Scottish Botanists Conference 2022 – Abstracts

Faith Anstey: BSBI Outreach 2022

Outreach workshops resumed in 2022: Grasses, Sedges & Rushes, and (new) Composites. Also two training field meetings: Tummel Shingle and Ben Lawers. Five workshops are planned for 2023, including a new one on Ferns. Ben Lawers will be visited for the third successive year, with another training meeting in Glen Fender.

Clifton Bain: Rainforests and Peatlands: Travels around Scotland's most threatened habitats

Two of Scotland's most under-appreciated habitats both thrive in wet conditions; Atlantic rainforests and peatlands, once considered useless they are now seen as vital to tackling the twin crises of biodiversity loss and climate change. Travelling around these wonderful features inspired Clifton to write a series of books telling their stories and offering guidance for others to enjoy their own natural connections. https://sandstonepress.com/authors/clifton-bain
Biography: Currently working for the IUCN UK Peatland Programme, Clifton has had a long career in nature conservation with RSPB and the Wildlife Trusts. He has a zoology degree from the University

of Aberdeen and was recently awarded a Royal Scottish Geographical Society Honorary Fellowship.

Brian Ballinger: Plants on Easter Ross town walls – a 10-year study of persistence

10 three-metre sections of town walls in Easter Ross (v.c.106) were visited annually for 10 years. 25 species were present, the most frequent being *Asplenium* (Spleenwort) species and *Cymbalaria muralis* (Ivy-leaved Toadflax). Only four of the 65 plants recorded were in the same position after 10 years. These were not necessarily the same individuals.

Michael Braithwaite, retired VCR: Scenes from the Wilds of Berwickshire

<u>This booklet is available free</u> as a PDF, published by the Berwickshire Naturalists' Club for its members. It tells the story of 28 sites, placing their diverse botany in context with history and geology. The selection of sites is made from the author's <u>Berwickshire BSBI Botanical Site Register</u> which lists 233 sites of botanical interest. Printed copies of *Scenes from the Wilds of Berwickshire* may be available from the <u>Berwickshire Naturalists' Club</u> website.

David Elston: Four interesting finds during 2022

The poster describes the following finds from Aberdeenshire, v.c.92 and Kincardineshire, v.c.91:

A) Cirsium palustre x vulgare = C. x subspinuligerum (Marsh Thistle x Spear Thistle), second Scottish record; B) Eleocharis acicularis (Needle Spike-rush), in extraordinary abundance; C) Dryopteris oreades (Mountain Male-fern), second record for Kincardineshire; D) Lepidium campestre (Field Pepperwort), first Kincardineshire record since 1960.

Sandy Edwards: Some interesting records for Fife and Kinross, v.c.85

Helminthotheca echioides (Bristly Oxtongue) very rare in Scotland, was found at Kinghorn during the Wildflower Families Workshop, only the second record for v.c.85. Carex riparia (Greater Pond Sedge) with very few sites in v.c.85, found at Tentsmuir has increased over the years. Limosella aquatica (Mudwort) re-found at Morton Lochs and Loch Leven as part of the SHARPP project. Hottonia palustris (Water-violet) a new record for v.c.85, was found in a small stream fed pond at Babirnie. Erigeron karvinskianus (Mexican Fleabane) third record for v.c.85, an Urban Flora Project record, rarely establishes outside gardens.

Sandy Edwards: The advance of Conyza canadensis (Canadian Fleabane)

Exhibit shows the rapid advance of Canadian Fleabane in Fife since first recorded in Dundee bus station in 2017.

Luke Gaskell, Recent finds in Peeblesshire, v.c.78

Ceratochloa carinata (California Brome) Peebles in a weedy street planter; Hordeum jubatum, (Foxtail Barley) this grass is usually a halophyte so it was a surprise to find it on a disused reservoir slipway in upland Peeblesshire; Equisetum pratense (Shady Horsetail), Polmond Craig; Populus nigra ssp. betulifolia (Black poplar) a mature male tree on the Eddleston water.

Sarah Longrigg with thanks to Matt Harding: An Unusual site in Stirlingshire, v.c.86

The site of a new water pipeline just north of Milngavie in Stirlingshire has been "made good" by the addition of material which appears to have come from a coastal/agricultural brownfield site, resulting in a diverse flora of around 170 species, including some which are new to VC86.

Angus Hannah: Robust Carex rostrata (Bottle Sedge)?

A sedge resembling *C. rostrata* but with dimensions of *Carex riparia* (Greater Pond-sedge) is exhibited. This grows at several sites on Bute (and presumably elsewhere) but seldom flowers, which may explain its rarity in herbaria and lack of recognition. Fruiting characters are needed for any hybrid determination. Please report if seen!

Matt Harding: Towards a first Rare Plant Register in Stirlingshire, v.c.86

Rare Plant Registers (RPRs) are useful tools to identify local conservation priorities and can help identify under-recorded habitats and species groups. In 2022 work began on the first RPR for Stirlingshire, and a productive field season yielded numerous excellent records, including new species for Stirlingshire and relocation of 'extinct' species.

Meng Lu, PhD Student Edinburgh: Genomics of hybridization in British native flowering plants

This project aims to explore the general patterns of natural hybridisation in the British flora using genomic approaches. With extensive floristic records, the British flora is an ideal system to study natural hybridisation. We seek to understand the extent of postglacial introgression in British native flowering plants.

Study species: Carduus crispus (Welted Thistle), Carduus nutans (Musk Thistle), Verbascum nigrum (Dark Mullein), V. thapsus (Great Mullein), Viola hirta (Hairy Violet), V. odorata (Sweet Violet), Primula vulgaris (Primrose), P. veris (Cowslip), Geum rivale (Water Avens), G. urbanum (Wood Avens), Linaria vulgaris (Common Toadflax), and L. repens (Pale Toadflax).

Jackie Muscott, retired vice-county recorder: Plant Prints – available for the price of a small donation.

Savanna van Mesdag, PhD Student Glasgow: Plants on anthropogenic substrate sites – what role do they play in UK biodiversity?

Throughout my PhD research, I have investigated plant species as part of their open plant communities on post-industrial waste sites, these sites are varied in terms of chemistry and mineralogy. I intend to study relationships between certain waste substrates and plant species and/or communities.

Beccy Middleton: The Tangled Bank - St Andrews Botanic Garden

This is a major development at the heart of St Andrews Botanic Garden, which puts the native flora of Fife centre stage. It has been inspired by three significant habitats found locally, and was designed to be of maximum benefit to research and conservation to help us understand some of our most precious places.

Chris Miles: Dumfriesshire some highlights 2022

Eight finds are highlighted from Dumfriesshire v.c.72 in 2022. These include one first vice-county record for *Limosella aquatica* (Mudwort). New populations or re-finds of other rare scarce or uncommon species locally include *Juncus ranarius* (Frogrush), *Corallorhiza trifida* (Coralroot Orchid) and *Ophioglossum vulgatum* (Adder's-tongue).

Derek Robertson: From the Bird's Mouth

This project gives Scottish Gaelic names to species of animals and plants that are newly arrived in Scotland. Bringing together advice from writers and scientists, the stories of how they came here are told through art, poetry, a series of exhibitions and a beautiful book full of illustrations.

Alison Rutherford: Atlantic Ivy

Small pots of *Hedera Hibernica* (Atlantic Ivy) specimens - free to good homes – to demonstrate how easy it is to distinguish from *Hedera helix* (Ivy).

Ian Strachan: Botanical survey and monitoring in Westerness, v.c.97 in 2022

Various highlights from this vast vice-county are described and illustrated, including a visit to an extraordinary geological feature in Knoydart; ups and downs at some important orchid sites; and two BSBI Field Meetings, from west to east – Sithean Mor and Ardnish, near Arisaig, in June, and Corrour Estate in July.

Les Tucker: Biodiversity's Critical Taxonomy, a review

This exhibit comprises recently-published BSBI field guides, annotations and reviews; with a selection of live, pressed, and photographed specimens demonstrating characteristics of troublesome Genera such as *Alchemilla* (Lady's Mantles), *Salix* (Willows), and *Taraxacum* (Dandelions). Hopefully, authoritative experts will be in attendance to elaborate further.

Joanna Walmisley: Polypodies in Skye, Raasay and the Small Isles

Updated distributions of taxa in the genus *Polypodium* L. in v.c.104 are shown. Two species, *P. vulgare* L. (Polypody) and *P. interjectum* Shivas (Intermediate Polypody) less common are known. Their hybrid only has two pre-2000 records. Further records for *P. interjectum* Shivas and three for *P. x mantonige* Shivas now exist in VC104

POSTERS

NatureScot

Sarah Smyth, NatureScot: Building a Plant Biodiversity Strategy for Scotland

In December 2020, the Scottish Government committed to including a Plant Biodiversity Strategy within the Scottish Biodiversity Strategy.

The document outlines the key elements to be included in a Plant Biodiversity Strategy for Scotland. It covers six areas: the plants themselves, people's relationship with plants, our data needs, how we address threats, opportunities from green economics and how plant conservation can integrate with wider policy.

Please take the time to read "<u>Building a Plant Biodiversity Strategy for Scotland</u>" and add your views to the consultation form next. The consultation will be open until 27th November 2022.

British Pteridological Society

Paul Sharp: BPS is the society for fern enthusiasts. The Scottish group within the BPS currently has about 40 members. Each year, we arrange multiple field meetings and garden visits across Scotland, as well as joining national meetings of the BPS. Visit the BPS website to find out more: www.eBPS.org.uk

Bridget Laue, BPS: Dryopteris kerryensis – a new fern for Scotland

Dryopteris kerryensis, previously thought to be endemic to SW Ireland, has now been found in other Irish locations, in Cumbria and in Somerset. In 2021 Roger Golding found a plant above Lochan na Lairige, v.c.88, NN592 406, confirmed this year on a BPS visit, a new record for Scotland.

BSS - Scotland's National Botanical Society since 1836, a Scottish Charity (SC016283)

We run lectures, field meetings, training workshops and the Urban Flora of Scotland Project. We publish the *BSS News* and the international journal *Plant Ecology and Diversity*, and produce a weekly blog https://botsocscot.wordpress.com/.

We give grants to students and recent graduates for fieldwork, an annual prize for the best undergraduate dissertation, and offer subsidised rates for students.

Join online BSS MEMBERSHIP | Botanical Society of Scotland (botanical-society-scotland.org.uk).

John Grace & Julia Wilson: Botanical Society of Scotland's Urban Flora project

Since 2015 we've been collecting species, abundance and habitat data from Scottish towns and cities. In 2022 our surveys included North Ayrshire, Lanarkshire, and Moray – with a major effort in the Aberdeen area. Our iRecord database contains 73,000 records and several thousand more are imminent. We wish to represent urban centres in all parts of Scotland.

This is a major project, and we thank several other organisations (including the BSBI) and many volunteer recorders for their participation.

The Botanical Society of Britain & Ireland (BSBI)

The <u>BSBI</u> is the leading organisation for amateur and professional botanists in Britain and Ireland. If you are not already a member and would like to support and participate in our work, <u>please join us!</u> It is a great line in CVs and there is no better way to improve your field skills than by going on our meetings & workshops. A selection of BSBI publications is displayed.

Jim McIntosh, BSBI Scottish Officer: The Plant Identification Table

A great opportunity to get expert help with identification with so many experts in the audience! Remember to bring your specimens and handlens! Add a note to the specimen of who collected it and where and when it was collected. If you can identify specimens please annotate with your determinations or confirmations and your name.

Natalie Harmsworth: BSBI Photographic Competition

A wonderful display of 194 photographs for this year's competition is on show. Vote for your favourite shot in each of the four categories: Flowers in the four seasons: winter, spring, summer & autumn. The winners will be announced after the final talk and each winner will receive a book token courtesy of Summerfield Books. The winning photographs will be on display at the prize giving and will also appear in future BSBI publications and on BSBI Flickr.

The Wildlife Information Centre (TWIC) Autumn Conference, Natalie Harmsworth

Details of The Wildlife Information Centre's forthcoming <u>Autumn Conference 'Home & Away; wildlife</u> <u>movements & migrations'</u> on 19 November in Edinburgh will be on display. TWIC is the Local Environmental Records Centre for SE & most of central Scotland. All naturalists are welcome to attend this event which is always a highlight in our diary

Royal Botanic Garden Edinburgh (RBGE)

Elspeth Haston, RBGE Herbarium Curator: Herbarium

Lorna Mitchell, RBGE: Library and Archives

The RBGE Library and Archives holds Scotland's national collection of botanical and horticultural literature. The poster provides a brief overview of the size and content of the collections, links to available catalogues and the arrangements that are in place for readers wishing to visit.