initial note of the discovery drafted by G R, details of subsequent fieldwork and discussion added by J M.



On the 20<sup>th</sup> June 2023 I was in the Mamores, a mountain range immediately to the south of Ben Nevis, carrying out an NVC and vascular plant survey for a client. As I zig-zagged down through one of the corries my eye was drawn to a small basic flush where I found *Juncus triglumis* (Three-flowered Rush) and *Arabidopsis petraea* (Northern Rock-cress). This was unexpected as geological maps indicate just one area of metamorphosed limestone (pelite), previously visited by Jim McIntosh that held *Salix myrsinites* (Whortle-leaved Willow) and *Carex atrata* (Black Alpine-sedge) amongst other things. But there was only granite (and no pelite) in this part of the corrie. As I knelt to photograph the *Juncus*, I spotted the tall, straight, yellow-green stems of a sedge that I instantly recognised from Site

Condition Monitoring in Mid-Perthshire the previous year. After a quick check of pictures from that survey, I was certain that I had found a new population of *Carex norvegica*. It had already been a good day but this knocked it into another league!

The count for this patch was 36 flowering or fruiting spikes across nine clumps. I remembered from previous survey work that populations can be scattered, with distant outlying plants. And sure enough, after a wider search, I found another clump, with three spikes, 80 metres away. As I was working, I couldn't thoroughly record the populations. Fortunately, Jim McIntosh visited the site on the 16<sup>th</sup> August 2023 and refound the two original patches both with more clumps and spikes than I had recorded and also found a new, third patch 90 metres away and a little lower in altitude.

	First 20/06	visit 5/23)	Second visit (16/08/23)						
Sub- popu- lation	Number Number of of clumps spikes		Number of clumps	Number of spikes	Number of grazed spikes*	Area plants scattered over (m²)	Altitude (m)		
1	1	3	3	9	2	1	836		
2	9	36	11	38	6	3	835		
3			28	59	9	12	805		
Totals				106	17	16			

Table 1. Population details of *Carex norvegica* on Mullach nan Coirean

### Discussion

Carex norvegica is Nationally Rare and on the Scottish Biodiversity List. It is confined to Scotland in the British Isles where it is found at five sites: Coire Sharroch (Angus); Coire Kander and Tolmount (South Aberdeenshire); and Beinn Heasgarnich and Meall Garbh, near Ben Lawers (Mid-Perthshire). All these occurrences are in designated sites which are well-botanised, classic localities for rare arctic-alpines. There are at least three other sites in Scotland where Carex norvegica has been recorded but never confirmed by subsequent searches: on Rùm, Ben Oss and Lochnagar.

Jermy et al (2007) note that Carex norvegica "is a plant of wet ledges and stony flushes in north facing corries where snow lies late, on base rich mountains usually between 550 and 900 but reaching 1095m on Ben Lawers. It occurs with other sedges, grasses and dwarf-heath species e.g. in the Dryas-Silene acaulis ledge community (CG14) and C. demissa-Saxifraga aizoides mire (M11), especially where

<sup>\*</sup>Number of grazed spikes is included in the Number of spikes

the vegetation is more open".

This description fits the Mullach nan Coirean population well, apparently on small seams of calcareous bedrock, on the margins of M11a flushes, perhaps not right within the well-flushed areas but growing along the edges where they grade into CG11 Festuca ovina-Agrostis capillaris-Thymus praecox calcareous grassland, in an area of late snow-lie, facing NNE between 805 and 836m.

Lusby (1995) noted that grazing is a threat to *Carex norvegica* populations, and many spikes in the Mullach nan Coirean population had had their flowering or fruiting heads bitten off (see table). This is likely to affect the accuracy of population estimates as once the heads are removed it is difficult to spot spikes and clumps.

Site	Total pop- ulation (spikes)	Date	Surveyor	Altitude(m)	Aspect	Total area
Mullach nan Coirean	106	16/08/2023	Jim McIn- tosh	805-836	NNE	16m <sup>2</sup>
Meall Garbh, Ben Lawers SSSI	191	28/08/2014	Dan Watson et al	925-948	WNW	10x75m²
Ben Heasgarnich SSSI	239	29/08/2018	Jim McIn- tosh	969	N	10x4m²
Corrie Sharroch, Caenlochan SSSI	186	29/08/2008	Theo Loizou	738-775	N	>500m <sup>2</sup>
Coire Kander, Glen Callater SSSI	8	03/08/2006	Viv Halcrow	830	E	4x2m²
Tolmount, Glen Callater SSSI	56	04/08/2006	Viv Halcrow	844	N	20x20m <sup>2</sup>

Table 2. Summary of Carex norvegica populations in Scotland

Table 2 includes data from NatureScot's vascular plant Site Condition Monitoring initiative and from the BSBI's Database. The records are just a snapshot in time, and all the reports seem to indicate that population counts vary quite widely from one report to the next — possibly due to natural fluctuation and/or as a result of grazing. The data for each site is therefore taken from the report with the most complete and biggest counts in the last 20 years.

The new population was found in an apparently unremarkable corrie which is 39km from its nearest known site (at Ben Heasgarnich). This represents a westwards range expansion of 29km. It would appear we still have plenty to discover in Scotland despite our long history of botanical exploration.

### References

Halcrow, V. 2006. *Site Condition Monitoring of Vascular Plants at Glen Callater*, Unpublished NatureScot report.

Jermy, A.C., Simpson, D.A., Foley, M.J.Y. and Porter, M.S. 2007. *Sedges of the British Isles, BSBI Handbook No 1*, Edition 3, Botanical Society of the British Isles, London.

Loizou, T. 2010. *Caenlochan SAC Site Condition Monitoring of Vascular Plants*. Unpublished NatureScot report.

Lusby, P. 1995. Scottish Rare Plant Project: Carex norvegica Species Dossier.
Unpublished report to the Nature Conservancy Council for Scotland, held in RBGE.

Pearman, D.A. and Walker, K.J. 2004. An examination of J W Heslop Harrison's unconfirmed plant records from Rum. *Watsonia*, **25**(1), 45-64.

Stroh, P.A., Humphrey, T.A., Burkmar, R.J., Pescott, O.L., Roy, D.B. & Walker, K.J. (Eds.) 2023. *Carex norvegica* Retz. In *BSBI Online Plant Atlas* 2020, https://plantatlas2020.org/atlas/2cd4p9h.f45 [Accessed 31/08/2023]

Watson, D. 2014. *The Status of Carex norvegica Retz. on Ben Lawers SSSI 2014.* Unpublished National Trust of Scotland report.



All photos by Gus Routledge

## Dryopteris aemula (Hay-scented Buckler-fern): recent records near Inverness (v.c.96) Andy Amphlett

*Dryopteris* aemula (Hay-scented Buckler-fern) has a hyperoceanic distribution (Hill et al, 2004), and in Scotland is very rare away from its western strongholds. In south-east England, there are a series of disjunct populations in the Weald (Sussex). Here it occurs in deep, steep-sided wooded ravines which maintain sufficient humidity for this 'Atlantic' species (Stroh et al, 2023).

In May 2012, Paul Green found two plants growing under *Pinus sylvestris* (Scots Pine) in Drumashie Plantation, v.c.96 (NH62643816), c.3.5km south west of Inverness. A single plant was relocated here in May 2016 (Figure 1).



Figure 1. Dryopteris aemula in Drumashie Plantation, v.c.96, May 2016. A. Amphlett

The plant(s) were growing on a north-west facing slope, near to the edge of the plantation, under mature pines at 65m Above Ordnance Datum (Figures 2 and 3). Associated species were an unremarkable assemblage, including *Calluna vulgaris* (Heather), *Blechnum spicant* (Hard-fern), *Avenella flexuosa* (Wavy Hair-grass), *Pteridium aquilinum* (Bracken) and *Ulex europaeus* (Gorse). The site's location and topography provided no localised enhanced humidity as might be found in a gorge, for example.

In 2022, Gus Routledge found single plants of *D. aemula* in two nearby plantations: Darroch Wood (NH608384, c.50m AOD) and Clune Wood (NH620348, c.230m AOD), 1.9km and 3.3km from the Drumashie Plantation site. Identification of these two plants was confirmed by Fred Rumsey from photographs. As at Drumashie Plantation, the habitat at these two sites was unremarkable.

Annual rainfall at Inverness for the period 1991-2020 is 755mm (MetOffice). The two lower altitude sites (Drumashie and Darroch Wood) would be only marginally wetter, while that at Clune Wood, being higher and slightly further inland, would be rather wetter (nearer to 1000mm annually). It will be interesting to see if these recently discovered plants persist. The occurrence of this hyperoceanic species in rather unpromising plantation woodland in the relatively dry east Highlands, suggests it would be worth keeping this species in mind when recording elsewhere, outwith the species' core range.

These isolated plants are the result of spore dispersal, but from where? The source population(s) may be in the west Highlands, but if so that suggests that similar isolated occurrences of *D. aemula* could occur almost anywhere, and indeed *Plant Atlas 2020* does show a few records outwith the core of the species' range. It is also possible that there are one or more as yet unrecorded populations, nearby in sheltered woodlands, e.g. in the Great Glen (Loch Ness) area.



#### References

Hill, M.O., Preston, C.D. & Roy, D.B. 2004. *Plantatt. Attributes of British and Irish Plants: Status, Size, Life History, Geography and Habitats*. Monks Wood: Biological Records Centre. NERC Centre for Ecology and Hydrology.

MetOffice. https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/gfhyzzs9i (accessed 05/01/2024).

Stroh, P.A., Walker, K.J., Humphrey, T.A., Pescott, O.L. & Burkmar, R.J. 2023. *Plant Atlas 2020. Mapping Changes in the Distribution of the British and Irish Flora*, Volume 1. Botanical Society of Britain and Ireland, Durham & Princeton University Press, Princeton and Oxford.

# Rassal Ashwood: under attack from <u>Chalara ash dieback</u> Dr David Slawson, Observatree Volunteer and Trustee of the NBN Trust

Rassal Ashwood near Kishorn in Wester Ross (VC105) is one of the most northerly ash woods in Britain. It grows on the Durness group of limestone which forms a narrow belt extending from Durness in the north, through Assynt and Kishorn, to Skye in the south. The alkaline rock provides an important habitat for ferns, mosses and liverworts and the bark of the ash tree itself is an important habitat for lichens.

I first visited Rassal Ashwood in 2019 as part of the <u>Observatree Project</u>. 'Observatree' aims to protect the UK's woods and trees through its network of trained volunteers who monitor trees for pests and diseases and generate data to inform science and conservation. Observatree volunteers in Scotland were asked to find and monitor ash woods and trees for the presence and progression of the disease Chalara ash dieback.

Chalara ash dieback is a highly destructive fungal disease of ash trees (*Fraxinus* species), including our native ash species *Fraxinus excelsior* (Ash). It has the potential to cause significant damage to the UK's ash population, with implications for woodland biodiversity and ecology, and for the hardwood industries. The disease can kill young and coppiced ash trees quite quickly. Older trees appear to resist it for some time but can eventually succumb either to Chalara or to other opportunistic pests and pathogens, such as *Armillaria mellea* spp. (honey fungus). For the mycologists amongst you, the common name "Chalara" derives from the asexual phase of its life cycle, *Chalara fraxinea*. Its accepted scientific name however is *Hymenoscyphus fraxineus* which derives from the sexual stage of its life cycle.

The pathogen, which is of eastern Asian origin, was found for the first time in the UK in 2012, although scientists now suspect that it might have been here since the 1990s. Since 2012, the disease can now be found on ash in most parts of the United Kingdom (map), although it's most visible in regions where the fungus has been present for the longest time, and where local conditions are most suitable for the fungus. To date, the disease appears less prevalent in Scotland than England and Wales, and it is for this reason that Observatree volunteers in Scotland have been asked to prioritise surveillance of ash trees.

Having confirmed in 2019 that Chalara ash dieback was present in Rassal Ashwood, I revisited the wood in 2020 to select and photograph a few individual ash trees to act as 'sentinels' to monitor disease progression. Further visits were made in 2021 and 2023 (another new invasive disease, Covid, laid low this surveyor

when the visit in 2022 was due).

Tragically, since 2019, there has been a steady progression of Chalara ash dieback on trees in Rassal ashwood with a very marked increase in disease severity between 2021 and 2023. Figure 1 below shows the progression of disease on one sentinel tree between 2020 and 2023. Figure 2 shows disease progression across the landscape, a closer image of symptoms on a dying tree and an image of the classic diamond-shaped lesion that is typical of Chalara.

If you think you have spotted the disease in a new area, please check the distribution map and symptoms section above before entering a report via **TreeAlert** in Great Britain and via **TreeCheck** in Northern Ireland and Ireland. How ash dieback is managed depends on the location of the trees and any health and safety concerns but generally aims to maintain ash tree genetic diversity and as many of the biodiversity benefits associated with ash woodlands as possible. Find out more about managing ash dieback here: **Scottish Forestry - Ash dieback in Scotland**.



Figure 1. Progression of symptoms of Chalara ash dieback on one sentinel ash tree

Finally, please take some sensible **biosecurity** precautions when visiting woods so that you do not inadvertently spread Chalara or any other pest or disease.



(a) General landscape showing extensive death of young and mature trees on northern edge of wood (limestone pavement in the foreground)

(b) Dying tree (another sentinel)

(c) Classic diamondshaped lesion extending equally above and below an infected branch

Figure 2. Symptoms of Chalara ash dieback.

All photos by David Slawson

## Near your house - wild plants near houses in Easter Ross Brian Ballinger

There is a widespread view that proximity to nature is likely to promote feelings of wellbeing, although it may be difficult to control all the variables involved in any study (Garside et al, 2023). This may also apply to garden plants, as has been advocated by the Royal Horticultural Society (2023).

Trees are also thought to enhance feelings of wellbeing and Konijnendijk (2023) has developed the 3:30:300 rule, which states that everyone should be able to see at least three trees from their house, be under at least 30% canopy cover and be within 300 meters of a public green space (Nieuwenhuijsen et al, 2022).

Wild plants also often arrive uninvited to urban places and may adapt well to sometimes challenging environments. However, these wild plants often have a public relations problem, frequently being condemned as invading weeds.

This study looks at wild plants within the immediate vicinity of houses, although it does not measure their perception by their immediate human neighbours. These observations were made during work on the <u>Botanical Society of Scotland's Urban Flora project.</u>

#### Method

10 urban streets in Easter Ross were studied, including eight adjacent streets to the immediate west of the centre of Tain and two adjacent streets in Dingwall. All the streets were residential and most had gardens.

In each street, house numbers seven and 22 were studied. In a few cases where one of these numbers did not exist the nearest number was used. Wild plants that had not obviously been planted were included and species within 20 meters of the property were counted. Most were in the street area, but some in the visible parts of the garden were included. No householders were approached and I was rarely asked what I was doing. Two visits were made, one in winter and the other in summer.

### Results

A mean of 11.4 species was recorded for each property, varying from six to 16 different species per site. The summer (June to September) mean was 7.7 species and the winter (January to March) mean 5.3 species per address.

A total of 52 different plant species was recorded near houses. The commonest species were *Poa annua* (Annual Meadow-grass) and *Taraxacum* (Dandelion), both being recorded from 19 out of the 20 addresses (Table 1). A further 14 species were recorded elsewhere in the streets being studied.

Nine neophyte (alien) species were recorded, the commonest being *Alchemilla mollis* (Garden Lady's-mantle) and *Buddleja davidii* (Butterfly-bush). Most other neophytes were recorded once only.

Species	Number of houses/ sites
Poa annua, Taraxacum	19
Epilobium montanum, Senecio vulgaris	14
Cardamine hirsuta	10
Sagina procumbens	9
Sonchus asper, Sonchus oleraceus	8
Arabidopsis thaliana, Bellis perennis, Erophila verna	7
Cerastium fontanum, Dactylis glomerata, Hedera, Holcus lanatus, Myosotis arvensis, Ranunculus repens	5-6
Aira praecox, Alchemilla mollis, Buddleja davidii, Hypochaeris radicata	3-4
Table 1. Frequency of species occurrence	

#### Comment

Wild plants are common in our streets, although their number is influenced by street structure, council management and herbicide use. The streets studied were not a totally random selection and contained few flats.

It is reassuring that native species continue to predominate in what is a relatively new habitat. Although neophytes are frequent, often they were seen once only in this study, although some do well in these urban and artificial habitats.

It is likely that many of these householders would regard these humble plants as weeds, although some of us studying our urban flora have come to appreciate their beauty.

Many more plant species were planted in gardens or sometimes council plantings and at present these may contribute more to the pleasure of residents and passers-by than our native taxa.

An effort is being made in many towns to promote the development and conservation of urban wild places and plants, but this still has a long way to go. At present, we should be cautious about suggesting a wild flower equivalent of the tree 3:30:300 target for wild plants in towns. A possible formula might be 5:50:500. That would be five species within five meters of the house, 10 within 50 meters and 20 within 500 meters at any one time, although this would require further evaluation. An alternative would be five within seven meters, 17 within 70 meters and 27 within 700 meters.

A similar study carried out in the larger city of Dundee yielded a similar result, with a slightly higher mean figure of 13.2 species per house over the year.

The first priority would be to persuade the nation that the humble *Senecio vulgaris* (Groundsel) and its urban colleagues are worthy of appreciation, although some progress has been made in this direction.

#### References

Garside, R., Lovell, R., Husk, K., Sowman, G., & Chapman, E. Nature prescribing. *BMJ* 2023 **383**: 2745

Konijnendijk C.C. 2023. Evidence-based guidelines for greener, healthier, more resilient neighbourhoods: Introducing the 3–30–300 rule. *Journal of Forestry Research*. **34**:821–830

Nieuwenhuijsen MJ, Dadvand P, Márquez S, Bartoll X, Barboza EP, Cirach M, Borrell C, Zijlema WL. 2022. The evaluation of the 3-30-300 green space rule and mental health. *Environmental Research*. **215** (Pt 2):114. Available at: <a href="https://pubmed.ncbi.nlm.nih.gov/36162472/">https://pubmed.ncbi.nlm.nih.gov/36162472/</a>

Royal Horticultural Society. 2023. Mental health and wellbeing – How gardening can help. Available at: <a href="https://www.rhs.org.uk/advice/health-and-wellbeing/articles/resources-and-further-reading">https://www.rhs.org.uk/advice/health-and-wellbeing/articles/resources-and-further-reading</a>

## Observations on *Neottia nidus-avis* (Bird's-nest Orchid) beside Loch Aline, Morvern, over 12 years

## **Robert Stebbings**

During a walk along the Ardtornish Estate Low Road to the west of the sea Loch Aline in 2012, two inflorescences of *Neottia nidus-avis* (Bird's-nest orchid) were found about 20mm apart and about a metre from the edge of the Road at NM68604626. This route had been walked every year for 24 previous years while searching for notable fauna and flora, and this was the first sighting for this orchid. As a result, a special effort was initiated to make annual searches of the area and record findings. The precise location of each inflorescence was to be annually located by measuring from fixed points, as agreed with Ardtornish Estate.



Figure 1. The first two inflorescences, found in 2012

R. Stebbings

### Natural history of Neottia nidus-avis (see Jersáková et al, 2022)

The species lives in moist soils generally with deep leaf mould and is often associated with *Corylus avellana* (Hazel), as in this case. In the area where this clone occurs there is a Carboniferous limestone substrate underlying strata of silica sand, which is extracted in the Lochaline Quartz Mine nearby (Brambell, 2010). Soil and leaf litter was less than 100mm deep.

### Setting up recording scheme and monitoring methods

Two stainless-steel round-headed coach bolts were positioned 58m south of the deer fence and gate crossing the Ardtornish Low Road. The bolts were placed exactly 1000mm apart, more or less parallel to the road and about 800mm east from the vegetated edge. Originally, the bolts were pushed down to be flush with the soil level. The tops were covered with moss to hide the conspicuous shiny metal.

Having established these two permanent markers, the aim was to record the exact locations of inflorescences and photograph them each year to establish whether, annually, they arise from the same location. On each annual visit an area of approximately 50 m radius was carefully searched for any locations for the orchid. Photographs were taken of any trace of inflorescence found.

### History of the plant discovery at this location

- 18 June 2012 Bird's-nest Orchid found about 60m south of Allt Achadh Forsa on Loch side of track. Two inflorescences in full flower were found (see Figure 1, and Table 1 Nos. 1 and 2).
- 22 September 2013 Bird's-nest Orchid searched for but no sign was found.
- 31 August 2014 Two inflorescences were located and evidently had completed flowering perhaps a month or more previously (Table 1 Nos. 3 and 4). These two stems were within 1m of the earlier discovery in 2012. There was no sign of the two old inflorescences.



- 17 August 2015 Three inflorescences were located Figure 2. Single flower. 2015 at the same site. One was new (Figure 2, and Table 1 No. 5), but the two seen in 2014 remained as slightly decayed remains.
- 15 August 2016 One new inflorescence was found in full flower (Table 1 No. 6) close to the hazel coppice stool and further north than previous discoveries. The inflorescence (Table 1 No. 5) from last year was clearly visible and part of one flower spike from 2014 (Table 1 No. 4) was found.
- 19 September 2017 Last year's inflorescence for 2016 (Table 1 No. 6) remained anchored in the soil while the flower spike from 2015 (Table 1 No. 5) was sharply bent over (towards road) with seed capsules partly covered in moss. It had been a particularly cool and wet year locally.
- 20 August 2018 A single new inflorescence found further east (down slope towards the Loch, Table 1 No. 7) and last year's inflorescence (Table 1 No. 6) was still standing near the hazel coppiced tree.
- 8 September 2019 No new inflorescence was found and at first there was no sign of any remaining old stems. However, by taking careful measurements to locate the flower stem first recorded in 2018 (No. 7), it was discovered beneath fallen leaves. The seed capsules and stem remained intact.

(Note: Because of the Coronavirus Covid 19 Pandemic no visits were possible in 2020 to 2022.)

7 and 8 September 2023 - Visits made on two days to include fingertip survey of the entire area within about 12m of all the inflorescences found in the whole study. A most careful survey was undertaken, not only of the whole area where inflorescences had been found previously but also of a considerable area around and on the west side of the Low Road. No sign of any inflorescence was found.

Year	2012	2013	2014	2015	2016	2017	2018	2019	2023
Inflorescence No									
1	0	Χ							
2	0	X							
3			0	0	Χ				
4			0	0	0	Х			
5				0	0	0	X		
6					0	0	0	Х	X
7							0	0	Х

Table 1. Survival of individual inflorescences. O = present, X = no sign of any part

### Interpretation and conclusions

Since discovery of two inflorescences in 2012, annual monitoring over the seven years 2013-2019 showed that just five new flowering spikes appeared. These were two in 2014, singles in 2015, 2016 and 2018 and none in other years. None was present in 2023 - live or dead. All the inflorescences occurred within a maximum span of 3.2m, with no other evidence within a 50m radius.

From the observations, spanning twelve years, it is clear that old inflorescences may often remain visible for up to three years. From the detailed work of others it seems likely there were several separate plants of the orchid in this area. A question arises whether there had been a single plant which over years had divided, with branches spreading out as the old parts decayed, or whether there were separate plants developing near to each other?

On Ardtornish Estate there have been several recent records to the east of Loch Aline and several other historic records elsewhere, including one close to the location of this study, by John Raven in 1977. Unfortunately one historic site has been inadvertently damaged (destroyed?) by the removal of a conifer crop between 2019 and 2022.

On this study site the lack of new or recent flower spikes in 2023 may be a reflection of two exceptional three-month-long spring droughts in 2022 and 2023.

#### References

Brambell, M. 2010. Morvern's Geology and Landscape. *Exploring Morvern*, Vol. 2.1-9.

Jersáková, J., Minasiewicz, J., & Selosse, M-A. 2022. Biological flora of Britain and Ireland: *Neottia nidus-avis. J. Ecology.* 110, (9) 2246-2263. Available at <a href="https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2745.13953">https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2745.13953</a>

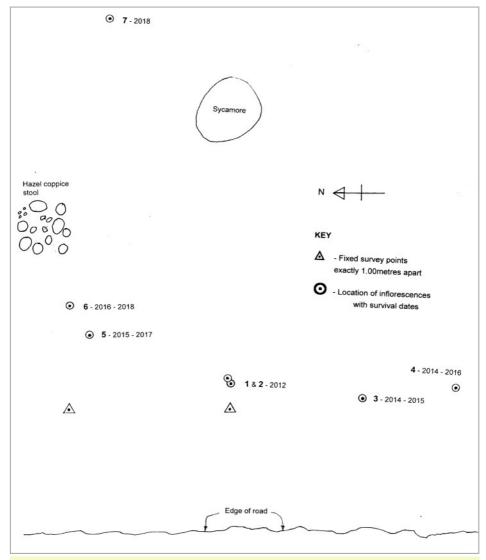


Figure 3. Plan of the site showing location of two stainless steel markers one metre apart (triangles) with hazel coppice and sycamore tree. Locations of inflorescences with dates are shown (circles).

## Missing in the Ochil Hills

## Liz & Alastair Lavery

The grassy Ochil Hills are a stronghold for several botanical rarities such as *Meum athamanticum* (Spignel), *Sedum villosum* (Hairy Stonecrop) and *Silene viscaria* (Sticky Catchfly). However since the 1890s many groups of enthusiastic botanists have searched in vain for the beautiful, delicate yellow flowers of *Saxifraga hirculus* (Marsh Saxifrage).



Figure 1. Saxifraga hirculus, Munsary Plantlife Reserve, Caithness, 2013 © David Back/Plantlife

The Ochil Hills form the impressive backdrop to the 'wee county' of Clackmannanshire, they separate the Forth estuary from the fertile valley of the Tay. Until Sitka Spruce plantations and wind farms arrived with access tracks, it was quite a hike to get into the middle of the hills where there are no roads. Even now it is a long walk in or a very steep climb up to Maddy Moss (Madaidh is Gaelic for wolf), the site of the only West Perthshire VC87 record for *Saxifraga hirculus*.

The beginning of our search was the BSBI database where it is recorded as:

'Saxifraga hirculus, Thompson, W., VC87 Maddy Moss NN9200 1912. Undated record in a paper by A. Bennett (Scot. Bot. Rev. 1912) Maddy Moss, above Tillicoultry, north side of the Ochils, Clackmannan.'

The collector is acknowledged as Wyville Thomson in Sowerby's English Botany, Vol 4, p. 72-73 'Ochill Hills, near Dollar, Clackmannanshire; (Dr. Wyville Thomson)'

Saxifraga hirculus is a very rare plant in Britain and Ireland (Figure 2). It is on the Scottish Biodiversity List and described as vulnerable on the UK Red List.

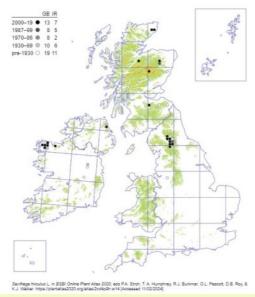


Figure 2. The distribution of Saxifraga hirculus in Britain and Ireland. BSBI Atlas 2020

It has a circumpolar distribution (Figure 3). Globally it is of 'Least Concern' on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species; however it is on the verge of vulnerable in much of Western Europe and is extinct in some countries.



Figure 3. The Global distribution of *Saxifraga hirculus* (<u>Saxifraga hirculus L. | Plants of the World Online | Kew Science</u>)

In the Flora of Perthshire 1898, Buchanan White has this entry: "S. Hirculus L. "Maddie Moss; top of the Ochils above Tillicoultry; Clackmannanshire".

We have traced an undated specimen in Manchester Herbarium from Clackmannan (Fig 4). The labels read:

Saxifraga hirculus (L) Clackmannan, Dr Hooker (in pencil)

Ex Herb. Charles Bailey, Haymesgarth, Cleeve Hill, Gloucestershire (printed on sheet)

Ex Herb: John Hardy, Manchester (stamped on sheet)



Figure 4. Saxifraga hirculus, Clackmannan, Dr. Hooker

Manchester University Herbarium were amazingly helpful in unravelling the information on the specimen sheet. Tom Petch at the Herbarium believes 'this sheet was gathered by Dr Hooker in VC87 in the 1820s (-1830s), came into the hands of John Hardy when the BSL (Botanical Society of London) folded in 1836 and thence to Charles Bailey and Manchester'. The Dr. Hooker of the sheet is likely to have been Sir William Jackson Hooker (1785-1865), Professor of Botany at the University of Glasgow and father of Sir Joseph Dalton Hooker (1817-1911); both father and son were successive Regius Keepers at Kew. We suspect the specimen may have been collected for Dr Hooker by a local botanist, George Arnott Walker-Arnott. As the only possible suitable habitat in Clackmannanshire for Marsh Saxifrage is in the Ochil Hills, this is real proof that it did at one time grow there.

The date of the BSBI record which may be attributed to Sir Wyville Thomson 1830 – 1882, (although Thompson, W. in the database), reported in 1912, is less clear. Wyville Thomson is likely to have made this when he was a young botanist, perhaps around 1850, and before he became Professor of Natural History in Cork in 1853 or achieved fame as the scientific leader on the Challenger Expedition from 1872.

The lure of this rare plant has led to many searches, first by PSNS (Perthshire Society of Natural Science) in 1890 and again in 1891 (Proc. PSNS Vol1; xciii, Proc PSNS Vol 1; xxvi). These were followed by others, notably in the 1960s by A.W.

Robson, BSBI recorder for Perthshire. In 1986 Caroline Crawford and C.R. Birkenshaw in an unpublished survey of Maddy Moss, record *S. hirculus* as extinct though they admit 'the plant may have been overlooked because the flowers are readily grazed off by sheep, the vegetative parts are non-descript, it is easily confused with other yellow flowers, and has a short flowering period.'

The latest search was in July 2018, by Liz and Alastair Lavery with Martin Robinson who had very recently discovered a new site for *S. hirculus* in East Perthshire (VC89) in north Perthshire, and by the late and much missed Alistair Godfrey, vice-county recorder for Mid-Perthshire (VC88). We were determined to search every inch of Maddy Moss, below Skythorn Hill where many springs and flushes are rising points for streams feeding into the Burn of Sorrow.



Figure 5. View of Maddy Moss looking NE from the col between Andrew Gennel Hill and King's Seat Hill 26 July 2018 ©Liz Lavery

This time we were armed with a 'treasure map' exact provenance unknown, an anonymous botanical friend had given this to Richard Thomas in the 1990s. 'X' marked the spot for non-flowering shoots of 'Saxifraga hirculus' at NN928 004 on the col between Gennel Hill and Kings Seat Hill. The map site was visited and explored, we found a nice bog with tall Carex rostrata (Bottle Sedge) and some creeping stems of Vaccinium oxycoccos (Cranberry) on Empetrum tussocks, but only Epilobium palustre (Marsh Willowherb) masquerading as non-flowering stems of S. hirculus.

Maddy Moss is predominantly sheep grazed acid grassland. The undulating hillside was dominated by grasses and patches of rushes in wetter areas; Calluna vulgaris (Heather) was sparse, only prominent in a few places. We explored several small, species-rich flushes on the north flank of Tamangie Hill, all possible Saxifraga hirculus habitat. Montia fontana (Blinks) was abundant in all these little flushes, frequently with Ranunculus hederaceus (Ivy-leaved Crowfoot) and small sprawling plants of Epilobium alsinifolium (Chickweed Willowherb), on a dense carpet of mosses. One of these flushes had many plants of flowering Sedum villosum (Hairy Stonecrop), a nationally scarce species. A 'near threatened species', S. villosum is relatively common in the Ochil Hills. The flushes were speckled yellow with flowers of Ranunculus flammula (Lesser Spearwort) and Scorzoneroides autumnalis (Autumn Hawkbit) giving us false hope, but none were Saxifraga hirculus. Also found during the day were two sites for the IUCN vulnerable species, Saxifraga hypnoides (Mossy Saxifrage), one at the head of the Burn of Sorrow and one in the C. rostrata bog mire on the col. It was a very enjoyable day but, despite hours of searching we failed to find our target plant.

Why has *Saxifraga hirculus* disappeared from Maddy Moss since the 1850s? Is it still there, hiding somewhere? It still could be in an unexplored spring flush. But I doubt it, after all our searching. A change in land use and farming may be responsible. By the 1760s sheep walks were increasing on the Ochils, where both cattle and sheep grazed previously. The New Statistical account remarked on the decrease of heather in the Ochils and increase in grasses since changes from cattle to sheep grazing. High rainfall on these newly grassy slopes, at times washed large amounts of peat from the hill tops down into the steep Hillfoot gorges which bisect the south facing scarp of the Ochil Hills.

The Dollar parish minister, Rev. A Mylne in The New Statistical Account, 1841, described "Maddie Moss: "Its area exceeds 120 Scots acres. It is very retentive of water and occasionally bursts its barrier and flows down in a muddy torrent to the Devon". J. P Day reports "The boggy morass called Maddy Moss has been known to burst its barriers and send a jostling torrent of mud by the Burn of Sorrow to the Devon below". August 1877 was particularly wet, "Throughout the night of the 27 August 1877, a steady fall of rain had swollen the Ochil burns and, when morning came, a torrential downpour was descending from the gloomy and sombre sky. The dark hillside was streaked with the white foaming, tumbling cataracts, which, pouring downwards into the turgid flood of the Devon, caused widespread inundation and devastation. The town of Tillicoultry suffered severely to the extent of some £8,000" (Day, 1915). Perhaps this is when this flower's peaty habitat with its seed bank was washed away forever.

### **References:**

Day, J.P. 1915. *Clackmannan and Kinross*. Climate County Geographies. P37-38 Buchanan White, F. 1898. *The Flora of Perthshire* 

Sowerby, J. English Botany Vol. 4 (1873) page 72-73 Sax hirculus. Available at <a href="https://archive.org/details/englishbotanyorc04sow/page/72/mode/2up?g=Saxifraga+hirculus&view=theater">https://archive.org/details/englishbotanyorc04sow/page/72/mode/2up?g=Saxifraga+hirculus&view=theater</a>

IUCN - https://www.iucnredlist.org/species/162099/78457172#assessment-information

JNCC - <u>Marsh saxifrage (Saxifraga hirculus) - Special Areas of Conservation (incc.gov.uk)</u>

BSBI *Plant Atlas 2020*. Available at <u>Saxifraga hirculus L. in BSBI Online Plant Atlas</u> 2020

BSBI Species account - Saxifraga\_hirculus\_species\_account.pdf (bsbi.org). Available at <a href="mailto:file:///C:/Users/eldla/Documents/Saxifraga%20hirculis%202024/Saxifraga hirculus species account.pdf">file:///C:/Users/eldla/Documents/Saxifraga%20hirculis%202024/Saxifraga hirculus species account.pdf</a>

Saxifraga hirculus L. Plants of the World Online | Kew Science World Map. Available at <a href="https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:228461-2#distributions">https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:228461-2#distributions</a>

Perthshire Society of Natural Science: Bulletin 41, 2018. Available at <a href="file:///C:/Users/eldla/Documents/Saxifraga%20hirculis%202024/Perthshire-Society-of-Natural-Science-PSNS-Botanical-Section-Bulletin-41-2018.pdf">file:///C:/Users/eldla/Documents/Saxifraga%20hirculis%202024/Perthshire-Society-of-Natural-Science-PSNS-Botanical-Section-Bulletin-41-2018.pdf</a>

Welch, David. 1996. Habitat preferences and status of *Saxifraga hirculus* L. in Northeast Scotland (6 colonies – M9 & M9 *Carex rostrata* community). *Botanical Journal of Scotland*. Available at <a href="https://www.tandfonline.com/doi/epdf/10.1080/03746609608684839?needAccess=true">https://www.tandfonline.com/doi/epdf/10.1080/03746609608684839?needAccess=true</a>

Finger, Aline, Macdonald, Iain & Hollingsworth, Peter M. 2023. Genetic monitoring for effective plant conservation: An example using the threatened *Saxifraga hirculus* L. in Scotland. *New Phytologist*. Available at <a href="file:///C:/Users/eldla/Downloads/Genetic monitoring for effective plant conservatio.pdf">file:///C:/Users/eldla/Downloads/Genetic monitoring for effective plant conservatio.pdf</a>

Herbaria United. Available at <a href="https://herbariaunited.org/specimen/210970/">https://herbariaunited.org/specimen/210970/</a>

Crawford, C. and Birkenshaw, C.R. 1986. *Maddy Moss – Survey Report, Clackmannan District*. SWT C32

Proceedings of the PSNS Vol II 1893 – 1898, Dollar vii. Available at <a href="https://www.biodiversitylibrary.org/item/253393#page/118/mode/1up">https://www.biodiversitylibrary.org/item/253393#page/118/mode/1up</a>

The Statistical Accounts of Scotland 1791 – 1845. Parishes of Dollar and Tillicoultry. Available at <a href="https://stataccscot.edina.ac.uk/static/statacc/dist/home">https://stataccscot.edina.ac.uk/static/statacc/dist/home</a>

## A walk east from Caputh, 2 July 2023 Ron Youngman and Liz Lavery

The Nature Section of the Perthshire Society of Natural Science in partnership with the BSBI organised a walk along the north side of the River Tay, East Perthshire (VC89) in monads NO0839/0939/1039. Thirteen members and others came along. This was a good turnout as, despite being one of the largest Scottish counties, Perthshire has a small population and very few who are interested in botany.



Figure 1. Our group by River Tay and at Caputh Liz Lavery

The area is largely arable but actually quite diverse with some good pockets of uncultivated ground, a riverbank strengthened by rip-rap, a riverside track and, at our turning point, an extensive area of river shingles.

We recorded 167 species of flowering plants, the majority being widespread, common and expected. The Tay floodplain is quite sandy and the local farmers take advantage of this by growing carrots, in rotation. The fields are still good for the more common arable weeds and sometimes have surprises. During this visit most were over — it is better in June. Still flowering were *Glebionis segetum* (Corn Marigold), *Spergula arvensis* (Corn Spurrey), *Tripleurospermum inodorum* (Scentless Mayweed), *Viola arvensis* (Field Pansy), *Viola tricolor* (Wild Pansy) and *Amsinckia micrantha* (Common Fiddleneck). More interestingly, along the riverbank was a good stand of *Lactuca virosa* (Great Lettuce) and nearby was *Oenothera glazioviana* (Large-flowered Evening-primrose). Both are rare in the VC.

At our lunch spot on the track beside the river we found *Agrimonia eupatoria* (Agrimony), very local in Perthshire, in unusual abundance along with *Verbascum thapsus* (Great Mullein) and *Campanula lactiflora* (Milky Bellflower).

Riverside shingles along the Tay (and Tummel) can be exceptional as the seeds of many plants, including those growing at much higher altitudes, are often carried down the river and deposited. Almost anywhere where there are shingles the flora can be very rich. However, it is a very dynamic habitat as the level of the Tay can fluctuate by several metres during winter and the current is extremely powerful thus washing out even well established willows and rearranging the substrate annually. This visit gave us *Viola canina* (Heath Dog-violet), *Rubus saxatilis* (Stone Bramble), *Galium boreale* (Northern Bedstraw) and *Silene uniflora* (Sea Campion) as well as *Eleocharis palustris* (Common Spike-rush), *Carex vesicaria* (Bladdersedge), *Galium palustre* (Marsh Bedstraw), *Caltha palustris* (Marsh-marigold) and *Lythrum salicaria* (Purple Loosestrife) in the wetter temporary pools.



Figure 2. Lactuca virosa (Great Lettuce) Ron Youngman



Rubus saxatilis (Stone Bramble) Liz Lavery

Elsewhere were a good selection of plants including *Anthyllis vulneraria* (Kidney Vetch), *Cruciata laevipes* (Crosswort), *Geranium pratense* (Meadow Crane's-bill), *Lycopus europaeus* (Gypsywort), *Ononis repens* (Common Restharrow), *Origanum vulgare* (Wild Marjoram), *Teucrium scorodonia* (Wood Sage) and *Thymus drucei* (Wild Thyme).

Good weather and sightings of a dozen or so bird species plus some butterflies and other insects all contributed to a good day out.

## Creag Mhor and Creag na Gualainn NN399454 Argyll (VC98), 4<sup>th</sup> July 2023 *Marion Moir & Jim McIntosh*

These base rich crags are eight miles from the A82 and lie to the south-east of the West Highland railway, Gorton Cottage and Rannoch Moor. They are right on the county boundary between Argyll and VC88 Mid Perthshire. A few records were made by Bernard Thompson, past VCR, in 1981 and 1991. We arranged with the farmer on the Black Mount estate to drive us up to Gorton Cottage; from there, a tunnel under the railway gives access to the moor leading up to the Creag Mhor and Creag na Gualainn. Jim McIntosh and Ian Moir tackled the crags which are very steep in places, with gullies, and one bulging buttress; I (Marion Moir) recorded up the river for any interesting plants washed down. Luckily it was a wonderful day and we were only limited by having our lift back at 4.00 pm but a relief not to walk back along the track to Loch Tulla. Such a rich assemblage of



Figure 1. Bartsia alpina (Alpine Bartsia) and Dryas octopetala (Mountain Avens) on Creag na Gualainn © Jim McIntosh

### Notable Finds

Carex capillaris, Rhodiola rosea, Alchemilla wichurae, Saussurea alpina, Bartsia alpina, Tofieldia pusilla, Dryas octopetala (abundant), Carex atrata, Luzula spicata, Trollius europaeus, Helictochloa pratensis, Dactylorhiza viridis, Antennaria dioica, Galium sterneri and G. boreale, Silene acaulis, Bistorta vivipara, Thalictrum alpinum, Carex vaginata, Oxyria digyna, Saxifraga oppositifolia, Rubus saxatilis, Salix myrsinites.

On the crest of Creag Mhor – Juniperus communis, Kalmia procumbens, Empetrum nigrum and Sibbaldia procumbens

Recorded by Thompson but not found – only *Anthyllis vulneraria* and *Arctostaphylos uva-ursi* 

## Viscum album (Mistletoe) in East Lothian (VC82)

**Marion Moir** 



Figure 1. Mistletoe at Seton Mains, East Lothian Sue Jury

*Viscum album* (Mistletoe) - several balls have for long been seen at Seton Mains on the Longniddry Road, NT426751, and I thought I would find out from Ann Frazer, the owner of the wood, how they came to be there. She said that she had rubbed the seeds into her apple trees in the garden before 1990 and had succeeded in producing plants. Then in about 1995 she noticed that they were growing on the Poplars in the wood and to her surprise they were spreading. She originally grew Mistletoe on her apple trees to collect to put in the local Farm Shop. The situation

of Seton Mains is close to the Forth, a dry climate and not subject to long frosts.

The BSBI Newsletter was asking for background on the spread of Mistletoe, from the point of view of climate change, and this would be more obvious in the south of England rather than in the chilly climate of Scotland! However, the case of the Mistletoe at Seton Mains shows that it can spread in protected areas, and perhaps where blackbirds and thrushes thrive, as the seed tends to spread naturally on the beaks of birds and rubbed into bark. The records show initial planting on just one tree, then it has spread all over the same tree, or has jumped to more fruit trees or large trees of Lime or Poplar. The Scottish Mistletoe records all seem to start by being hand sown into one fruit tree; recent records of spreading Mistletoe are in a small orchard in Blairlogie near Stirling (VC87) and mostly from within Edinburgh or nearby (VC83). In Edinburgh, there is a concentration around the Modern Art Gallery and the Dean Cemetery where they are on fruit trees but have spread onto the Lime trees. Other recent records are in gardens in Brora and Davoch in East Sutherland (VC107); old records from the Angus area.



## **Scottish Bramble Project**

### **Angus Hannah**



Figure 1. Rubus ulmifolius (left) and Rubus drejeri (right)

Chris Miles

Brambles are among the most important of all our plant groups in the promotion of biodiversity and the development and sustenance of ecosystems, but their neglect by all but a few dedicated specialists has left the general botanical and conservationist communities ignorant of this fact. The inability of botanists in general and ecologists in particular to identify them has allowed them to slip out of sight in this country. In contrast to Germany and some other European countries our NVC treats all our brambles as if they were alike, thereby ignoring a whole tranche of diverse vegetation communities, while *Plant Atlas 2020*, though allowing proper treatment of some apomictic genera does not map even the most widespread subgenus *Rubus* species.

In the first two decades of this millennium, following the death of Allan Stirling, bramble recording in Scotland dwindled even further. With the notable exception of David Welch, who continued to make interesting discoveries in the north-east, and published a new species in 2021, very little was done. George Ballantyne, who had been referee in the genus for many years, was increasingly afflicted with ill-health, and Tony Church, who had been very active in Arran was likewise no longer able to continue. By long persistence the latter succeeded in persuading me to take on brambles in 2013. My progress at first was slow, and it was only thanks to photos he sent from time to time that I was able learn some local species. Since 2017 I have held annual weekend meetings in different vice-counties around the south-west, aiming to encourage others to join in.

Momentum gathered slowly, but it became increasingly clear that the principal barrier facing everyone was the lack of an accessible, user-friendly guide to identification, especially for those in the earlier stages of the subject. The British and Irish Handbook by Edees and Newton is an admirable work of reference, but its use requires a significant level of experience and it is of little value to beginners, especially here, as 80% of the species it describes do not occur in Scotland. John Norton's photographic website is excellent, but from a Scottish perspective it suffers likewise in being focused on Hampshire brambles and inevitably contains much that is irrelevant to us at the same time as omitting species that are common here.

The very sad loss of David Welch last spring was a bad blow, as I had come to rely upon his wise judgement in difficult matters, and there was now no one in Scotland who could guide me. As his sole successor, it seemed to me more urgent than ever to expand the community of aspiring batologists, and this meant making it easier for those setting out on the journey. What was needed most was a well-illustrated guide-book to Scottish species and a photographic reference gallery easily accessible to all. For both purposes I needed lots of bramble photos from all over the country. I am therefore appealing to VCRs and others to send me sets of photos (about 4-6 of each bush, showing close-up views of stem, leaf, flower etc.) for identification. This is usually possible, and offers the bonus of a good record for the locality, improving our knowledge of the distribution of bramble species, which is still very patchy. Selected photos will be used in the book, and others added to the gallery.

I intend the book to be published in the spring of 2025. It seems likely that it will be a BSBI Handbook. My thanks are due to Liz Kungu (Series Editor) for suggesting this. As mentioned above, I owe a great debt to Tony Church for setting me off on this trail. I also thank Peter Wiggins for a great deal of help in organising the photographic gallery, Michael Philip for assistance in the field and elsewhere, Chris Miles for his enthusiastic participation in what proved to be a successful pilot of photo-ID, and everyone else who has sent me bramble photos or been supportive in other ways. Please send via Dropbox or Google Drive or as email attachments to butesedge@yahoo.co.uk

## Vice-county Recorder reports 2023

## **Dumfriesshire (VC 72)**

Chris Miles

Write ups of each of the 11 local group meetings can be seen here <u>Dumfriesshire</u>, <u>v.c. 72 – Botanical Society of Britain & Ireland (bsbi.org)</u>.

Not all data is uploaded yet but there will be close to 10,000 new records collected through the year. We used the BSBI app for some recording.

A display was made for the Scottish Botany Conference in November where photos or specimens of the first vice county records for Dune Helleborine, *Epipactis dunensis* found by Paul Stanley Northern Knotweed, *Polygonum boreale* and Purple Rampingfumitory *Fumaria purpurea* were shown.

Other interesting finds were: the 4th known colony for Purple Small-reed *Calamagrostis canescens* at Hollows; the 6th colony for Rough Horsetail *Equisetum hymenale* in the Kello water; a new hectad for Broad-leaved Helleborine *Epipactis helleborine* found by Alison Robinson at Caerlaverock Castle and it was refound in NX9878 for the first time since 1847. A new site for Shady Horsetail *Equisetum pratense* in the western Moffat Hills by Jan Davidson and Sarah White and a new hectad for this species in the Langholm Hills.



Epicactis dunensis (Dune Helleborine)

Angus Hannah has named 700 photographs of brambles collected through the season. For the first time since the 1980s we have localised records for 23 bramble species in 65 monads from 21 Hectads. This is just the start!

Brian Burrow confirmed that a specimen collected last year and again this year at Craignee is Tain Hawkweed *H. subrude* a new vice county and southern Scotland record for this taxon.

Purple Ramping-fumitory *Fumaria* purpurea

Drew Davidson invited me to look at an arable field on the family farm. An interesting flora included a Fumaria with large recurved flowers, very large sepals, and a pink back ground colour. Tim Rich confirmed the id.



Fumaria purpurea (Purple Rampingfumitory)

### **Kirkcudbrightshire (VC73)**

At the beginning of the year, Sarah White joined David Hawker as Joint Recorder.

Monitoring projects were undertaken on two Nationally Scarce species:

- Carex elongata (Elongated Sedge) on the RSPB Wood of Cree reserve, with over 2250 flowering clumps counted.
- Silene viscaria (Sticky Catchfly)
   This showed a considerable decline in number of flowering stems since 1993.

Visits were made to VC73 by two partner organisations:

The British Pteridological Society (Roger Golding & Alison Evans), led a training day on ferns at Kirkbean Glen and found two New County Records: *Dryopteris lacunosa* and *D. pseudocomplexa*.

The British Bryological Society at their summer meeting discovered a good population of *Hymenophyllum* 

### **David Hawker and Sarah White**



David Hawker with *Silene viscaria* (Sticky Catchfly)

wilsonii (Wilson's Filmy-fern) in the unusual habitat of block scree on Cairnsmore of Fleet. The Rare Plant Register has been drafted and should be completed by March 2024.

New County Records and particularly interesting finds were:

Poa infirma (Early Meadow-grass) Southerness, Paul Stanley
Spergularia bocconii (Greek Sea-spurrey) Southerness, Paul Stanley
Trachystemon orientalis (Abraham-Isaac-Jacob) Arbigland, Drew Davidson
Senecio inaequidens (Narrow-leaved Ragwort) Brockloch Rigg, Jan Davidson
Carex × decolorans (C. bigelowii x C. nigra) Windy Standard, Kirkcudbright Botany
Group

Centaurium pulchellum (Lesser Centaury) RSPB Mersehead, Anna White. One of only three records in the VC.

*Melica nutans* (Mountain Melick) RSPB Wood of Cree, Jim McCleary. One of only a few scattered sites.

*Potamogeton friesii* (Flat-stalked Pondweed) Carlingwark Loch, Sarah White. Refound at its only site in VC where last recorded 1989.

# Wigtownshire (VC74)

### **Michael Jeeves**

Very little has been published on the flora of Wigtownshire (VC74), with Dr Alan Silverside's unpublished checklist easily the most useful source of information. Now nearly 35 years old, it inevitably needs updating and I have recently prepared a draft of a new checklist, which I hope to make available on the BSBI's website soon. I am also working on a Rare Plant Register and I have prepared a draft of that too.

In the summer of 2023, with the assistance of botanists from both Wigtownshire and neighbouring Kirkcudbrightshire, I organised further survey work at the Torrs Warren military training area, Wigtownshire's most important site for vascular plants. I am drafting a report for the site managers. The weather had been hot and dry for some time, unusually so for this part of the country, and this appeared to have impacted on the flora.

Following on from my work at the RSPB's Wood of Cree nature reserve, which straddles the boundary dividing VC73 and VC74, I gave a presentation on the flora and vegetation of the reserve to a meeting of wildlife recorders in Dumfries and Galloway organised by the South West Scotland Environmental Information Centre (SWSEIC).

I also assisted the Crichton Carbon Centre in surveying and gathering data on the flora of the Moss of Cree, a raised bog that has been partly restored with amazing success. Later I attended a special event to record the flora and fauna of this site at the invitation of SWSEIC.

A total of 1680 records for the year have been processed to date.

# Ayrshire (VC75)

Dave Lang

2023 for the small vc75 Ayrshire recording group was a combination of seasonal visits to particular habitats (woodlands in spring, grasslands in summer etc.) and a final year of 'treasure hunts' as part of the BSBI Scottish HectAd Rare Plant Project (SHARPP).

Highlights from the year were often to be found near the sea – and included finding new locations for *Teesdalia nudicaulis* (Shepherds-purse) and *Mertensia maritima* (Oysterplant) while confirming/refinding old locations for *Viola canina* (Heath Dogviolet) and the Nationally Scarce endemic *Coincya monensis* subsp. *monensis* (Isleof-Man Cabbage). The latter is now pretty much confined to Ayrshire and the Clyde Islands in Scotland, with its range seemingly shrinking.

On the road verges near Bennane Head in the south of the vice county we confirmed the continuing presence of *Ophrys apifera* (bee orchid) as well as finding an unusual growth form (for us) of *Anacamptis morio* (green-winged orchid) – here at its only Scottish location. Seemingly, when protected from grazing cattle it grows closer to the height described in books – rather than the little stumps of inflorescence that we are more used to.

We also recorded the county's third appearance of *Anacamptis pyramidalis* (Pyramidal orchid) at Seafield Dunes in Ayrshire's north. While towards the end of the season I personally was pleased to get to grips with confidently recording one of the easiest of the eyebrights – *Euphrasia tetraqueta*!



Mertensia maritima (Oysterplant). Nationally Near Threatened and locally scarce species expanding its range at Dunure.



■ Anacamptis pyramidalis (Pyramidal Orchid). A new site for this locally scarce orchid species at Seamill.

Anacamptis morio
(Green- winged Orchid). Freed from grazing on a road verge, these nationally Near Threatened orchid specimens manage to make it to a 'normal' height.



# Lanarkshire (VC77)

# **Peter Wiggins & Michael Philip**

In 2023 we have resumed previous levels of activity, with 11,614 records made across 193 monads and over 100 species recorded in 53 monads, nearly double the activity in 2022.

The Botanical Society of Scotland's Urban Flora Project continued for another year, and we surveyed three towns in the vice-county making a total of 16 towns or urban areas surveyed.

As well as continuing to record in the SWT Falls of Clyde Reserve we worked with the South Lanarkshire Ranger Service to record in 3 LNRs which was combined with informal training for volunteers. This partnership will expand in 2024.

At the Falls of Clyde Reserve we also hosted a very successful BSBI workshop 'Ferns for Complete and Utter Beginners', which attracted 18 delegates from as far afield as Aberdeen and Newcastle.

We have started working towards a rare plant register for Lanarkshire and, looking forward to the centenary of the publication of J.R. Lee's 'Flora of Clyde Area' (1933), we are beginning to assess how the flora has changed.

Malcolm Macneill has carried on his sterling urban botany work, noting *Apera spica -venti* (Loose Silky-bent) in two sites and then in November *Oxybasis glauca* (Oakleaved Goosefoot) in a new housing development. Both were confirmed by the referees.

Lanarkshire is a big vicecounty: why not pay us a visit sometime and help us tackle some of our many unrecorded areas?



The view from Bizzyberry Hill

### Peeblesshire (VC78)

Luke Gaskell

This year 2935 records were added to the DDB from 22 days recording.

The upland landscapes of South Scotland are rapidly changing. Increased farming activity, sport shooting, wind farms and of course afforestation are all putting pressure on natural habitats so it's always a pleasure to come across less "managed" places. For example recording up the Scape Burn there were great beds of *Arctostaphylos uva-ursi* (Bearberry), a rare plant here, growing across dry scree along with *Sedum villosum* (Hairy Stonecrop) and *Myosotis stolonifera* (Pale Forget-me-not) in nearby flushes. However, Sitka Spruce seedlings were colonising from nearby forestry on one side while muirburn for grouse shooting had impoverished the vegetation on the other side.

Peeblesshire has relatively little arable so it was nice to come across some fields of under-sown barley near Walkerburn which had not been sprayed. The arable plants included *Amsinckia micrantha* (Common Fiddleneck), a second VC record *Centaurea cyanus* (Cornflower), *Euphorbia helioscopia* (Sun Spurge), *Galeopsis* 

speciosa (Large-flowered Hemp-nettle), Lycopsis arvensis (Bugloss) and Viola × contempta (V. tricolor × V. arvensis), also a second VC record.

I have continued recording nearer home in Roxburghshire concentrating on villages and have been involved in surveys for the Tweed Meadows restoration project.

#### Other notable finds:

*Viola* × *contempta*. VC78 Walkerburn. 2nd VC record.

*Tulipa sylvestris* (Wild Tulip). Tweed by Newstead, VC80.

Hemerocallis lilioasphodelus (Yellow Daylily). St Boswells, VC80 Second VC record



# Berwickshire (VC81) Robin Cowe

This year, 6,100 records were made from 14 recorders, covering all the large tenkilometre squares in the county.

I began a small project re-recording the clubmosses after so many of the former records were on sites for wind turbines or felled plantations with mixed results so far.

An amazing find at Pease Bay Caravan Park, which hosts a spectacular collection of Berwickshire rares around the caravan pitches: *Valerianella locusta* (Common



Cornsalad), Erodium cicutarium (Common Stork's-bill) and Sherardia arvensis (Field Madder) are all in good numbers, with a small population of Myosotis ramosissima (Early Forget -me-not).

A trip to Mellerstain to look at the last population of *Linnaea borealis* (Twinflower) in Berwickshire found it smaller than had previously been recorded but still flowering.

Vicia orobus (Wood bitter-vetch)
A new site and a wonderful day as I run across the hill shouting another one near Watch Water.

Epipactis helleborine (Broad-leaved helleborine)
Gordon Moss, the first for the Moss and the Gordon area.

Another notable find: *Lysimachia europaea* (Chickweedwintergreen). The last record at Press Castle was 136 years ago



### East Lothian (VC82)

#### **Marion Moir**

14,852 records this year, shared with TWIC and East Lothian Council, mostly all empty Monads have been covered. Refinding old records was also a focus, especially in the Spring.

Newsletter for the Lothian Botany Group, Sept 2023 shows an overview of our activities. A programme of walks from May to Aug inclusive was well attended but different people each time, this year we shall concentrate more on recording. Our outings to Aberlady with the Ranger, John Harrison, showing us the rare plants and to Papple Steading for the Wild Flower Meadow were memorable. The WhatsApp has given the group a sense of bonding and is useful for plant photo identification.

The Sealife Centre at North Berwick was approached to record the flora of the Bass Rock. Old records were from just after the Lighthouse Keepers departure in 1989, and guano built up from the gannets has had a detrimental effect on variety. No Asplenium marinum (Sea Spleenwort) was found.

Alice Balfour's plant notebook of c.1890 about plants around Whittingehame, in the RBGE Archives, gave me an introduction to Michael Brander, the owner of Whittingehame Estate and Tower, where interesting plants were found.

After our BSBI day at West Barns, Dunbar, showing c.30 people the coastal plants and rare grasses, I sent samples of the Brachypodiums and Carexes to Referees for all the coastal nature reserves. With the help of Michael Wilcox and Oli Pescott, the *Brachypodium rupestre* (Tor-grass) at Yellowcraigs was re-identified as *Brachypodium phoenicoides*, NEW to Scotland.

We helped the Council with a Biodiversity Day at Haddington Hospital and contributed ideas for future landscaping.

### **Various Spring-flowering species**

Old records for Spring flowers were re-found: *Myosotis ramossissima* (Early Forgetme-not), *Saxifraga granulata* (Meadow Saxifrage), *Catapodium rigidum* (Fern Grass) and *Adoxa moschatellina* (Moschatel). Louise Hardy in Dunbar searched the old records of *Adoxa*.

*Drymochloa sylvatica* (Wood Fescue) in Woodhall Dean (SWT), the only record in The Lothians, was given a good grid ref and found in more places in the glen.

### **Whittingehame Arboretum**

There is an ancient *Taxus baccata* (Yew) outside the Whittingehame Tower, one of two in East Lothian which are noteworthy. The Whittingehame Arboretum, planted in the 19th Century, is also interesting, and I particularly noted the Whittingehame Eucalyptus and *Calocedrus decurrens* (California Incense-cedar) with its fan shaped branches and ovoid cones.

Senecio sarracenicus (Broad-leaved Ragwort)

Down on the River Papple below Whittingehame Tower grows *Senecio sarracenicus* (Broad-leaved Ragwort), and it has spread all the way down from Garvald, a tall impressive plant with yellow flowers.

Brachypodium phoenicoides at Yellowcraigs was NEW to Scotland, has only been found in Britain and Ireland once previously in Devon VC3 in 2004 (Ref BSBI News 143 pages 41-43, Roger Smith), and has been recorded in Denmark and Belgium. Samples from Yellowcraigs have been placed in RBGE Herbarium.

# Midlothian (VC83)

Sue Jury

For 2023 there have been a total of 31,308 records added to the DDB. The recording priority was to target monads, with no or few records, and updating old records by re-finding species. A focus also has been on recording in brownfield sites before they are lost to development.

Midlothian has also been also involved in recording with TWIC, the BSS and the ENHS.

A WhatsApp botany group has been created with East Lothian, holding eight walks from May to September. Other impromptu walks held at other times.

*Pilularia globularia* (Pillwort) was re-introduced by Tim Duffy and I into Murder Acre, SWT Reserve.

Visits to some inaccessible sites were organised, these being Hillhead Quarry, Newbridge and Hazelbank Quarry, near Fountainhall.

A response has been sent by David Elston and I into Historic Environment Scotland regarding the Strategic Plan for Holyrood Park.

#### **Notable Finds in 2023**

A poster of the Notable Finds was presented at the BSBI and TWIC conferences.

Crataegus × subsphaerica, (Crataegus monogyna × rhipidophylla) see Plant of the week (<a href="https://botsocscot.wordpress.com">https://botsocscot.wordpress.com</a>) A first record for Scotland. Found at Hallyards on disused railway by Sue Jury and Douglas McKean, verified by Mick Crawley. This taxon seems to have gone un-noticed. Wherever landscapers have been — roads, rivers, estates and amenity sites there seem to be plantings. It seems to be a fertile hybrid as saplings have been found.

Ophrys apifera (Bee Orchid) First for Midlothian. 20 flowering spikes at West Granton on waste-ground, found by Marcus Ruhsam. Attempt has been made to

move them to a safer site as the site is being redeveloped.

developed.

Poa imbecilla (New Zealand Poa), re-find. Naturalised within the RGBE

Elymus athericus (Sea Couch) First verified record for Midlothian (and Scotland). Large clump found at Seafield on the beach, by Sue Jury verified by Michael Wilcox. The specimen is now in the herbarium at the RBGE. See article in BSBI News by Michael Wilcox (BSBI-News-154 -web.pdf).

*Pilosella caespitosa* (Yellow Fox-and-cubs). New site, mound at Millerhill waste-ground, found by Sue Jury and Vladimir Krivtsov, verified by Mick Crawley. A Rare Alien, last seen in 1992

Hyoscymus niger (Henbane) Re-found by Sue Jury and ENHS, on outing to Cramond Island. This re-find was probably from a washed-up seed., the seed source maybe May Island where there is a large colony of Henbane at the Old Lighthouse. A Rare Alien, the last record was in 1986.

Datura stramonium (Thorn-apple) At Newbridge wasteground, two plants seen, flowering, found by Sue Jury and Douglas McKean. A Rare Alien



Hypopitys monotropa (Yellow Bird's-nest) New site found. Old site lost to redevelopment. The first record in 1921 was lost to bulldozers. This record was found in the same bit of retained woodland by Millerhill waste-ground by Douglas McKean and Stuart Maxwell. 90-100 stems found. Second and only existing record.

Bolboschoenus maritimus (Sea Club-rush) First record for Midlothian. Found at Millerhill on waste-ground by Sue Jury verified by Matt Harding

*Brachypodium pinnatum* (Heath-false Brome or Tor-grass). New record, RBS Gogarburn, found by David Adamson. verified by Michael Wilcox. (This is probably the only existing record as the original record 1992 at Cobbinshaw was not refound, though the area was searched for extensively. There are now wind turbines at Cobbinshaw.

# Fife & Kinross (VC85)

### Sandy Edwards

Number of records: 2,500

Botanical representative on Fife Wildlife Sites Working Group. Gradually updating records for these sites (60).

Helping with species identification for St. Andrews Botanic Garden.

Tutored at two Wildflower Workshops and one Grasses Workshop.

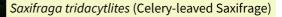
Ran a Rumex (Dock) identification workshop at the Scottish Annual Meeting.

Tutor to three students who completed the identiplant course.

#### Notable finds:

Azolla filiculoides (Water Fern)
Asplenium ceterach (Rustyback Fern)

Symphytum caucasicum (Caucasian Comfrey)



## Stirlingshire (VC86)

# **Matt Harding and Phil Sansum**

2023 saw interesting finds and re-finds made across Stirlingshire, a draft Rare Plant Register published, collaboration with RBGE on the Darwin Tree of Life Project, and with TWIC to identify and designate Local Nature Conservation Sites.

Atriplex longipes (Long-stalked Orache) was re-found after 40 years at its most northerly British site during a SHARPP search, along with two Atriplex hybrids new to the Firth of Forth. Other notable SHARPP successes included Potamogeton friesii (Flat-stalked Pondweed) re-found after 35 years.

New sites for *Bidens cernua* (Nodding Bur-marigold, pictured) and *Juncus filiformis* (Thread Rush) were welcome discoveries; the appearance of *Crassula helmsii* (New Zealand Pygmyweed) on Loch Lomond less so. The hybrid *Rumex* × *platyphyllus* was found amongst the *R. aquaticus* (Scottish Dock) population on Endrick Water, and further monitoring is needed.

A BSBI field meeting to Mugdock Country Park discovered *Centaurea debauxii* (Chalk Knapweed), new to VC86, a first record of *Hieracium sparsifolium* (Sparseleaved Hawkweed) since 1896, and a new site for *Parietaria judaica* (Pellitory-of-the-wall). New critical taxa for VC86 included *H. strictiforme* (Strict Hawkweed) and *Taraxacum rubicundum* (Ruddy Dandelion). Thanks to Angus Hannah's excellent bramble workshops, an effort to record *Rubus* taxa across Stirlingshire is now underway.

Urban botanising was very rewarding in 2023, with Malcolm Macneill recording new sites for *Oxybasis rubra* (Red Goosefoot) and *Saxifraga tridactylites* (Rueleaved Saxifrage). Malcolm's finds of *Setaria pumila* (Yellow Bristle-grass) and *Panicum miliaceum* (Common Millet) were new for VC86.

In the mountains, Dan Watson rediscovered *Deschampsia cespitosa* ssp. *alpina* (Alpine Hair-grass) on Ben Lomond after 64 years. *Polystichum lonchitis* (Holly-fern) records from Dan, Alasdair Eckersall and David Allsop were also very welcome.

Bill Parkes surveyed species-rich grassland at Dumbrock Loch Meadows SSSI. Orchid surveys have been undertaken here since 1983, with Bill and Sarah Longrigg currently conducting annual surveys. The most notable change has been for *Dactylorhiza viridis* (Frog Orchid), down from 266 plants in 1998 to none in 2023

A big thank you to **all** who recorded in Stirlingshire in 2023!

#### Other notable records

Atriplex longipes (Long-stalked Orache) at Pow Burn, where it was found by Clive Stace in 1984 — its most northerly British station. Many thanks to John Akeroyd for confirming the identification.

Adoxa moschatellina (Moschatel) on the banks of the River Avon — a sizeable new population running near-continuously for 300+ m.

Orchis mascula (Early Purple-orchid) growing on ledges at Double Craigs SSSI, out of reach of grazers

*Potentilla verna* (Spring Cinquefoil), a highlight of the flora of Double Craigs SSSI and the only post-2000 site for this species in Stirlingshire

Lysimachia thyrsiflora (Tufted Loosestrife) growing on the Forth & Clyde Canal. Stirlingshire is one of this species' key strongholds

Saxifraga tridactylites (Rue-leaved Saxifrage) colonising gravel in Falkirk, the second site for Stirlingshire

*Epipactis helleborine* (Broad-leaved Helleborine) in Stirling, demonstrating its ability to adapt to urban environments

Chaenorhinum minus (Small Toadflax), a locally scarce species enjoying the conditions in the Stirling Sainsbury's car park (other supermarkets are available)

Setaria pumila (Yellow Bristle-grass) discovered by Malcolm Macneill in Cumbernauld, new to Stirlingshire, and subsequently found in Stirling as well

Helminthotheca echioides (Bristly Oxtongue) at Helix Park, the fifth record for Stirlingshire



Butomus umbellatus (Flowering-rush), third vice-county record discovered at Balmaha



## **West Perthshire (VC87)**

It has been a quiet year, but 4564 records have so far been added to the DDb and confirmed. Matt, the Scottish Officer, who lives locally in our VC, has very kindly sent us any records he has made over the year. His strangest record was found growing in a crack in the pavement of his village and turned out to Oxvbasis glauca, (Oak-leaved be Goosefoot) Matt also had an expedition this summer into the far NW of our VC, collecting records for an area which is both difficult to access and very rough under foot. Liz and I were delighted as it more than we could However, contemplated. Matt thoroughly enjoyed himself, collecting about 1.000 records which we hope will be added to the DDb in the New Year.

## Liz Lavery and Jane Jones



*Oxybasis glauca*, (Oak-leaved Goosefoot)

Liz has been an Identiplant tutor for some years but I am joining the team for 2024 and look forward to helping students get to grips with plant identification and the enjoyment of plant recording.

The original RPR for VC87 was completed in 2013 but is presently being updated.

Several alien plants seem to have appeared in local gardens; these have included *Silene armeria*, (Garden Catchfly), *Zinnia elegans*, (Zinnia) and *Actinidia deliciosa*, (Kiwi). Where the first two species came from is a mystery but the latter was from seeds being put into a compost bin. Whether any survive a winter will be interesting to see, but I don't imagine there will be kiwi fruit to pick in 2024.

The PSNS (Perthshire Society of Natural Science) Botanical and Ornithological Sections were re-launched in 2022 as the PSNS Nature Section, <a href="https://www.psns.org.uk/nature/">https://www.psns.org.uk/nature/</a>, combining Botany and Birds. In 2023 Liz led or co-led three very enjoyable and well attended excursions. One in April to look at Lathraea squamaria (Toothwort) in Dollar Glen and listen out for newly arrived summer migrants. We were thrilled to hear a Black Cap and a Nuthatch. Venturing into VC88, two lovely days were spent exploring the banks of the River Tay. A notable find was Lactuca virosa (Great Lettuce), a monstrous looking plant, absent from our vice-county; at points we had fun navigating a maze of beaver paths and slides running into the river.

## Mid Perthshire (VC88)

### Jim McIntosh

After Alistair Godfrey's sad death at the end of 2022, Neale Taylor was appointed as joint Country Recorder in May. One of his first tasks was to collect Alistair's botanical specimens, record cards, journals and correspondence from Alistair's daughter and begin processing it. Over 600 plant specimens have been sorted and catalogued including over 100 *Taraxacum*, 65 *Dryopteris*, 50 *Euphrasia*, 30 *Hieracium*, 34 *Rosa* and 62 *Salix* specimens. Few are ready to be accessioned by an herbarium: many await determination or confirmation by referees, and the majority need labelling and mounting. We are liaising with the herbarium at Perth Museum.

We are very grateful to the 25 resident and visiting botanists who helped to collect just over 5,300 field records – with major contributions by Jim McIntosh, Dan Watson, Lewis Donaghy & Neale. There were 337 records of 40 Nationally Rare or Scarce species including those from detailed surveys of *Saxifraga cernua* (Drooping Saxifrage) & *Sabulina rubella* (Mountain Sandwort) by NTS Ben Lawers staff in 2023.

Neale began checking Mid-Perthshire iRecord records with a view to bringing them over into the main DDb holding. So far 8,000 records have been checked out of a total of 9,000. Of these about 7,200 have been confirmed.

We had several meetings with Perth & Kinross Council staff who are undertaking a survey of Local Nature Conservation Sites that is due to complete in 2024. We surveyed several sites in 2023 and are currently agreeing a survey programme for 2024.

A list of Locally Rare & Scarce species for Mid-Perthshire was prepared and will shortly be forwarded to the DDb where it can be used as a search constraint, and also to Perth & Kinross Council who would like to use it in their assessment of potential Local Nature Conservation Sites.

# **East Perthshire (VC89)**

### **Martin Robinson**

2,220 records were made, including four new vice-county records: *Cotula coronopifolia* (Buttonweed), *Galanthus elwesii* (Greater Snowdrop), *Pseudofumaria alba* (Pale Corydalis) and *Taraxacum tenebricans*.

April was taken up with recording along the River Tay for early-flowering species such as *Gagea lutea*, and also with continuing *Taraxacum* work in the vice-county, and spreading the word about them at every opportunity, encouraging people to leave them to flower. We are now up to 123 microspecies in the vc.

Later summer revolved around *Alchemilla* and *Salix* species. Mark Lynes came up to the remote Fealar Estate for a couple of days, where masses of *Alchemilla glomerulans* (Clustered Lady's-mantle) and *A wichurae* (Rock Lady's-mantle) were found. *A. sciura* was not, however, and nor was it in Gleann Beag, just over the boundary from its site in vc92.

Several days were devoted to *Salix arbuscula* (Mountain Willow) a predominantly Breadalbane species of which most historical records here are open to question.

Jo Parmenter on a visit found two good candidates in Gleann Beag, which are being grown on for study by Les Tucker.

Involvement with Perth & Kinross Council continued and more sites were surveyed for their 'Local Biodiversity Sites' scheme. It has picked up momentum with the appointment of a postgraduate student.

Work continued on a third, much expanded revision of the Rare Plant Register, which ought to be finished by the end of this winter.

Alchemilla glomerulans (Clustered Lady's-mantle)



Theo Loizou

# Angus (VC90)

As part of his work for Scottish Water, Theo Loizou (TL) undertook several peatland surveys at the Backwater Catchment hills of the north-west of the VC.

### A few of the highlights included:

*Meum athamanticum* (Spignel). An extensive population (many thousands) occurs along the banks of the Hole Burn.

Vaccinium microcarpum (Small Cranberry). New records were found in active blanket bog at the southeastern corner of Bruntshields, close to the watershed with Glen Posen and also at Corwharn.

In lowland Angus, TL has also been undertaking surveys for the Scottish Wildlife Trust (SWT) as well as surveys with Robin Payne of Local Nature Conservation Sites (LNCS) for Angus Council.

Berula erecta (Lesser Water-parsnip). Significant populations of this RPR species were re-found by TL and Anne Burgess (AB) at the Montrose Basin in an area known as The Lurgies. Also found in this area was Scrophularia auriculata (Water Figwort). There are currently only three known sites for this plant in Angus.

At Balgavies Loch, the Nationally Scarce *Cicuta virosa* (Henbane) and *Lysimachia thyrsiflora* (Tufted Loosestrife) continue to thrive. However, the RPR species *Rumex hydrolapathum* (Water Dock) was not detected and may be extinct.

During the LNCS survey a new population of *Calamagrostis epigejos* (Wood Small-reed) was found at Mains of Aldbar near Brechin. *Equisetum pratense* (Shady Horsetail) was found locally in abundance just east of Reekie Linn and the rare hybrid with *E. fluviatile* (known as *E.* × *mchaffieae*) may be present at this site.

# **Kincardineshire (VC91)**

#### **David Elston**

The most significant event of the year was the death of senior co-recorder David Welch. An obituary has been written and will appear in BSBI News early in 2024.

I led a Wildflower Society walk at St Cyrus NNR on July 4th (main photo) as part of a 3-day meeting organised by Lyn Jones. Most attendees were from the south of



England, so were pleased to see common northern species such as *Ligusticum* scoticum (Scots Lovage) and Rosa mollis (Soft Downy-rose) as well as some of the scarcer plants for which the site is renowned including *Dianthus deltoides* (Maiden Pink) and Astragalus glycyphyllos (Wild Liquorice).

Recording has concentrated on tetrads with few previous records, primarily in lowland arable areas. Combined with 2022's focus on lowland areas dominated by arable land, several species once considered scarce in Kincardineshire have been found to be quite widespread, including *Lamium hybridum* (Cut-leaved Deadnettle) in arable margins and *Carex hirta* (Hairy Sedge) in wet grassland.

An urban flora recording visit to Inverbervie led to discoveries of Veronica agrestis (Green Field-Speedwell) in the cemetery and outwith the settlement Salix phylicifolia (Tea-leaved willow) new to the catchment of the Bervie Water.

Visits to edge tetrads primarily in South Aberdeenshire have proved surprisingly productive. In particular, ditches in wet heath close to the former Loch of Park were found to contain *Eleogiton fluitans* (Floating Rush), *Utricularia minor* (Lesser Bladderwort) and *Eleocharis multicaulis* (Many-stemmed Spike-rush).

There are now fewer than 10 tetrads without respectable species lists, and these will be covered in 2024.

A selection of the most significant finds in Kincardineshire during 2023 is given below.

*Ophioglossum azoricum* (Small Adder's-tongue) was found at St Cyrus NNR, new to Kincardineshire. A press release was written and published in the Scotsman and on Yahoo News. A poster describing the discovery was produced for the 2023 Scottish Botanists' Conference and is on the SBC website.

*Polypogon monspeliensis* (Annual Beard-grass) was found growing by a footpath in Newtonhill, a Kincardineshire first.

*Hydrocharis morsus-ranae* (Frogbit) was found for the first time in Kincardineshire, growing in the old curling pond at Burnett Park, Banchory. This small pond has been the site of several other unusual records, in this case presumably resulting from the discard of material from a garden pond.

Following on from last year's first record for *Lepidium campestre* (Field Pepperwort) in Kincardineshire since 1960, a second group of plants was discovered near Park Bridge when exploring round one final bend at the end of a long day.

Ornithopus perpusillus (Bird's-foot) was discovered on a forest track at Drumtochty, showing signs of flowering despite the visit taking place in December. This is third localised record for the species in Kincardineshire.

*Impatiens parviflora* (Small Balsam) was discovered in the woods at NTS Crathes Castle, the sizeable patch suggesting this species must have gone unnoticed there for quite some time. This is only the 5th record for Kincardineshire and the first since 1994.

△ Ceratophyllum demersum (Rigid Hornwort) was found in a eutrophic pond below Knock Hill, Glenbervie, a second Kincardineshire site for this species originally discovered at Loirston Loch in 2018.



## South Aberdeenshire (VC92)

### Ian Francis

Botanical recording in 2023 yielded c.3,700 records, with notable finds - a few listed below. A newly formed North-East Scotland botanical network, set up by Alison Peaker and Carol Blow, visited numerous sites including a wet grassland SSSI in mid-Deeside in July, finding 226 taxa, a high total for Aberdeenshire. A Scottish Wildlife Trust outing at Potarch, with 20 attendees, covered pine woods and herb-rich grassland by the River Dee. A survey week on the NTS Mar Lodge Estate produced around 2,700 records in 52 monads, including a wide range of upland and montane species, many nationally scarce or rare (reported on in the BSBI Yearbook by Dan Watson). The Glen Shee and Cairnwell area received much attention this year, with some notable records.

Finally, Goodyera repens (Creeping Lady's-tresses) is strongly characteristic of north-east and northern Scotland and 376 flowering spikes were found at Muir of Dinnet by Simon Ritchie. However, this finding was depressingly countered by the loss of another previously recorded large colony, growing along the top of a wall near Balmoral. This numbered hundreds of spikes in 2019 but was reported by Tristan Norton as having been completely destroyed during 2023, by vegetation

stripping of the wall. Such botanical losses are not

often formally recorded.

I thank all who submitted records in 2023 and Andy Amphlett and David Elston for much help.

Noccaea caerulescens (Alpine Penny-cress). An exciting find was of Alpine Penny-cress in May by Simon Thomas on the Green Hill of Strathdon on south-facing serpentine outcrop. Confirmed by Tim Rich, this is now the most northerly site in the UK.

Botrychium nordicum (Nordic Moonwort) recorded from six closely spaced locations at the Glen Shee ski area by Lyn Jones and Leslie Tucker.

Taraxacum caledonicum. The first record of this dandelion for the vice-county was made at the Glen Shee ski area by Lyn Jones and Leslie Tucker.

Carex buchananii (Silver-spiked Sedge). In Aberdeen, the rare neophyte Silverspiked Sedge was found by David Elston close to Aberdeen harbour, the first VC record (confirmed by Mick Crawley).

Sabulina rubella (Mountain Sandwort) was relocated by Tristan Norton, in its only VC location, but unrecorded since 1996.



# North Aberdeenshire (VC93)

### **David Elston**

The most significant event of the year was the death of senior co-recorder David Welch. An obituary has been written and will appear in BSBI News early in 2024.

The newly formed North East Scotland Botanical Recording Network (NESBRN) paid three group visits to North Aberdeenshire during the year. The first visit, to Forvie NNR, failed to refind its principal target species, *Corallorhiza trifida* (Coralroot Orchid) but succeeded in collecting many other useful records including two widely separated populations of *Dactylorhiza viridis* (Frog Orchid, main photo). This combination of target failures rectified by ancillary success became a feature of the year. The second visit collected substantial species lists for the first time from two tetrads near Gartly. The third visit, to the gorge of the River Ythan at Gight, failed to find any convincing *Quercus petraea* (Sessile Oak) despite the presence of 10-figure grid refs, the many oaks found all being either entirely or predominantly with characteristics of *Quercus robur* (Pedunculate Oak).

Now that the quest to obtain respectable species lists for all tetrads in Kincardineshire is nearing completion, attention is beginning to turn to North Aberdeenshire. A day spent recording the urban flora of Peterhead, the largest settlement outside Aberdeen, brought the volume of data from this previously under-recorded town up to a more acceptable level. The most interesting finds were all in the vicinity of St Peter's Church, including *Trifolium micranthum* (Slender Trefoil) in the cemetery.

A selection of the most significant additional finds in North Aberdeenshire during 2023 is given below.



Dactylorhiza incarnata subsp. coccinea (Early Marsh-orchid)
Detailed observations of Dactylorhiza orchids by Tristan Norton at Rattray Head, backed up by high quality photos, led referee Dr Richard Bateman to confirm the presence of the previously unrecorded subspecies coccinea of Dactylorhiza incarnata (Early Marsh-orchid) in North Aberdeenshire.

Carex vesicaria (Bladder Sedge)
Exploration of the River Ythan floodplain
after examining oaks at Gight led to the
discovery of the first likely native site of
Carex vesicaria (Bladder Sedge) in North
Aberdeenshire.

Lysimachia europaea (Chickweed Wintergreen); Cruciata laevipes (Crosswort)
The NESBRN search for Corallorhiza trifida (Coralroot Orchid) at Sand of Forvie
NNR led to a detailed search of the heathland on the west side of the reserve. Here



*Lemna trisulca* (Ivy-leaved Duckweed). A large pond by the River Ythan contained a substantial population of *Lemna trisulca* (Ivy-leaved Duckweed) new to North Aberdeenshire.

we found *Lysimachia europaea* (Chickweed Wintergreen), with only two previous BSBI records from the NNR. A follow-up visit led to the discovery of *Cruciata laevipes* (Crosswort), the first BSBI record for the reserve.

Platanthera bifolia (Lesser Butterfly-orchid)

A SHARPP search for *Platanthera* bifolia (Lesser Butterfly-orchid) at Cairnhill Moss led to the rediscovery of a healthy population of plants on the south side of the road across this Local Nature Conservation Site.

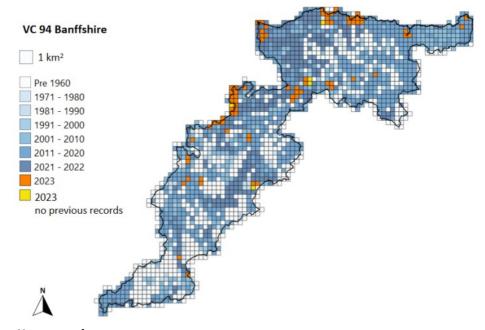
### **Banffshire (VC94)**

### Flora Donald

Sitting down to write this report, I expected to relay a modest number of finds. However, in reviewing the records I realise this expectation was coloured by my own frustration at moving house over the summer curtailing my ability to get out and about and that of course, visiting botanists found exceptional plants again this year.

## Coverage:

So far, 2013 records have been submitted for 2023 from 20 different hectads and 88 monads, including five monads with no previous records. An incredible 62% of records reported in 2023 were found by Anne Burgess who visited 34 different monads just this year. An additional 476 records were added to the DDb from previous years (1983 - 2022).



#### New records:

Encouragingly, most of the 69 new hectad records were of native species. My particular favourites were Andy Amphlett's Equisetum×littorale (E. arvense x E. fluviatile) (Hybrid Horsetail)f rom NJ13 and Myosotis ramosissima (Early Forget-menot) from NJ55 found by Anne Burgess.

An early recording start in March led Andy Amphlett to two new vice county records *Gagea lutea* (Yellow Star-of-Bethlehem)and *Galanthus plicatus* subsp. *byzantinus* (Pleated Snowdrop), followed in May and June by new vice county records of *Lathyrus linifolius* var. *varifolius*, *L. linifolius* var. *montanus* (Bitter-vetch) and *Phacelia tanacetifolia* (Fiddleneck). Tristan Norton then visited in August and recorded vice county firsts of *Fumaria purpurea* (Purple Ramping-fumitory), *Trifolium incarnatum* subsp. *incarnatum* (Crimson Clover) and *Trifolium alexandrinum* (Egyptian Clover). The latter was sown as a crop but is a useful record to compare against any future spread and is only the second finding in Scotland; the first was reported only a fortnight earlier by Ian Green in neighbouring vc95.

#### **SHARPP:**

With great optimism and improving weather conditions, Anne Burgess and I headed out to the Wood of Edinvillie armed with eight very detailed grid references of *Linnaea borealis* (Twinflower)recorded in 1998. We searched the area diligently and enjoyed updating the inventory with 49 new taxa for the tetrad, but were sadly unable to locate a single Twinflower patch. Even suspecting inaccuracies in the original grid references, we think the habitat has changed and may no longer be favourable for this delicate rarity.

Arabidopsis petraea (Northern Rock-cress). The Cairngorms are something of a stronghold for Northern Rock-cress where it is recorded every few years. It's always encouraging to receive reports of this species though, given its listing as vulnerable on the GB red list. This year's report was sent in by Mike Smedley who saw it flowering in Glen Avon.

Corallorhiza trifida (Coralroot Orchid). Andy Amphlett re-found Coralroot Orchid in three locations last visited 12 years ago, counting 192 plants and extending the known distribution into new adjacent areas. Andy noted that trampling and ground poaching occurs easily at these locations posing a significant risk to these orchid populations.



Gagea lutea (Yellow Star-of-Bethlehem). Conditions in 2023 produced a good flowering year for Yellow Star-of-Bethlehem. New populations were found on opposite banks of the River Spey which separates vice counties 94 and 95. The two plants in the spate zone of the eastern bank were a vice county first for 94.

Moray (VC95) Ian Green

The main aim of 2023 was to carry on trying to visit all monads for a monad Atlas Flora of vc95. The recording has been going well with 21,218 records collected during 2023. Several field meetings were arranged across the vice-county to look at rare and interesting species.

Sixteen new species were added to the vice-county list, all non-native species, though some are native in other parts of the UK. Three of these species were new for Scotland *Lemna valdiviana* (Valdivia Duckweed), *Trifolium alexandrinum* (Egyptian Clover) and *Euphorbia maculata* (Spotted Spurge). Plus a fourth species is the first record for the UK -*Jasione laevis* (Shepherd's Scabious).

## East Inverness-shire (VC96)

## **Andy Amphlett**

- 9258 records of 755 taxa were collected in 2023, from 264 monads, in 27 hectads.
- 84% of records were at 100m precision or better.
- 78% of the records were collected by the VCR, with 18 additional recorders providing the remainder.
- 10 new taxa for the vice-county were recorded; 2 natives: Carex × helenae ( demissa × C. viridula) and Montia fontana subsp. chondrosperma; 1 archaeophyte (Spergula arvensis var. arvensis), and 7 aliens.
- 7 taxa were recorded for the first time post-1999.
- Although only 4% of hectad records were new, 37% of tetrad and 57% of monad records were new.
- 752 records of 90 RPR taxa were recorded, of which 48% were new monad records.
- In addition, a further 1550 records for previous years were uploaded to the DDb.
- All records have been verified and validated.
- A new vice-county webpage was created https://bsbi.org/easterness.
   Downloads available via that webpage are:
  - ♦ A Checklist and RPR taxon list for v.c.96 (Excel).
  - A list of taxa first recorded in v.c.96 since the publication (in 1978) of Mary McCallum Webster's Flora of Moray, Nairn & East Inverness (Excel).
  - ♦ An analysis of altitudinal ranges of all taxa in v.c.96 (Excel).
  - ♦ Ten maps of the vice-county, including four showing recording coverage.

Carex × helenae (C. demissa × C. viridula)
This apparently very rare hybrid sedge was found at 3 locations around the shore of Loch Ceo Glais, the first post-1999 record for GB.
Material was determined by Nigel Blackstock.



Aristavena setacea (Bog Hair-grass)

A thorough survey was undertaken around the whole shore of Loch Ceo Glais, where Gus Routledge had recently refound this species after a gap of 47 years, finding the species at 3 locations.

Corallorhiza trifida (Coralroot Orchid)

Successful targeted searches were made at Cran Loch, Lochloy Wood and SE of Big Burn.



Juncus balticus (Baltic Rush)
A new site was found beside the Allt a'
Mhuilinn, at Coignafearn, at 400m
AOD. This is 6km upstream from the
nearest previously recorded location.
In the photo; the J. balticus are the
thin dark stems in the foreground.

## **West Inverness-shire (VC97)**

## Ian Strachan

In 2023 more than 10,000 records were made or received for Westerness, where there is still much basic recording to be done. Some highlights were presented at the SBC in November - the exhibit can be seen on the <a href="Westerness">Westerness</a> page of the BSBI website <a href="https://bsbi.org/westerness">https://bsbi.org/westerness</a>, which has been recently updated with the addition of this and other SBC exhibits from the last 6 years.

With the Knoydart Foundation Rangers we held a very successful Rough Crew Field Meeting in June, based at Inverie. Over four days we collected more than 3,800 records from 42 monads in stunning weather, making a huge contribution to records for this neglected part of Westerness.

Gus Routledge found the record of the year, *Carex norvegica* (Close-headed Alpine-sedge) in Coire Dearg (Mamores), new to v.c.97. Jim McIntosh and IS found a second v.c. site for *Omalotheca norvegica* (Alpine Cudweed) on the south face of Ben Nevis, and Jim generated more than 2,000 additional records for Ben Nevis and the Mamores, with many new finds. Another major contribution of records was made by Jon and Angela Mercer for the Glen Loy area.



Glen Nevis and Sgurr a' Mhaim from Coire Eoghain on Ben Nevis, with Coire Dearg (distant right) where *Carex norvegica* (Close-headed Alpine-sedge) was found in June, the first record for Westerness.

Locations likely to be affected by the proposed Earba pump-storage scheme on Ardverikie Estate were visited by IS, who found a remarkable, previously unknown flora around the pristine montane Loch a' Bhealaich Leamhain. This would be destroyed or damaged by a 60m-high dam. Other activities by IS included biannual recording of NPMS plots at Moy for the 8th successive year, and a talk to Arisaig Botany Group on 'Wild fruits of the Highlands'.

Another remarkable occurrence in 2023 was that, following correspondence with IS, Michael Braithwaite found and digitised 933 records for Morvern from notebooks dating back to 1976-77. He had made them during field meetings at Ardtornish run by John Raven and Clive Jermy, and they include valuable details for historical records such as *Cerastium alpinum* (Alpine Mouse-ear) on Beinn Mheadhoin, possibly its most westerly British locality.

# **Dunbartonshire (VC99)**

# **Michael Philip**

Our current Dunbartonshire project continues its strong momentum, with over 14,000 records uploaded this year. This means we have now gathered over 50,000 records since the start of 2021, visiting 511 monads at an average of 97 species per monad.

We held 19 field outings in 2023 but have also seen a steady increase in the amount of records being contributed by individuals and small, more spontaneous, gettogethers.



Highlights of the year included an intensive day's recording on the Loch Lomond island of Inchmoan (see photo); a visit from Brian Burrow (referee for Hieracium) including two indoor workshops and a field day in the Kilpatrick Hills; and a final burst of urban recording for the Botanical Society of Scotland's 'Urban Flora Project'.

An exciting new sub-project is a partnership with RSPB to record the flora of their Loch Lomond Reserve. Working with RSPB staff and volunteers, we have covered around half the Reserve area in 2023.

A first vice-county record was achieved by carefully photographing some coastal *Atriplex*. We're grateful to John Akeroyd (referee) for determining the hybrid *Atriplex* 

glabriuscula × longipes = A. × taschereaui (Stace), on three of our Clyde estuary beaches. This taxon has been recorded elsewhere on the Clyde, but not before in Dunbartonshire.

And the ever-vigilant Alison Rutherford noticed an unusual shrub erupting out of a footpath in Helensburgh. She collected a specimen and had it identified by the RHS: *Tetrapanax papyrifer* 'Rex' is a first record for the British Isles.

# Clyde Islands (VC100)

# **Angus Hannah, Sarah Cowan**

JVCR Sarah Cowan (Arran)

3040 records were made for Arran, of which 545 were additions for monads covered in the previous 3 years, visiting at different seasons. 29 new monads were visited, 12 not recorded since 2000 (some never).

Talks and walks with local groups and individuals included:

- nature walk with NTS Rangers and COAST (Community of Arran Seabed Trust) at Kildonan with 50 participants of all ages.
- botany walk for the Arran Natural History Society at Sannox, North Arran.
- summer field study for NTS Rangers and Geopark Rangers to improve ID skills.
- survey work for North Ayrshire Council with bird Recorder.
- field study with BTO bird ringers and moth experts.
- supplying local landowners with updated lists.
- Scouting suitable areas for the British Lichen Society visit in spring 2024

Arran Rare Plant Register was updated in May.

JVCR Angus Hannah (Bute)

In first 6 months of year I made 4000 records, mostly common species new to monads in current date-class.

I visited RBGE several times, helping select specimens from George Ballantyne's *Rubus* collection for E, GLAM and ABN. From his surviving notes I digitised 900 bramble records at monad precision for vcc86 and 81.

After June my efforts were devoted to brambles, mostly in other vcc, having become Scottish referee for *Rubus* in succession to David Welch. My annual workshops were held in Maybole vc75 in July, and I began work on a Scottish Brambles Handbook and photographic reference gallery.

- Mertensia maritima, declined dramatically since 2007. One large plant remaining.
- Logfia minima, second Arran site on old forest track recently scraped.
- Trichomanes speciosum, found by Tony Church near a previously known site.
- Lycopodium clavatum near track to ruined moorland distillery.
- Hieracium dicella found by Sarah Cowan, collected by P. Mackie confirmed B. Burrow.
- Circaea alpina, finally confirmed by A. Hannah for Bute, at several sites in the far north end.

# Kintyre (VC101)

### **Dave and Pat Batty**

We had a very quiet year recording in 2023. The main highlight was a new site for *Cephalanthera longifolia* (Narrow-leaved Helleborine) in south Knapdale where six plants were found in three places. A friend had moved to the area and found it by chance. It had been known to neighbours but never reported. *Zostera noltei* (Dwarf Eelgrass) was re-found in the Loch Sween area.

### Mid Ebudes (VC103)

# Lynne Farrell

This is the report for Mid Ebudes VC 103. The box above does not allow me to highlight VC 103 and type it in, it would seem.

Liaised and visited several local conacts on Mull, who help with botanical matters. E-mail communications with botanical helpers on Coll and Tiree maintained.

Main effort was on SHARP species including Sorbus rupicola for which we found some new populations. In Sep. We concentrated on updating records for aquatic and emergent species not seen since the Scottish Lochs Survey in 1994. We successfully refound *Subularia aquatica*, *Elatine hexandra* in two lochans, and several *Potamogeton* species in other lochans. *Teesdalia nudicaulis* at its lowland river site was re-surveyed. Coastal species such as *Salicornia europaea*, *Suaeda maritima* and *Ruppia maritima* also updated at several sites.

# North Ebudes (VC104) Stephen Bungard, Joanna Walmisley

Over 7,100 records were added to the DDb including fourteen taxa new to VC104 and about 110 new hectad records. The new taxa are mostly garden escapes or planted, but *Sedum villosum* (Hairy Stonecrop) was an impressive addition to the native flora and *Pimpinella saxifraga* (Burnet Saxifrage) seems likely to have been introduced with imported soil. Late records from 2022 included *Scilla verna* (Spring Squill), new to Skye.

Eyebrights: *Euphrasia* × *eurycarpa* was a first for Skye and *Euphrasia arctica* × *micrantha* × *scottica* is a new triple hybrid. Eighteen *Hieracium* (Hawkweed) specimens were also sent for determination.

Skye Botany Group met roughly monthly from May to September. The focus was on <u>SHARPP</u>, interspersed with meetings of more general interest. Locations included Raasay, Canna/Sanday and some spectacular parts of Skye: from Dunvegan Castle for ferns with James Merryweather, to Trotternish and the cliffs of Preshal More and Sgùrr Bhreatail.

<u>SHARPP</u> success rate is just over 15% with only a few plants deemed completely gone. The list of targets remains long and a further year would be welcomed.

A talk on the Flora and Vegetation of Raasay was given on Raasay and repeated at a <u>Highland Biological Recording Group</u> meeting. Subsequently, there has been considerable interest locally in Raasay's temperate rainforest and the <u>Carbon Neutral Islands Raasay</u> project is looking to preserve and increase native woodland.

<u>Plant Atlas 2020</u> was drawn to the attention of <u>HBRG</u> and to <u>Skye and Lochalsh</u> <u>Environmental Forum</u> by an article in their newsletter.

#### Some more notable finds:



Sedum villosum (Hairy Stonecrop) New to VC104

*Iris setosa* (Bristle-pointed Iris) in Sleat First record in the wild in the British Isles

Cardamine raphanifolia (Greater Cuckooflower) near Portnalong, Skye New to VC104

Peloric *Pedicularis sylvatica* subsp. *sylvatica* (Lousewort) Found near Staffin, Skye



*Pimpinella saxifraga* ( Burnet-saxifrage) in Portree New to VC104



# West Ross & Cromarty (VC105)

### **Duncan Donald**

April saw the National Trust for Scotland's Inverewe estate "Bioblitz" [far less destructive than its name implies!]. Perhaps unsurprisingly the new VC records were 'escapes' from Inverewe Garden: *Arisarum proboscideum* (Mousetailplant), and well-established *Rhododendron macabeanum* (McCabe's Rhododendron) at some distance from the Garden itself, apparently self-seeded.

In June, members of the Inverness Botany Group joined me on a chartered boat-trip to two of the Summer Isles. Tanera Beg held the largest colony of *Dryopteris aemula* (Hay-scented Fern) I've yet seen, but *Asplenium marinum* (Sea Spleenwort) on an 'inland' cliff hints at why these aren't called the Winter Isles ...! Our main objective was Isle Ristol, where we added *Avenula pubescens* (Downy Oat-grass), *Carex distans* (Distant Sedge), *Dactylorhiza traunsteinerioides* (Narrow-leaved Marsh-orchid), *Koeleria macrantha* (Crested Hair-grass) and *Salicornia europaea* agg. (Glasswort) to the Scottish Wildlife Trust reserve's plant-list.

The BSBI Field Meeting I ran in July, reported more fully elsewhere, helped at last to get much of the northern Fannichs properly surveyed, insofar as the weather allowed. Highlights included new VC record <code>Euphrasia × eurycarpa</code> [E. frigida × E. ostenfeldii] (an Eyebright); new hectad records for <code>Salix phylicifolia</code> (Tea-leaved Willow), and <code>Trichophorum cespitosum</code> s.s. (Northern Deergrass) [well spotted, Simon Thomas!]; and new sites for <code>Athyrium distentifolium</code> (Alpine Lady-fern) and <code>Carex saxatilis</code> (Russet Sedge) in what seems to be their VC stronghold, as well as <code>Salix lapponum</code> (Downy Willow).



Neal Taylor on Creag na h-Inghinn, Ben Damph Forest

Later in July an invited group surveyed the Ben Damph estate (and adjacent hills), an area hitherto under-reported. New hectad records were made for *Drosera* × *obovata* [*D. rotundifolia* × *D. anglica*] (Obovate Sundew), *Euphrasia frigida* (Upland Eyebright), *Salix phylicifolia*, and *Saxifraga hypnoides* (Mossy Saxifrage); new sites

found for *Lycopodiella inundata* (Marsh Clubmoss) and *Poa glauca* (Glaucous Meadow-grass); *Arctostaphylos uva-ursi* (Bearberry) was unusually abundant in a couple of places.

Unable to be at Ben Damph, Marcus Yeo nevertheless contributed a large list of finds from around Lochcarron, including new VC records for *Echinochloa crus-galli* (Cockspur), *Erigeron canadensis* (Canadian Fleabane) and *Galinsoga parviflora* (Gallant Soldier) [to which Andy Amphlett later added *Bistorta amplexicaulis* (Red Bistort)], as well as the first reports from NG83 for *Elymus caninus* (Bearded Couch) and *Salicornia europaea* (Common Glasswort) since Druce's in 1893! I must also thank Ro Scott for noting the continuing inexorable spread of *Cotula alpina* (Alpine Buttonweed) within Coigach; Jane Thomas and James Merryweather for a new VC record of *Genista anglica* (Petty Whin) [and from James a putative new site for *Malus sylvestris* (Crab Apple)]; Lynn Youngs for updating *Sibbaldia procumbens* (Sibbaldia) from Groban; and Peter Cunningham for a new hectad record for *Zostera marina* (Eelgrass).

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

More than 7,600 records were made in 2023. Many parts of the Vice-County were visited and we are grateful for all the contributions, especially those from remote mountain areas. We also visited some conservation sites, including a hill farm and a new community woodland at Dingwall.

A joint BSBI/BSS/Inverness Botany Group Field Meeting was held at Tain on 25th May. We were pleased to be joined by members of the Tain Field club. *Crassula tillaea* (Mossy Stonecrop) was frequent on the paths and there were very large areas of *Zostera* (Eelgrass) by the shore. Further on *Cerastium arvense* (Field Mouse -ear), so rare in VC106 lately, was spotted by the roadside.

New finds included another new *Linnaea borealis* (Twinflower) site at Swordale recorded by Chris Gray and a new VC record for *Chenopodium ficifolium* (Fig-leaved Goosefoot) at Aultguish made by Matt Harding.

Talks in 2023 (BRB):

22nd September Botanical Society of Scotland's Urban flora conference at the Royal Society of Edinburgh. 'Urban habitats and Walls'.

11th September Highland Biological Recording Group. A short talk 'Urban and Rural Habitats in Easter Ross'.

Articles in 2023 (BRB):

BSBI News 'Plants in Urban and Rural Habitats in Easter Ross' 154. 17-20

BSBI Scottish Newsletter 'Local Botany -Pre-existing Societies or Local Groups'. 45. 62-63

BSS News 'Urban and Rural Shores' 120. 31-34

BSS News 'Flora of Industrial Estates in Easter Ross'121, 35-38

## West Sutherland (VC108)

Ian M. Evans

West Sutherland is an extensive vice-county, with five parishes covering 3098 sq.km., and many hitherto unrecorded areas far from its few roads. There are two local botanists and two regular visitors. The useful season for fieldwork is limited, essentially June-September. It is currently targeted on two areas, the **Quinag** estate of the John Muir Trust in the south-western parish of **Assynt**, and the parish of **Tongue** on the north coast.

Eight monads on Quinag, and one other in Assynt, yielded some 900 records, and two weeks staying at Tongue, in June and August, some 1650 records from 20 monads.

Species new to **Assynt**, and West Sutherland as a whole, were *Mycelis muralis* (Wall Lettuce) outside Lochinver (NC0923) and *Hypericum maculatum* (Imperforate St John's-wort) near Kylesku (NC2333).

New hectad records of note from the **Tongue** area included *Lycopodiella inundata* (Marsh Clubmoss) above Strath Naver (NC7153), and both *Pyrola media* (Intermediate Wintergreen) and *Orthilia secunda* (Serrated Wintergreen) in a remote woodland south of Loch an Dherue (NC5345). Thanks to Gwen Richards, Gordon Rothero and Ro Scott for all their contributions during the year.

*Mycelis muralis* (Wall Lettuce) At Lochinver, new to West Sutherland. Photo Gwen Richards



# **Outer Hebrides (VC110)**

## **Paul Smith**

The main activity in vc110 continues to be recording towards a tetrad flora, and there are now some records in 1046 of the 1189 tetrads that have some land above sea level, with perhaps 100 of those needing a further, proper recording visit even though they have a few records. So there are perhaps 250 tetrad visits to make for full coverage.

The main excitement for the year was a boat-based field meeting (at the third attempt after earlier postponements during COVID times) to the islands south of Barra. The weather was kind and we managed lists for all of the tetrads including some quite small scraps of rock, one of which could only be recorded with binoculars. A full report is in the BSBI Yearbook. This is a major help towards coverage of some of the more challenging areas of the VC.

The VCR also made spring and (post-boat) summer visits to Lewis, mostly covering moorland areas (which are often the least visited). Spring included a long walk to Allt Gil Bhigurra, the largest natural woodland in the county, and some nice wooded cliffs at Cul Chreag. Summer recording was in a mix of machair, coast, village and moorland habitats, re-finding many old hectad records and adding many new ones (especially of introduced species in Tolsta, NB55). The biggest surprise was a second county record for *Geum rivale* (Water Avens) by a burn in the machair, quite different from its other vc110 site on a North Harris cliff ledge.



Gil Bhigurra woodland

A number of visitors sent records from their holidays, which were much appreciated. Altogether more than 5000 records were added in 2023.

Ajuga pyramidalis (Pyramidal Bugle) in a new site at Allt Gil Bhigurra (NB20U), near a new record for Botrychium lunaria (Moonwort) and also with Arctostaphylos uva-ursi (Bearberry) in the same place as last seen in 1997.

Geranium robertianum (Herb Robert) on Creag Mo, North Harris – common on the mainland, but a rare native in the Outer Hebrides, and not otherwise known in the county as a cliff ledge species.



Ajuga pyramidalis (Pyramidal Bugle)

# Orkney (VC111)

# **John Crossley**

For me it was a year for pursuing projects more than area recording. Three years ago I reported on the finding of Dactylorhiza incarnata subsp. cruenta (Leopard or Flecked Marsh-orchid) on the island of Hoy. In 2022 a visiting orchidologist year found D. francis-drucei (formerly traunsteinerioides) (Narrow-leaved Marsh-orchid) in the same place, and doubt was then cast on the earlier identification of D. incarnata subsp. cruenta. The situation is now resolved: both species are there, with the bonus of Hammarbya paludosa (Bog Orchid). An exceptional place.

For several years I have been chasing up *Carex maritima* (Curved Sedge) at its older recorded sites. One of the last hold-outs was a single 1975 record on acidic sand dunes on the island of Eday. This year I found a single fruiting plant.

A similar quest for *Primula scotica* (Scottish Primrose) near Noup Head on the island of Westray was disappointing. In the 1970s and 1980s there were at least seven recorded sites in an area of about 1 sq km, with a total of many hundreds of plants. A group of us found just three plants at a single site. Heavy sheep grazing over many years and local land 'improvements' are likely to blame for the losses.

The only *Salix myrsinites* (Whortle-leaved Willow), a single female plant, in Orkney has been known from a site on cliffs in Hoy for 150 years. This year I found another, also female, 30 m higher on the same cliff.

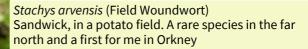
I helped to organise a bioblitz near Stromness. It was well attended and there were lots of nice plants to see, including *Juniperus communis* subsp. *nana* (Dwarf Juniper).

Some notable finds:

Ambrosia artemisiifolia (Annual Ragweed) New VC record, in South Ronaldsay. Found beneath a pigeon loft, of birdseed origin

Lepidium virginicum (Least Pepperwort) New VC record, in South Ronaldsay

*Ophioglossum azoricum* (Small Adder's-tongue) Eday, in damp acid grassland. A new site



## Michael Braithwaite - an appreciation

A full obituary will appear in BSBI News but because Michael was such a stalwart of the BSBI in Scotland we thought we couldn't let his death go unremarked in the Scottish Newsletter. Here are some personal recollections and thoughts of Michael by Jim McIntosh, retired Scottish Officer.

Michael was an incredibly diligent County Recorder and brought a thoughtful and innovative approach to his Berwick Recordership. For example, he was one of the first to produce a Rare Plant Register (RPR) in 2004 and then published his ground-breaking Site Botanical Register in 2011 (both subsequently updated). The Site Botanical Register reorganises the same data in a RPR by site, and includes brief habitat descriptions and is of much more practical use to land managers, botanists and ecologists. His *Short Flora of Berwickshire (2014)*, is arguably one of the best floras in Scotland – full colour with lots of photographs, distribution maps and interesting text. Together with his many contributions to the British & Irish Botany journal and BSBI News over the years, and his botanical records, he has created a great botanical legacy for succeeding generations.

Michael was a great supporter of the BSBI in Scotland. He was instrumental in devising the Scottish Officer project, along with David Pearman and Chris Sydes of Scottish Natural Heritage, which aimed to promote botany and support the membership. Indeed, he was on the interview panel in 2004 that appointed me as Scottish Officer and continued on the steering group for many years afterwards. At the time Michael was Honorary Treasurer and was in a good position to advise on the finances of the new post. He would regularly provide support and advice to me as Scottish Officer and was a fair, if outspoken, critic.

He was sensitive to the need to avoid overloading the Scottish Officer, and so when, as President in 2009, he organised a long weekend Annual Spring Meeting in Berwick he did so almost single-handedly with little call on me. Actually, he was a great supporter of BSBI conferences and workshops in general. He participated in nearly all those organised in Scotland, often speaking and regularly exhibiting his botanical findings and, more recently, poetry. He was particularly pleased how the Scottish Botanists' Conference collaboration with RBGE and the Botanical Society of Scotland encouraged many new and younger botanists to get involved.

He would also regularly attend BSBI field meetings with his wife Paddy. Back in the 1990s, I met up with them on several field meetings and discovered that he was a patient and enthusiastic teacher to anyone who was keen to learn - and I got a great grounding in sedge and rush identification! At both indoor and outdoor meetings, he particularly enjoyed meeting up and chatting with fellow botanists – amongst whom Michael was highly respected and liked and his botanical work much admired.

Jim McIntosh, retired Scottish Officer

# Dr Alan Silverside - an appreciation

A full obituary will appear in BSBI News. Meantime, here are some personal recollections and thoughts of Alan Silverside by Jim McIntosh, retired Scottish Officer. Alan was BSBI Recorder for Wigtownshire, BSBI Referee for *Euphrasia* and a lecturer in plant ecology at the University of the West of Scotland (previously known as the University of Paisley), from which he retired in 2015. He died peacefully in hospital on the 28 November 2023.

Alan had a brilliant eye for botanical detail and would attempt to identify every plant he came across often to subspecies, variety or form. He was particularly interested in *Mimulus, Euphrasia, Spiraea* and several other tricky groups and contributed accounts and keys to *The Plant Crib* and other publications. He regularly attended conferences and Scottish meetings and he gave an excellent and memorable talk on these difficult groups at a Conference on Hybrids at Preston Montford in 2005.

He became referee for *Euphrasia* and published many papers on them. His expertise on *Euphrasia* and botany more generally, made him popular on field meetings. I remember attending several Recorder Conferences where he was at the centre of a scrum of botanists anxious to have their specimens checked! Alan was also a great lichenologist and he set up a series of webpages on lichens and fungi which are still popular today (if difficult to find).

He was appointed County Recorder for Wigtownshire in 1977 and undertook field work for both Atlas 2000 and Atlas 2020; the Monitoring Scheme and Local Change projects. He produced a checklist in 1990, available on the BSBI Wigtownshire webpage, and began a revision in 2004. Alan became good friends with Helen Jackson and encouraged her to become recorder for East Lothian, when it fell vacant in 1981, and helped her greatly with both recording and digitisation.

Alan was often a bit elusive. Phone calls, letters and emails would go unanswered. In my 18 years as Scottish Officer, he only ever phoned me once – and that was accidentally! This was aggravated when his eyesight deteriorated in later years, making it difficult for him to read computer screens and to reply to emails. It could also be frustrating for members who sent Alan specimens. When I visited him towards the end of 2019, I discovered that many specimens sent to him as referee were still in unopened packages and sadly he did not attend to them in time for the Atlas 2020 deadline. But hopefully the specimens will be recovered and determined.

Latterly, ill health prevented him doing much recording. So, to help with Atlas 2020 I organised a recording week in Wigtownshire with him in 2018. It was very successful week, but sadly in the end Alan was unable to attend himself, which was a shame as I'm sure he would have really enjoyed it. Alan retired as County Recorder in 2019 – after an amazing 42 years.

Jim McIntosh, retired Scottish Officer

# Scottish Botanists' Conference 2023

The 2023 Scottish Botanists' Conference was held at the Royal Botanic Garden Edinburgh on Saturday 4th November, with a record attendance. A menu of captivating talks was provided. All are available to view on the <a href="mailto:BSBI YouTube">BSBI YouTube</a> channel.

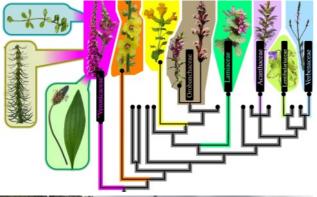
- Plant Atlas 2020: powering policy with citizen science Mat Williams, Chief Scientific Advisor for Environment, Natural Resources and Agriculture to Scottish Government
- Plant Atlas 2020: the State of Scotland's Flora Matt Harding, BSBI Scotland Officer
- Scottish Plant Recovery using Conservation Translocations Aline Finger, RBGE Molecular Ecologist



Monitoring Cicerbita alpina (Alpine Blue-sow-thistle) at Corrie Fee

RBGE

- BotSoc.Scot! BSS welcome and updates Jonathan Silvertown, President of BSS
- From seedling to sapling: a year in the life of a young professional botanist –
   Gus Routledge
- For Peat's Sake: The Highs and Lows of Managing Plantlife's Munsary Peatlands Nature Reserve Alistair Whyte, Head of Plantlife Scotland



 Divorcing the Scrophs: why plant names keep changing – Richard Milne, University of Edinburgh



 Understanding Wild Pine in the Highlands – James Rainey & Jane Sayers, Trees for Life

There were also three engrossing **Flash talks** by research students:

- I. Urban flower meadows to promote biodiversity by Patricia Mrazek
- II. Effects of mineral and chemical content of anthropogenic soils on plant biodiversity by Savanna van Mesdag
- III. Improving and refining methods of DNA sequencing to identify willows by Connie Simon Nutbrown

## There were seven Mini-workshops:

- I. Willowherb (*Epilobium*) identification, led by Geoffrey Kitchener, BSBI *Epilobium* referee, with an <u>Epilobium visual key</u> provided
- II. Montane willow identification, led by Sarah Watts, Corrour Estate
  Conservation Manager, with Montane willow handout and herbarium sheets
- III. Introduction to Dock identification with Sandy Edwards, BSBI Recorder for Fife
- IV Introduction to Horsetail identification with Heather McHaffie, British Pteridological Society

- V Bryophytes for beginners with Oliver Moore, British Bryological Society
- VI Making the most of herbaria specimen collection, presentation and online catalogues with Elspeth Haston, RBGE Deputy Herbarium Curator, & RBGE Herbarium team, with guidance on <a href="herbarium specimen preparation">herbarium specimen preparation and care</a>
- VII Getting the most out of the Online Plant Atlas 2020 by Pete Stroh, BSBI England & Scientific Officer, *Plant Atlas 2020* author

Many of the exhibits that were on display can be viewed <u>here</u>.

### **Exhibition Abstracts**

#### **OUTREACH Workshops in 2023 by Faith Anstey**

We held six Outreach workshops in 2023: three 'plant families' ID workshops for beginners and improvers – one by special request from Historic Environment Scotland; one on Grasses; one Habitat Survey ID; and a new workshop on Ferns for beginners. There were two training field meetings, at Glen Fender and our annual visit to Ben Lawers with an emphasis on graminoids. For 2024 we have at least five workshops planned, plus three training field meetings and a new event: Training the Trainers.

## Urban and rural Woodlands in Easter Ross (VC106) - a comparative study by Brian Ballinger (recorder for Easter Ross)

10 urban woodlands and 10 rural woodlands in Easter Ross were studied. In each case 100m transects were recorded on two occasions noting all vascular plants that did not appear to have been planted. A total of 650 records were made in the urban woods and 526 in the rural.

161 species were recorded in the urban woods and 146 in the rural. There were 26 neophytes (aliens) in the urban woods and eight in the rural. This difference in species number was not quite statistically significant and could be accounted for by neophytes. The rural woods contained more typical 'rural' species such as *Calluna vulgaris* (Heather), *Carex sylvatica* (Wood-sedge), *Galium saxatile* (Heath Bedstraw), and *Lysimachia* (formerly *Trientalis*) *europaea* (Chickweed-wintergreen).

The number of species detected increased more in the rural woods than the urban in moving from winter to summer.

# The discovery of *Ophioglossum azoricum* Small Adder's-tongue in Kincardineshire (VC91) by David Elston (recorder for Kincardineshire & North Aberdeenshire)

The fern ally *Ophioglossum azoricum* (Small Adder's-tongue) was found at St Cyrus National Nature Reserve on 5th July 2023, an addition to the known flora of Kincardineshire. This poster describes events surrounding this discovery, from background information to the subsequent press-release.

## Recording in West Sutherland (VC108) by Ian M. Evans and Gwen Richards (recorders for West Sutherland)

West Sutherland is a large vice-county, with an area of 3098 sq. km spread over 47 hectads, and very few resident botanists. The only part comprehensively surveyed is the parish of Assynt in the south-west. That was done in the 1990s, by tetrad.

Recording at this level continued until about 2015, when we switched to monads. Complete coverage at this level is impracticable; we lack the personnel and much of the area is very remote.

Recent recording has been focussed on two areas, one close to hand (Quinag, in the parish of Assynt), the other further afield (the parish of Tongue and adjacent areas).

We aim to make the results of our recording available to a wider audience. The website of the Assynt Field Club <a href="https://www.assyntwildlife.org.uk/">https://www.assyntwildlife.org.uk/</a> carries numerous stories on Quinag, and *The Highland Naturalist*, <a href="https://www.hbrg.org.uk/MainPages/HNat.html">https://www.hbrg.org.uk/MainPages/HNat.html</a>, annual articles on the work around Tongue.

Finds during 2023 have included *Equisetum hyemale* (Rough Horsetail) on Quinag, *Lycopodiella inundata* (Marsh Clubmoss) in Strath Naver and both *Pyrola media* (Intermediate Wintergreen) and *Orthilia secunda* (Serrated Wintergreen) south of the Kyle of Tongue. All were new hectad records.

### Peeblesshire Plants (VC78) 2023 by Luke Gaskell (recorder for Peebleshire).

Lathyrus tuberosus (Tuberous Pea) - This is a new record for the vice-county, probably sown some time ago as part of a wild-flower seed mix. There were half a dozen flowering plants along a short section of the Tweed CycleWay near Cardrona and it will be interesting to see how long it persists there.

*Ervum tetraspermum* (*Vicia tetraspermum*) (Smooth Tare) - Third VC record, this tare was last recorded a few miles to the west 29 years ago. It is not considered native to Scotland and it is usually found on disturbed ground and road verges. This locality was an embankment of the disused Galashiels to Edinburgh via Peebles railway and it is possible that it has been there since the route was closed more than sixty years ago. It appears that *Ervum tetraspermum* is being included in wild-flower mixes and is therefore being recorded more frequently across the Borders.

## Three rapidly-spreading species – why do they spread? By John Grace, BSS and the University of Edinburgh

In our Urban Flora project we find several species that surprise us by sudden appearance and rapid spread in towns and cities. Three are illustrated in this poster: *Polypogon viridis* (Water Bent), *Polypogon monspeliensis* (Annual Beardgrass) and *Erigeron canadensis* (Canadian Fleabane). These are just three of many species that seem to be 'travelling north'. We have been exploring the reasons. Anthropogenic influences are likely to have been more important than climatic warming.

## Some botanical highlights for Westerness (v.c. 97) in 2023, by Ian Strachan (joint recorder for Westerness)

Various highlights from the past year are described and illustrated.

Some great finds were made by botanists in the mountains above Glen Nevis. Two particularly exciting species (both Nationally Rare) were *Carex norvegica* (Closeheaded Alpine-sedge) in Coire Dearg, in the western Mamores, new to the vice-county; and *Omalotheca norvegica* (Highland Cudweed) on the south-east face of Ben Nevis – a first for the Ben Nevis range and only its second locality in the VC.

In June a successful Rough Crew meeting was held on the remote Knoydart peninsula, with the Knoydart Foundation Ranger Service. Over four days a remarkable 3,815 records were made from 44 monads, including many new hectad records in this under-recorded corner of Scotland.

In July several notable finds were made around the unexplored Loch a' Bhealaich Leamhain, north of Ben Alder, including *Potentilla crantzii* (Alpine Cinquefoil), *Subularia aquatica* (Awlwort) and much *Salix lapponum* (Downy Willow). This pristine mountain loch is under threat from a 60m-high dam as part of a proposed pump-storage scheme.

## Atriplex (Oraches) on the Firth of Forth by Matt Harding (joint recorder for Stirlingshire)

During searches for the Scottish HectAd Rare Plant Project (SHARPP), the most northerly British *Atriplex longipes* (Long-stalked Orache) population was re-found after 40 years at Haughs of Airth (VC86), along with first records for the hybrids *A. x gustafssoniana* (Kattegat Orache) and *A. glabriuscula x prostrata* on the Firth of Forth (both found in VC84 & VC86). Huge thanks to John Akeroyd, BSBI *Atriplex* referee, for his determinations and feedback! His identification tips are shared here to encourage other *Atriplex*-hunters around the Forth.

## West Perth (VC87) - A most unexpected find! By Liz Lavery (joint recorder for West Perthshire)

While walking to his local post box in Thornhill, Matt Harding spotted a very unusual looking goosefoot growing by a bollard on the pavement. John Akeroyd, BSBI *Atriplex* referee, confirmed it was *Chenopodium glaucum*, now *Oxybasis glauca* (Oak-leaved Goosefoot), a first for the vice-county.

## Midlothian (VC83) - Notable finds for 2023 by Sue Jury (recorder for Midlothian)

Including *Crataegus x subsphaerica* (*Crataegus monogyna x rhipidopylla*), *Elymus atherica* (Sea Couch) – the first verified records for Scotland, *Opyrys apifera* (Bee Orchids) – a new first for Midlothian, and many other notable finds.

## Interesting finds in Dumfriesshire (VC72) in 2023 by Chris Miles (recorder for Dumfriesshire)

A number of interesting species have been found this year. Photos or specimens of the first records for *Epipactis dunensis* (Dune Helleborine), *Polygonum boreale* (Northern Knotweed), and *Fumaria purpurea* (Purple Ramping-fumitory) are shown. Other interesting finds or refinds this year are also noted in the display.

## How does the variation in the mineralogical and chemical properties of anthropogenic substrate influence plant biodiversity? By Savanna van Mesdag

Anthropogenic substrates include a wide range of waste materials left over from industry and mining, including colliery spoil, blast furnace and steel slag, paper mill sludge and many, many more. This study found high levels of plant biodiversity including species rare in their local geographical area and/or nationwide. Relationships between plants and substrate on multiple different types of anthropogenic substrate were investigated with reference to some key chemical variables, with positive results. Anthropogenic substrates can support high levels of plant biodiversity and in light of the Anthropocene and the current biodiversity crisis much of this needs to be better studied and understood.

### Plants on the move: surveying urban greenspaces in Fife by Beccy Middleton

This small study demonstrated the botanical value of some urban greenspaces in Fife. 19 greenspaces in urban parts of north-east Fife were surveyed. National Plant Monitoring Scheme habitats were identified and quadrats recorded in each. Native species were recorded more frequently than neo- or archaeophytes, and were more abundant. Management (particularly mowing height and frequency) varied and had a large impact on the number and type of species found.

See: Plants on the move surveying urban greenspaces in Fife

## Scottish Bramble Project by Angus Hannah (joint recorder for the Clyde Islands)

2023 was a tough year for Scottish batology. Our long-serving referee George Ballantyne had died two years before, and when his herbarium reached RBGE this spring, it was in poor condition. Two surviving notebooks containing valuable records (now digitised) are exhibited. Much had been lost. Worse was to come with the death of our other leading expert, David Welch. It was a small consolation that he had recently published his Mearns-Angus bramble as *R. longiflorus* (photos shown). The bramble community responded to these misfortunes.

An illustrated Handbook of Scottish Brambles is in preparation (sample pages shown).

A reference gallery of photographs of all Scottish species is being set up.

We are appealing for sets of 4-5 close-up photos, usually enough for identification. You get a good record; the photos join the library to help others; bramble distribution gets better understood. A successful pilot was run with Chris Miles in vc72, resulting in over 100 new records (specimen photo-set shown).

Please send photos as email attachments at full resolution or share in Dropbox to Angus Hannah butesedge@yahoo.co.uk

We will continue to hold workshops and field-meetings in different localities and will offer more should demand increase.

### Plant ID for beginners - a new method, by Richard Milne

How best do we start total beginners on the path to becoming good at plant ID? The main challenge facing the total novice is where to start, with ~1700 native species, over 500 common aliens and ~3000 more rare aliens. Over 15 years, I have developed a method that narrows down to a list of families, based on a very few traits that beginners can easily understand, which is presented here. From this list, the beginner simply looks through images of the indicated families to find a visual match. In doing so, they begin to recognise common families and gain expertise. Currently the method requires picture ID books, but I am constructing a comprehensive image library of the UK flora to create a stand-alone tool. I also introduce a 'platekey', which combines images with dichotomous key text, providing the beginner with a gentle introduction to the latter.

See: Plant ID for Beginners—a new method

#### Montane willow identification workshop specimens, by Sarah Watts

This exhibit displays herbarium specimens collected under licence for the seven montane willow species discussed in the associated workshop on their identification.

Arctic-alpine specialists:

Salix lanata (Woolly Willow); Nationally Rare

Salix lapponum (Downy Willow); Nationally Scarce

Salix myrsinites (Whortle-leaved Willow); Nationally Scarce

Salix arbuscula (Mountain Willow); Nationally Scarce

Salix reticulata (Net-leaved Willow); Nationally Scarce

Secondary montane willows:

Salix myrsinifolia (Dark-leaved Willow)

Salix phylicifolia (Tea-leaved Willow)

See also Montane willow handout and herbarium sheets

### Some Novel Anthropochorous Allopolyploid Taxa on Tayside, by Leslie Tucker et alia ad hoc

Roadside verges, drainage ditch banks, and mulched surfaces under cultivated specimens in gardens and parks have been observed to provide sites for some unexpected plants. Mostly these are from common, even notorious, 'weed' genera having wind-dispersed seeds: *Salix*, *Taraxacum*, etc. Presumably these ubiquitous vagrants simply settled on a vacant surface suitable for germination and development; however, some unusual segregates, usually more typical of exotic 'wild' habitats and communities, probably arrived along with imported stone and organic compost.

Potted specimens, herbarium pressings, photographs, descriptive notes, and background publications are displayed to support some of the more controversial taxonomy.

### **BSBI Scottish AGM Minutes**

## Saturday 4 November 2023 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 2022

These had been made available in the 2023 Scottish Newsletter and through emails in advance of the 2023 SBC.

No substantive issues were noted. They were approved as record of the 2022 AGM, proposed by Ian Strachan, seconded by Stephen Bungard and with general consent of those present.

#### 3. Chair's report

- 3.1. Matt Harding was congratulated on his appointment and first year as Scotland Officer.
- 3.2. The following changes to the panel of Recorders for Scottish Vice Counties was noted.
  - Alistair Godfrey (Mid Perthshire) and David Welch (North Aberdeenshire & Kincardineshire) had both died during the year, representing substantial losses to the Scottish botanical community. The meeting expressed deep regret for these losses but also gratitude for the many achievements of Alistair and David.
  - Paul Harvey (Shetland) had retired as VCR, replaced by Jon Dunn.
  - Sue Jury (Midlothian) had been through the formalities of appointment as VCR.
  - Sarah White (Kirkcudbrightshire) and Neale Taylor (Mid Perthshire) have respectively joined David Hawker and Jim McIntosh as co-recorders.
  - Lyn Jones has offered his services but has yet to go through the formalities for Argyll, where Gordon Rothero has long been seeking assistance.
  - Dave & Pat Batty (Kintyre) continue to remain in post to provide cover but would like to step down: offers of assistance, perhaps on a panel basis, are sought.

The Chair thanked all the above, and indeed all VCRs, for their work.

3.3. The Plant Atlas 2020 launch in Scotland took place at RBGE on 9 March 2023. The event was chaired by Pete Hollingsworth in his joint capacity as BSBI Trustee and RBGE Director of Science. The opening address by Lorna Slater MSP in her capacity as Minister for Green Skills, the Circular Economy & Biodiversity was particularly welcome and the event as whole was a great

success. The Chair thanked all involved in preparation and on the day.

- 3.4. The 2023 programme of outreach and field meetings was very successful, with 15 events. The workshop on fern identification was welcomed as an additional offering for inexperienced botanists, whilst the boat-based tour of Barra Islands was noted as being particularly intrepid. The Chair thanked all involved in the successful organisation and delivery of all 15 events.
- 3.5. Faith Anstey was thanked for editing the Scottish Newsletter 2023, in particular for creating both a bumper edition available online and a slimmed-down edition which could be printed and posted to the membership within budget.

John Crossley was thanked for agreeing to take over as editor.

- 3.6. CfS had continued to respond to consultations and make representations on nationally important matters as follows:
  - Royal Society of Edinburgh: Inquiry into Public Support for Tree Planting and Forestry;
  - Scottish Government;
  - Future Grant Support for Forestry;
  - Proposals for a New Agriculture Bill;
  - Highland Council: Objection to Planning Application for a Golf Course at Coul Links.
- 3.7. Grateful thanks were extended to all contributors to the work of BSBI in Scotland not thanked yet, including but not limited to:
  - Committee for Scotland;
  - Outreach Group;
  - Local Group / Network organisers;
  - Participants and promoters;
  - Plant recorders; BSBI staff;
  - RBGE (hosting Scotland Officer & Events);
  - NatureScot & anonymous donor for funding Scotland Officer.

### 4. Committee for Scotland 2023-24 – composition and elections

The committee elected at the 2022 AGM had co-opted Ellie Mayhew and Beccy Middleton. The Chair very much welcomed having a full committee during the year. Of the current committee Lindsay Mackinlay, Michael Philip & Andrew Rowley were retiring and Ellie Mayhew was not seeking election at the end of her period as co-optee. All were thanked for their contributions, and all other members wished to

remain in post.

Looking ahead, the Committee for Scotland proposed Polly Spencer-Vellacott continue as Secretary and the following recruits be elected as member: Beccy Middleton (also to act as Field Meetings Secretary), Ian Francis & Georgia Hancock. The CfS proposals were proposed by Peter Gordon, seconded by Duncan Donald and received the consent of the meeting as a whole.

The potential for two further recruits for co-opting was noted, and suggestions for volunteers sought.

The elected and co-opted membership of CfS was augmented during the year by many more people fulfilling a variety of roles.

From BSBI: Matt Harding (Scotland Officer); Julia Hanmer (Chief Executive); James Harding-Morris (Countries Support Officer); Chris Miles (Chair, Board of Trustees); Steve Gater (Hon Secretary); Pete Hollingsworth (link to Board of Trustees); Jonathan Shanklin (Chair, Committee for England); Faith Anstey (Outreach & Newsletter Editor).

External to BSBI: Iain Macdonald (NatureScot); Brian Ballinger (BSS); Alistair Whyte (Plantlife); Dan Watson (NTS).

All were thanked for the outside knowledge and additional context brought.

### 5. Some plans for 2023-24

The Chair spoke to slides outlining a list of areas of activity for the year ahead, as follows:

Consultations & Representations, including the Scottish Biodiversity Strategy; Data availability, to rectify the lack of uptake of BSBI records by commercial consultants;

Plant Atlas 2020 follow-ups, including an evening event at Holyrood sponsored by Mark Ruskell MSP;

Outreach & Field Meetings, highlighting a week on Tiree for which Lyne Farrell sought assurances there would be sufficient participation to justify her booking accommodation;

"Wild Plants on the Tourist Trail", an initiative to enable visitors to learn about plants they encounter which will require participation from BSBI members to achieve good coverage;

Identiplant, for which administrative arrangements have changed with tutors as well as students were sought;

BSBI Awards, with nominations sought by 31st December;

National Plant Monitoring Scheme, for which more participants are sought; Scottish HectAd Rare Plant Project (SHARPP) for which data entry was now a

priority.

#### 6. Date of next 2024 AGM

2024 Scottish Botanists' Conference, date TBA.

#### 7. AOB

The chair asked for questions and comments from the audience.

Jim McIntosh asked about what projects were proposed for 2024 – whether there was a national project from BSBI, and suggested that if not, it might be good to continue with SHARPP.

Ian Strachan gave a strong yes to the question of whether BSBI data should be freely available to all including commercial users/ consultants. He also suggested that it should be on the NBN with less delay than the current 5 years.

Duncan Donald raised a question seeking guidance for non-plant records (e.g. butterflies/ birds). In some areas a Biological Records Centre is available, but otherwise if people wish to record they would need to contact the relevant group/recorder for the species concerned.

#### **CROSSWORD No 8 by Cruciada**

#### **ACROSS**

- 1. Outer whorls of sex returning to melted clay (7)
- 5. First couple abandon Cirsium for making agave fibre (5)
- 8. Exercise can drive one nuts! (5)
- 9. Unopened flower significant in Citizen Kane's childhood (7)
- 10. Science hidden, confused, without direction, mature but not opening up (12)
- 12. A citrus, unfinished and given back, nettles (6)
- 14. Place a wager on young former Stachys (6)
- 17. Shrubs in bed at Spring festivals (12)
- 21. Name one girl Heather (7)
- 22. Thence tare has cereal fungus (5)
- 23. Weeds that turn out to be neeps (5)
- 24. Things you can do with wickedness may be diagnostic in Alchemilla, for example (7)

#### **DOWN**

- 1. Thus express hesitation better over pepper (8)
- 2. Silvery metal detectives find to be crystal clear (5)
- 3. Unknown insect this yellowish (7)
- 4. Emphasise how unfavourable growing conditions may cause this (6)
- 5. Problem for discussion in this one of Scottish Newsletter? (5)
- 6. Inclined to almost support company producing Nicotiana (7)
- 7. Finishes objects (4)
- 11. Great R&B artist of mine is to be remembered (8)
- 13. This palm has leaves said to be genuinely immense (7)
- 15. Seabird on rough sea seeks region usually drier and cooler (7)
- 16. Scared to chop down these trees? (6)
- 18. Love spread around you, we hear, holds future seed (5)
- 19. What Carex, not Juncus, are popularly said to have (5)
- 20. Oddly conceals New Zealand yams (4)

Solution on page 83

### Botanical Society of Scotland Field meetings Spring to Autum 2024 ALL WELCOME

**Saturday 18 May, 10am Craigmillar Park, Edinburgh**. Foraging walk and taster picnic. Leader: Nenya Milne

**Tuesday 21 May 7pm Reres Hill, Broughty Ferry, Dundee**. BSS urban flora and other wildlife. Joint with Dundee Naturalists Society. Leader: Brian Ballinger

**Thursday 30 May 7pm—9pm Ashworth Laboratory, University of Edinburgh.** Evening crash course in flowering plant ID (not grasses). Leader: Richard Milne

**Sunday 2 June, 10am Millerhill, Dalkeith**. Plant ID following 30 May course. Leader: Richard Milne

**Saturday 8 June 11am Knox Wood, Midlothian**. Plant survey of the wood. Leader: Sim Tang

**Sunday 16 June 12 noon North Berwick**. Seaweeds. Leader: Alastair Lyndon

**Saturday 29 June 10am Beinn Dubhchraig, Mid Perthshire (v.c. 88).** Alpine Field Meeting. Numbers limited. Leader: John Holland

Monday 1 July 2pm Campbell Park, Edinburgh. 'Bioblitz' and plant survey. Leaders: Jonathan Davey with members of the Urban Flora group of the BSS

**Saturday/Sunday 6/7 July. Fort William**. Residential weekend—Urban Flora project and a 'holiday'. Leaders: John Grace and Chris Jeffree

**Thursday 11 July 1030am Easter Ross seaboard villages**. Meet at Balintore for an urban shore walk, joint with Inverness Botany Group: Leader: Brian Ballinger

Wednesday 24 July 10am Tyningham saltmarsh. Leader: Chris Jeffree

**Tuesday 6 August 2pm Clatto Moor, Dundee**. Plant recording and other wildlife. Leader: Brian Ballinger

**Saturday 10 August 10.30am RBGE, Edinburgh**. Photography workshop. Places limited. Leader: Richard Wilson

**Wednesday 14 August 10am Lesmahagow, Lanarkshire**. Recording and Urban Flora. Leaders: Michael Philip and John Grace

**Sunday 1 September 11am John Muir Country Park, East Lothian.** Fungus Foray. Leader: Cameron Diekonigin

Check our website <a href="https://www.botanical-society-scotland.org.uk/">https://www.botanical-society-scotland.org.uk/</a> for further details. Contact our Programme Secretary, <a href="Maria.Chamberlain@ed.ac.uk">Maria.Chamberlain@ed.ac.uk</a> for joining instructions

### **British Pteridological Society**

### Scottish Group - Meetings Programme 2024 ALL WELCOME

**Saturday 6 April Spring Zoom meeting 6pm.** Discussion and talks:

Hazel France – Ferns in Singapore Botanic Gardens Michael Sundue - Documenting Colombian ferns

Saturday 18 May Killarney Fern on Arran. Killarney Fern and others. Meet at Ardrossan, Leaders: Liza Downie and Michael Hutchinson.

Saturday 15 June Ascog Fernery, Isle of Bute. Meet at Wemyss Bay ferry terminal. Leader: Bridget Laue

Saturday 13 July Creag an Fhitich, Glen Falloch, Stirlingshire

Leader: Andy MacGregor

Saturday 19 October Annual Autumn Meeting, Glasgow Botanic Garden

Leader: Chris Nicholson

For up-to-date information check the BPS website: www.ebps.org.uk/events/ category/meetings/regional/scotland.

For more details about meeting places and times, and contact details for meeting leaders contact Bridget Laue bridgetlaue@blueyonder.co.uk

#### **SOLUTION TO CROSSWORD ON PAGE 81**

### ACROSS CRIB 1. CALYXES (NB Chambers gives both this **ACROSS** and Calyces) 2. ISTLE 8. PECAN 9. ROSEBUD 10. INDEHISCENCE 12. URTICA 14. BETONY 17. COTONEASTERS 21. CALLUNA 22. ERGOT 23. SWEDE 24. SINUSES **DOWN** 1. CAPSICUM 2. LUCID 3. XANTHIC DOWN 4. STRESS 5. ISSUE 6. TOBACCO 7. ENDS 11. MYOSOTIS 13. TROOLIE 15. EASTERN 16. CEDARS 18. OVULE 19. EDGES 20, OCAS

- 1. anag CLAY/rev SEX 5. TH)ISTLE
- 9. PE/CAN 11. ref to film
- 10. anag SCIENCE HID(D)EN
- 12. anag A CITRU(S) 14. BET/ON/Y
- 17. COT/ON/EASTERS 21. CALL/UNA
- 22. ERGO/T (tare = call sign for T)
- 23. anag WEEDS 24. SIN/USES
- 1. CAP/SIC/UM 2. LU(tetium)/CID
- 3. X/ANT/HIC 4. double definition
- 5. dd 6. TO/BAC(K)/CO
- 7. dd 11. MY/OS/OTIS 13. truly
- 15. anag SEA/TERN 16. anag SCARED
- 18. anag LOVE + U 19. "Sedges have edges"

#### BSBI FIELD MEETINGS AND WORKSHOPS 2024

See Year Book and website for full details

- Saturday 23 March (Training) Training for Trainers, RBGE, Edinburgh (v.c.83)Leader: Faith Anstey (faithanstey@gmail.com)
- Saturday 18 May (Training, Beginners) Plant Families Workshop, Dunfermline (v.c.85) Leader: Aileen Meek (aileenammeek@gmail.com)
- Saturday 8 and Sunday 9 June (General, Recording) SHARPP recording along the Banffshire coast (v.c.94) Leader: Flora Donald (donald.flora@yahoo.co.uk)
- Saturday 16 June (General, Training) Field meeting, Tentsmuir, Fife(v.c.85)
  Leader: Sandy Edwards (ase1@st-and.ac.uk)
- Tuesday 18 to Saturday 22 June (General, Recording) Tiree (v.c.103)
  Leader: Lynn Farrell (lynneonmull@btinternet.com)
- Saturday 22 June (Training) Start to Identify Grasses Workshop, Falls of Clyde, New Lanark (v.c.77) Leader: Michael Philip (botany@opus44.co.uk)
- Saturday 29 and Sunday 30 June (Specialised, Training) Progress in Bramble Identification Dumfriesshire(v.c.72) Leaders: Chris Miles and Angus Hannah. Contact: Chris (chrismiles01@btinternet.com)
- Saturday 6 and Sunday 7 July (Specialised) Hawkweed Hunt, Glencoe (v.c.98) Leader: Tim Rich (tim\_rich@sky.com)
- Saturday 6 July (Training, Beginners) Plant Families Wildflower Walk, Kincardine O'Neil, Aboyne, (VC92). Leader: Aileen Meek (aileenammeek@gmail.com)
- Saturday 13 July (Training) Sedges & Rushes, Dumfriesshire (v.c.72) Leader: Chris Miles (chrismiles01@btinternet.com)
- Sunday 14 July (General) Arable Weeds, Peebleshire (v.c.98)
  Contact: Luke Gaskell (<u>lukegaskellw@gmail.com</u>)
- Saturday 20 July (Training) Grasses, Sedges & Rushes, Ben Lawers (v.c.88)
  Leaders: Dan Watson and Faith Anstey. Contact: Faith (faithanstey@gmail.com)
- Saturday 20 and Sunday 21 July (Specialised) Alchemilla Weekend, Glenshee (v.c.89) Leader: Mark Lynes (maslyni@gmail.com)
- Saturday 27 July (Training) Plant Families Workshop, Fort William (v.c.97) Leaders: Aileen Meek and Faith Anstey. Contact: Aileen (aileenammeek@gmail.com)
- **Sunday 28July (Training) Field Meeting, Fort William (v.c.97)** Leaders: Aileen Meek and Faith Anstey. Contact: Aileen Meek (aileenammeek@gmail.com)
- Saturday 3 August (Recording) Campsie Fells, Stirlingshire (v.c.86)
  Leaders: Matt Harding and Lynn Jones, Contact: Matt (matt.harding@bsbi.com)
- Saturday 10 August (Training) Identifying Composites, Kirkhill, Inverness (v.c.96) Leader: Faith Anstey (faithanstey@gmail.com)
- Saturday 17 August (Training) Complete and Utter Beginners' Workshop, Arrochar (v.c.99) Leader: Michael Philip (botany@opus44.co.uk)
- Saturday 31 August (Training) Plant Identification for Habitat Surveys, Dumyat (v.c.87) Leader: Lindsay Mackinlay (thefutureforestcompany.com)