

BSBI / BSS Scottish Annual Meeting 2016 – Abstracts

A Rare Plant Register for Dumfriesshire and recording in 2016 (v.c.72)

Chris Miles

The first Dumfriesshire Rare Plant Register was on display.

- 256 taxa are included, native and archaeophytes, being rare or scarce or of particular interest in Dumfriesshire. Altogether 1582 records of these are given in the Register.
- 1018 other taxa recorded in Dumfriesshire were excluded as occurring in more than 10 locations or being neophyte/non native.
- 69 taxa are currently thought extinct.

2016 recording updated a number of the registers taxa which are shown today:

Ruppia maritima (Beaked Tasselweed), first record since 1999

Equisetum pratense (Shady Horsetail), Crawick, last recorded here in 1994

Equisetum pratense (Shady Horsetail), a new Hectad record at 530m

Utricularia minor (Lesser Bladderwort), 5th site for vc and first record for 57 years

Euphrasia arctica x *micrantha*, new to vc.

Neottia nidus-avis (Bird's-nest Orchid), first in NY38 since 1978

Dryopteris expansa (Northern Buckler-fern), a second vc record in the Moffat Hills

Genista tinctoria, (Dyer's Greenweed), first record in NX89 since 1978

Gentianella amarella (Autumn Gentian), Glenshanna, last recorded in 1996

Hymenophyllum wilsonii (Wilson's Filmy Fern), NS70, a new Hectad record

And a new alien

Cyperus eragrostis (Pale Galingale) a first for Scotland? Kelton Merse NX97

Use of strategic mapping to direct data planning in Lanarkshire (v.c.77) Michael Philip

Several schematic maps are shown here, using colour to convey the status of existing data. These give a clear picture of areas needing to be re-surveyed for Atlas 2020; areas which can be tackled by people with relatively modest experience; and areas where no data currently exists. Our aim in v.c.77 is to deploy a growing network of field-workers, according to their experience and skill, right across the vice-county in a big push for fresh data throughout 2017/2018. Whether in small, informal outings; or training days; or weekends with expert input - there will be lots going on. Why not give us a hand?!

Recording and Forestry 2016 (v.c.78)

Luke Gaskell

I have been recording in monads across Peeblesshire with the aim of increasing coverage for the new Atlas. Some of the least visited parts of the county are the extensive blocks of commercial forestry, and while the ground under the conifers is usually almost barren, other areas left unplanted such as stream sides, hill tops and fire breaks can be quite rewarding.

Trientalis europaea (Chickweed Wintergreen) is the fourth VC record, the first since 1986. It is in a new hectad in the south of the county above Tweedsmuir.

Potamogeton pectinatus (Fennel Pondweed) first VC record was found in a former fire pond within a large commercial forest.

Carduus nutans (Nodding Thistle) is a first VC record. Not in a forest yet, but in a reseeded field that has a planting application pending.

Acaena ovalifolium (Two-spined Acaena) is a first VC record. This plant was growing in forestry around Leithen Lodge.

I have surveyed the farm and made a contribution to the current Forestry consultation. The current planting proposals will leave the large area of blanket bog and marsh unplanted though the *Meum athamanticum* (Spignel) which grows on the dry acid grassland still needs to be protected.

New and Interesting Plant records from Roxburgh and Selkirkshire 2016. (v.c.80 & 79)

Rod Corner

Luke Gaskell has made some interesting discoveries at the new Borders Railway sites at Galashiels of which *Senecio inaequidens* (Narrow-leaved Ragwort) and *Hirschfeldia incana* (Hoary Mustard) are the most noteworthy and are exhibited here together with descriptions from the *The Adventive Flora of Tweedside* by Hayward and Druce (1919). Although they were recorded by Mary MacCallum Webster and Olga Stewart in the 1960's and early seventies from the flora derived from the woollen industry at Galafoot, they have not been seen in the area since. It is thought that the railway excavations have allowed long buried seed in both v.c. 79 & 80 to come to the surface and germinate.

Michael Braithwaite made an intensive survey of flora of the trunk road A7 in Roxburghshire and Selkirkshire in 2016 and published an account in *Floras of Hawick's Road and Rail Routes compared*. Among several interesting species seen was the elusive *Leontodon saxatilis* (Lesser Hawkbit) as the first definite record for v.c. 80. It is not a native species in the area but derived from a wild flower seed mix. The diagnostic taxonomic features were described.

New and Interesting Plant records from Roxburgh and Selkirkshire 2016. (v.c.80 & 79)

Jeff Waddell

Whilst out on a general recording trip late in the season on the 25th of September three and a half miles east of Kelso in Roxburghshire, Jeff Waddell collected a species which appears not to have been recorded in Scotland this century, *Galeopsis angustifolia* (Red Hemp-nettle). The last Roxburghshire, indeed Scottish record appears to be from 1969, i.e. 47 years ago. The plant was growing in an arable margin in a wheat field.

During the BSBI Hawick field meeting on the 26th of July Jeff Waddell, Luke Gaskell & Phil Munro recorded a well established population of over 70 plants of *Oenanthe fistulosa* (Tubular Water-dropwort) scattered around the margins of Broadlee Loch. It occupied two habitats, sedge swamp and shallow rocky loch edges. These are the first Roxburghshire records and also the first for the Scottish Borders region. It is suspected the species may have colonised the site recently, rather than have been overlooked. During the same recording trip, the

neophyte *Lagarosiphon major* (Curly Waterweed) was also collected from Broadlee Loch. This is the third county record, but the first time it has been recorded from a natural water body, away from habitation.

Floras of Hawick's Road and Rail Routes compared (v.c.80)

Michael Braithwaite

A 2015 survey of a 20 mile stretch of disused railway near Hawick in Roxburghshire had demonstrated the survival of a botanically species-rich habitat corridor. This raised the possibility that a comparable corridor might have developed down the A7 trunk road especially as so much of it had been subject to road realignment projects that had left a legacy of broad verges, cuttings and embankments. The 2016 survey of the A7 from Mossypaul to Selkirk has indeed found habitats that are comparable with those on the old railway.

Species-diversity is at its highest in the grassland of the frequent cuttings and embankments. Orchids are very plentiful. There is also a rich mosaic of habitats in narrow unmanaged strips sandwiched between the road and the River Teviot. Most of the roadside habitats are represented by small fragments, underlying the tenuous existence of the populations of species confined to such fragments that make up so many of the 'dots' in distribution Atlases.

The very detailed survey report, illustrated in colour, is [available](#) on the BSBI website under Roxburghshire and as a printed booklet.

Some highlights of 2015/2016 in Midlothian (v.c.83)

Barbara Sumner

Photographs are displayed to show two new vice-county records, and seven scarce or rare species recorded at new sites. *Echinops exaltatus* (Globe-thistle) and *Rumex hydrolapathum* (Water Dock) are new to v.c.83, the former being a garden escape and the latter a native species which has spread along the Union Canal. Scarce or rare species found at new sites are *Dactylorhiza incarnata* subsp. *incarnata* (Early Marsh Orchid), *Equisetum pratense* (Shady Horsetail), *Lactuca serriola* (Prickly Lettuce), *Meum athamanticum* (Spignel), *Scleranthus annuus* (Annual Knawel), *Scutellaria galericulata* (Skullcap) and *Valeriana dioica* (Marsh Valerian). All these scarce or rare species are native except *Lactuca serriola*, which is an archaeophyte making reappearance after 105 years absence.

New and interesting Lothian Records

Douglas McKean

A dozen specimens are exhibited mainly from a brown field site at Newbridge, but also from Currie. *Scilla bithynica* (Turkish Squill) NCR, *Geranium x cantabrigiense*, NCR from Catcune (Fountainhall) and Newbridge. The latter site also delivered *Lysimachia ciliata* (Fringed Loosestrife) NCR chocolate leaves, *Geranium versicolor* (Pencilled Crane's-bill) NCR, *G. x oxonianum* (Druce's Crane's-bill), *Aquilegia vulgaris* cv. (Nora Barlow Columbine), *Astilbe x arendsii* NCR red var. *Clematis* sp. (sterile), *Geranium versicolor*, NCR, *Lysimachia nummularia* 'Aurea' (Creeping Jenny), *Hypericum calycinum* (Rose-of-Sharon), *Typha latifolia*, (Bulrush), *Melissa officinalis* (Balm) NCR, lots of *Calamagrostis epigejos* (Wood Small-reed)

and hundreds of *Senecio inaequidens* (Narrow-leaved Ragwort) and finally a colony of *Chara vulgaris* (which is rare), confirmed by Nick Stewart.

This is the site that delivered *Anthoxanthum aristatum* ssp. *puellii* – no longer found. I am also exhibiting a leaf from a seedling of *Quercus cerris* (Turkey Oak) from a seedling in a hedge, Inverleith Park, Edinburgh, where *Q. cerris* is frequent. Regeneration is also known from Glasgow and Lanarkshire and is frequent down south. I note that the Army are felling their Turkey Oaks in favour of native ones which may be under threat from it.

Also exhibited is Stuart Maxwell's *Blackstonia perfoliata* (Yellow-wort) - a species new to the Lothians and only the third site for Scotland.

A New Site for *Linnaea borealis* in NE Fife (v.c.85)

R. Pennington & A.S. Edwards

In Scotland, the distribution of *Linnaea borealis* (Twinflower) closely matches that of the old pinewood remnants of the Caledonian Forest, as the species is most closely associated with these ancient woodlands. It is most common in the northeast of the country, in the drier native pinewoods.

In Tentsmuir Forest in NE Fife (vc85), *Linnaea* is growing under mature Scots Pine that date from the forest's early development in the 1920s. The ground flora is *Pinus sylvestris*-*Hylocomium* woodland, *Erica cinerea*-*Goodyera repens* sub-community of the Grampian Highlands, albeit with several coastal dune species.

"*L. borealis* has been recorded from some locations in the Borders region, and also in the northeast of England, where it was most likely introduced in the 18th century, together with conifers planted from Norwegian sources, but it has subsequently disappeared from there."

([The Trees for Life website](#))

Tentsmuir Forest is younger than the North East and Borders plantations. Perhaps *Linnaea* was accidentally brought there with juvenile pines from the Highlands or Norway, or perhaps they were brought from the North East lowlands or Borders plantations. It would be informative to know the origin of the original saplings planted in Tentsmuir.

A new site for *Lycopodiella inundata* (Marsh Clubmoss) in West Perth (v.c.87)

Jane Jones

After a day's recording on the hills on the north side of Loch Katrine, Arthur and I were heading by the most direct route we could find, back to the car. We were following a rough track which undulated through the terrain and which had presumably been last used when some broad-leaved tree planting had taken place at least 5 years previously. As we came down a small slope where the track was less vegetated I noticed a club-moss which looked unfamiliar. I took a few photos and a small specimen to look at later and we continued on.

When I examined the plant I realised it looked very much like *Lycopodiella inundata* (Marsh Clubmoss). But as this is considered endangered within Britain, I felt I needed a second opinion, so contacted both Liz Lavery and Heather McHaffie. Heather was excited enough to come out to the site and confirmed that my identification was correct. We also investigated the spread of the *Lycopodiella inundata* in the area and I also looked at old maps to see if I could work out the age of the track. This exhibit gives more details of the find.

***Pseudorchis albida* (Small-white Orchid) discovered in West Perth (v.c.87) Liz Lavery**

John Snodin and Roy Sexton found 6 flowering spikes of *Pseudorchis albida* (Small-white Orchid) growing beside the footpath to Callander Craggs, Braeleny above Callander village on 11th June 2016. This is the first confirmed record for this species in West Perth since the 1970s. The tiny plants, 5-8 cm high, were growing in herb rich grassland with other orchids *Gymnadenia borealis* (Heath Fragrant-orchid) and *Platanthera chlorantha* (Greater Butterfly-orchid), and *Succisa pratensis* (Devil's-bit Scabious), *Carex flacca* (Glaucous Sedge), *Potentilla erecta* (Tormentil), *Anthoxanthum odoratum* (Sweet Vernal-grass), *Festuca ovina* (Sheep's-fescue) and heath species *Calluna vulgaris* (Heather) and *Vaccinium myrtillus* (Blaeberry) nearby.

Base-enriched areas on the west side of the road in the area known as 'the Commonty' on Braeleny Farm are rich in orchid species (NVC plant communities MG5, MG3, M10). *Trollius europaeus* (Globeflower), *Orchis mascula* (Early-purple Orchid), *Neottia ovata* (Common Twayblade) and *Ranunculus auricomus* (Goldilocks Buttercup) are present in unusually high numbers. *Cirsium heterophyllum* (Melancholy Thistle) is also present but under threat from grazing. It is an outstanding site, probably the best for orchid species in West Perth, but has never been adopted as an SSSI. The discovery of Small-white orchid makes it exceptional.

Stirling and Clackmannanshire SWT Group's Botanical Projects in v.c.86 & 87

Roy Sexton and Melissa Shaw

This rolling video display will illustrate the botanical monitoring/conservation projects of this local SWT group including those concerned with *Silene viscaria* (Sticky Catchfly), *Coeloglossum viride* (Frog Orchid), *Platanthera bifolia* (Lesser Butterfly-orchid), *Pseudorchis albida* (Small-white Orchid), *Juniperus communis* (Juniper), *Neottia nidus-avis* (Bird's-nest Orchid), *Bryum schleicheri* (Schleicher's Thread Moss), *Genista anglica* (Petty Whin), *Heracleum mantegazzianum* (Giant Hogweed), *Helianthemum nummularium* (Rock Rose), *Platanthera chlorantha* (Greater Butterfly Orchid), Hedgerows, etc..

The Perthshire Society of Natural Science 150th Anniversary

Alistair Godfrey

This summarises the PSNS's contribution to botany since 1867. Led from the start by Dr. Francis Buchanan White with prodigious energy and enthusiasm, his greatest contribution to British botany was *A Revision of the British Willows*; seven of his hybrid binomials are still recognised.

The number and type of excursions were also prodigious. Specimens were collected for the Society's own museum. Records were collected for the *Flora of Perthshire* and published in 1898, posthumously in Buchanan White's name, completed by Professor J. W. H. Trail of Aberdeen University.

Other notable PSNS members are William Barclay, who had an interest in roses and their hybrids; one named by Georges Rouy as *Rosa* ^x*perthensis*. Barclay's pupil, J. R. Matthews, developed an interest in roses, and also ecology and plant distribution in his native Perthshire. He was also Professor of Botany at Aberdeen University.

Botany flourished again from the 1950s, led by A. W. Robson, BSBI recorder for all the Perthshire vice-counties for several years, Chair of PSNS's Botanical Section. A *Checklist of the Plants of Perthshire* followed in 1992. The BSBI partnership continues and with the BSS on the Urban Flora of Scotland project.

***Saxifraga hirculus* L. A new population in Perthshire (v.c.89)**

Martin Robinson

On 2 August 2016 a strong new population of *Saxifraga hirculus* L. (Marsh Saxifrage) was discovered by Martin Robinson on Fealar Estate in the extreme north of v.c.89 (East Perthshire). Three weeks later another colony, 100 metres from the first one, was found by Leslie Tucker, who had accompanied Martin Robinson to see the population. Both colonies were in linear flushes at an altitude of 720 - 735 metres. These resulted from slightly calcareous springs issuing from the lower edge of a peat cap covering the shoulders of a long ridge. They were densely carpeted with moss species and a rich variety of herbs, appearing from a distance as stands of *Carex rostrata* (Bottle Sedge) in one case and *C. nigra* (Common Sedge) in the other.

The community is best described as M8 *Carex rostrata* - *Sphagnum warnstorffii* mire, although the moss blanket was mostly of pleurocarpous species. The most frequent *Sphagnum* species was *S. warnstorffii*, and *S. teres* and *S. angustifolium* were also found. The main herbaceous species are listed. They range in base-tolerance from *Parnassia palustris* (Grass of Parnassus) to *Comarum palustre* (Marsh Cinquefoil). *Pyrola rotundifolia* (Round-leaved Wintergreen) and *Salix myrsinites* (Whortle-leaved Willow) are present in one of the flushes.

This discovery constitutes the fifth extant population in Scotland.

Wilson's Filmy-fern Extant in Angus (v.c.90)

Theo Loizou

Hymenophyllum wilsonii has not been detected in Angus for at least 50 years and was thought to be extinct. However, in 2016 T. Loizou detected the fern in West Corrie of the Clova mountains, while recording for Atlas 2020.

Several old records exist for this fern in the county. For example, it has been recorded at Reekie Linn in the Den of Airlie and also by a stream near the Bassies in Glen Clova. Other sites include Falls of Fee and Glen Effock in Glen Esk. The most recent old record is from Bachnagairn and this appears to date back to the early 1960's. There are no past records in Angus of this fern in West Corrie and therefore it could be a new site. However, it is not clear whether the Bachnagairn site (which is just about 1 km from the site) that is referred to in the *Flora of Angus* (1981) is this site.

The colony itself occurs in damp (but not wet) north facing mossy crevices in what appears to be mostly acidic rock. This small colony contained at least 100 fronds.

Elusive and Rare Orchids in Angus (v.c.90)

Theo Loizou

Two orchids that are particularly scarce in Angus are the *Pseudorchis albida* (Small-white Orchid) and *Anacamptis pyramidalis* (Pyramidal Orchid).

P. albida is known mainly from Glen Clova and Glen Esk where it is associated with species-rich heathland. However, it also occurs in a few lowland areas such as Woodside not far from Kirriemuir. While undertaking recording for Atlas 2020, the author found a new site in the county along the north-facing slope of Glen Ogil Reservoir in grassland. Although this proved to be a good find only one flowering spike was detected in the whole area and no non-flowering shoots were found. The area was grazed by cattle.

A. pyramidalis is currently only known from one site in Angus. It occurs near Easthaven in calcareous dune grassland. However, according to the *Flowering Plants and Ferns of Angus* by Hogarth (2012), numbers of plants at Easthaven have steadily declined since it was first discovered there in 1998 by L. Tucker. In 2016 L. Tucker and T. Loizou re-visited the site but were unable to detect any plants. This rich dune-grassland is moderately to heavily grazed by cattle and they appear to be having a deleterious effect on this orchid.

Two tricky montane ferns (v.c.90)

John Edgington

It is sometimes difficult to distinguish *Dryopteris oreades* (Mountain Male Fern) and *D. expansa* (Northern Buckler Fern) from *D. filix-mas* (Male Fern) and *D. dilatata* (Broad Buckler Fern) respectively. Not only are these two far commoner than their montane relatives, but they often grow in close association with them. This exhibit aims to show, by photographs and mounted specimens, some of the distinctive characters separating these, and related, species. After studying these, you should in most cases be able to identify these ferns in the field (which is likely to be block scree on a disconcertingly steep slope). Plants shown were collected in Angus, v.c.90.

Dwarf Atlantic Ivies (v.c.99 & v.c.75)

Alison Rutherford

This exhibit shows living samples of typical Atlantic Ivy dwarf forms and a tiny-leaved prostrate but vigorous form from a wood near Westerton, west of Glasgow (v.c.99). A painted china bowl with a small, tri-lobed, round-tipped ivy is also displayed – made by an artist living on Bute. As this portrays a plant very similar to the known 'Irvine Dwarf' ivy from v.c.75 Ayrshire, it perhaps indicates that this form may also be found on that island. This may mean that we have *Hedera hibernica* (Atlantic Ivy) but not *Hedera 'Hibernica'* (Irish Ivy) as a native in three Scottish Vice Counties.

***Hypolepis ambigua*, a New Zealand endemic fern, newly discovered in a wild state in the British Isles (Clyde Isles v.c.100)**

Angus Hannah

In March 2016, in a remote conifer plantation on Bute, I found an extensive colony of a large bracken-like fern unfamiliar to me. A specimen which I sent to Fred Rumsey at NHM was

determined by Tim Pyner as the New Zealand endemic *Hypolepis ambigua* (Brownsey & Chinnock) not previously recorded in the wild in the British Isles. Not considered particularly decorative, it is seldom grown in gardens, but occasionally juveniles travel as epiphytes on the trunks of tree-ferns.

The species was not well understood in the past, and was partly included in the ill-defined taxon *H. tenuifolia* until the thorough revision of New Zealand *Hypolepis* by Brownsey & Chinnock (1984). There are specimens from New Zealand in E, originally labelled *H. tenuifolia*, the majority of which have been re-determined by Brownsey as *H. ambigua*. The most useful characters are the pseudo-indusia (flaps partially covering sori) and the hairs beneath the lamina, the latter being best observed on fresh material.

A frond is exhibited, along with some photographs and details of the site, and information about the taxon.

***Trachyspermum ammi* (v.c.103)**

Lynne Farrell

Trachyspermum ammi (Ajoram) was found on the island of Coll in August 2016. The BSBI database shows that there are very few records for this casual species and only six from this century. With many people now providing bird-seed in their gardens, it is likely to be on the increase, so worth keeping an eye on what grows under the bird-seed holder.

***Linnaea* returns to East Ross (v.c.106)**

Brian Ballinger

Linnaea borealis (Twinflower) was thought to be extinct in East Ross not having been recorded since 1957. However it has now been found in four sites:

- Wester Culbo Wood NH638 597. Found by us in March 2007 when looking for an *Orthilia* site in Forestry Commission pine plantation.
- Strath Vaich NH342 753. Found in birchwood by Ian Green in March 2012. There had been unconfirmed reports about a population in this area before, but they were never confirmed.
- Cnoc Navie NH658 787. Found by me in September 2015, growing in a Forestry Commission pine wood plantation.
- Cnoc Corr Guinie NH666 747. Found by Derek Gunn and FC staff in August 2016. Another FC pine plantation. There are (at least) two populations here.

It is notable that three of these sites are in Forestry Commission *Pinus sylvestris* (Scots Pine) plantations and most were found when not in flower (although they have all been seen to flower since). How did they get there? How many more sites are waiting to be found? *Linnaea* is relatively easy to identify when not in flower once you have your eye in for it and the three FC patches extend over 5 to 40 metres.

Short visits or long visits – which are better? A pilot study (v.c.106)

Brian Ballinger

Four linear sites of approximately 400 metres were selected and visited on 3 occasions, starting at the centre; 2 were coastal, one urban and one forest. One visit was one hour long

and two visits were of half an hour each. The order was varied and all vascular plant species seen were noted.

All visits took place during a two week period in September, although all sites were recorded on 3 different days. A total of 231 records were made on the 4 long visits and 277 on the 8 short visits to the same sites. The long visits only recorded 84% of the short visit species total. Some 46 long visit species were not noted on the short visits and 92 short visit species were not seen on the long visits. This suggests there may be advantages to repeated short visits rather than one long visit. However, this must be treated with great caution as it is a small sample and reflects the experience of only one recorder and takes no account of travel time.

West Sutherland, 2016 (v.c.108)

Ian Evans and Gwen Richards

A productive year's work, yielding some 4100 records from 36 monads, mainly in under-recorded areas on the north coast and in Strath Naver, including the following:

- *Eleocharis parvula* (Dwarf Spike-rush): saltmarsh, Kyle of Tongue, June (Clive Chatters; second Scottish record).
- *Ruppia cirrhosa* (Spiral Tasselweed): saltmarsh pool near the above, September (first recent record for mainland Scotland).
- *Ranunculus flammula scoticus* (Lesser Spearwort): exposed shore, Loch Loyal, July (new site).
- *Mertensia maritima* (Oysterplant): Armadale Bay, July (new site).
- *Solanum dulcamara* (Bittersweet): normal and albino forms, mouth of the River Strathy, August (first recent record from West Sutherland).

Many thanks for help from: Bill Badger (Loch Urigill); Gordon Rothero and Ro Scott (Tongue).

Plant Families Workshops 2016

Faith Anstey

Now in its fourth year, the three Plant Families Workshops we held this spring – in Glencoe, Stirling and Dundee – were as successful and enjoyable as ever. Fifty-five students attended, and twelve tutors generously gave their time and expertise to introduce beginners and improvers to the concept of identifying species by finding the family first.

The Pocket Guide to Wildflower Families being published and on sale to all, the print run of 500 is now almost sold out. Copies have gone all over the country to individuals, local botanical groups and even for use at Napier University. The National Trust for Scotland is also keen on this approach through families, and Plantlife's recommendation of the booklet to volunteers on the National Plant Monitoring Scheme resulted in many more orders.

For 2017 we plan two workshops with the same programme as before, in Ayrshire and Glasgow, plus a second-level workshop on Grasses, which will be held at Holyrood Park in July. If any BSBI member is interested in tutoring a small group on the Grasses workshop, and in promoting hands-on learning by helping the students to work things out for themselves, please do get in touch with me at faithanstey@gmail.com

Influence of aspect on diversity, distribution and leaf size of plant species in an alpine environment

Patricia Monterde Vitoria¹, Jay Mackinnon¹ and Dan Watson²
¹Edinburgh Napier University and ² National Trust for Scotland

This study examined the relation of aspect, slope and radiation to species distribution, species richness, vegetation cover, community composition and leaf size in the Breadalbane Mountains. Slope and aspect are important drivers of vegetation composition in montane habitats due to the creation of different microclimates by variation in the period and intensity of solar radiation. In addition, since disturbances induce strong changes in the abundance of plant species, grazing pressure was also estimated.

Five summits within the Ben Lawers National Nature Reserve were sampled using a modified GLORIA approach (Pauli *et al.* 2015), recording percent cover of each substrate and species of plant and lichen. Leaf size was measured on *Alchemilla alpina* (Alpine Lady's Mantle) and line transects used to estimate grazing pressure in terms of number of intact dung pellets.

We present the plant communities identified (using the National Vegetation Classification), examine the factors underlying variation in species composition and abundance using ordination plots and describe the patterns of presence/absence, abundance and richness of species in relation to aspect, solar radiation, estimated grazing pressure and location.

An opportunity for translating Low Countries' botanical expertise to a Scotch-Irish context: Discovering *Taraxacum pietii-oosterveldii* (Piets Paardebloem, Pisenlit de Pierre, Pete's P.-abed, Caisearbhán'a Peadair)

Leslie Tucker

Having myself overcome, with considerable trouble, the common or gardeners' prejudice which leads to the recording of *Taraxacum agg.* (Dandelion allsorts), I recommend targeting a few rarer species which have more recognisable jizz; also worthy indicators and essential components of threatened wild habitats.

As my title indicates, I have been greatly aided by recent Dutch publications, which I recommend and make further reference to in my exhibit. I hope my translations and interpolations are appropriate and memorable. First, if one overlooks, however temporarily, the gross and ubiquitous herbs of section *Ruderalia* (Weeds), some of our nicest species are found in section *Celtica* (Westerners). Here, the title taxon commemorates a recently died Dutch explorer and environmentalist. Karst Meijer's Herbarium Friscum and Dandelion Society have proposed keys to a new section *Frugalia* (Schraallandsindicatoren, Skrawland Indicators); Wiktionary proposed 'skimpy country indicators', but old fellows recall thin turfs turned to cultivate lazy beds, *sgrath* (skraw), as more couthily appropriate.

Eponymous *T. frugale* (Schraallandspaardebloem), widespread in Netherlands, I know only in Devon. BSBI Handbook 9 lists *T. nordstedtii s.l.* (Nordstedt's Dandelion group), 42 a - e, including *T. lancastricense* (Lancastrian Dandelion) discovered in Perthshire and Angus Sidlaws. Others probably await identification and reclassification.

Botanical Society of Britain and Ireland (BSBI)

Jim McIntosh

The BSBI is the leading organisation for amateur and professional botanists in Britain and Ireland.

- We promote the study of, and interest in, the British and Irish vascular plant flora
- We support and encourage, carry out and participate in research into the taxonomy, ecology, biogeography and conservation of our flora.

If you are not already a member of the BSBI - and would like to support our work – please join us! Pick up our membership leaflet and ask me, Jim McIntosh if you have any queries about joining. A range of leaflets, including the most recent BSBI Annual Review and BSBI News are available to take away; and recent issues of the New Journal of Botany and other recent BSBI publications can be perused. I would be pleased to supply promotional material to anyone who plans to go to events, such as conferences or workshops, this winter that potential new members might attend. Check out the BSBI Scottish webpages on www.bsbi.org/scotland

The BSBI Panel of Referees and Specialists

Jeremy Ison

This poster aims to provide an overview of the BSBI refereeing system. Suggestions and comments are invited, especially from those with experience (positive or negative) of using the system. These can be anonymous if preferred!

The BSBI Photographic Competition

Natalie Harmsworth

All 112 entries to the 2016 BSBI Photographic Competition are displayed. Vote for your favourites in each of the two categories: Rare species and Common species. The winners will be announced after the main talk and, if present, will be awarded BSBI Summerfield Books tokens. The winning photographs will be displayed at the prize giving and will adorn future front covers of BSBI publications.

Botanical Society of Scotland (BSS) - The Urban Flora of Scotland

John Grace

The Botanical Society of Scotland has completed the second field season of a long-term project to survey the flora of Scotland's towns and cities. The hypothesis to be tested is that towns and cities, by virtue of a slightly warmer microclimate, hold more warmth-loving species which are otherwise found further south. We present some early indications, highlighting several species which appear to be scarce or absent in Scotland but which thrive in Scottish towns and cities. We appeal for those with relevant data to join our project, by registering as a recorder on our web site.

Bryophyte finds on BSS Urban flora excursions in 2016

David Chamberlain

Botanically themed glass

Hazel Metherell

The British Pteridological Society for fern enthusiasts**Heather McHaffie**

The British Pteridological Society has an active Scottish group with summer field trips. Non-members are always welcome. Add your name and email to the sign-up sheet if you would like to be on the mailing list for these visits. Each year a site is monitored and there are trips both to wild fern populations and gardens.

National Trust for Scotland: Display of NTS botanical work**Lindsay Mackinlay****Plantlife Scotland - second field season of the National Plant Monitoring Scheme****Jill Williams**

The National Plant Monitoring Scheme (NPMS), a partnership between Plantlife, BSBI and CEH, and funded by JNCC, has completed a successful second field season. In Scotland the number of allocated monads is now 208, an encouraging increase of 35% from 2015. There is still much to do to increase the adoption of monads particularly in more remote and rural areas of Scotland, and to ensure sufficient survey plots in upland habitats.

We continued our training programme, with four "Introduction to the NPMS" workshops around Scotland delivered by Jill Williams, and two "Introduction to Grasses and Sedges" run by Ben Averis. We have also set up a mentor scheme, with eight mentors around Scotland, many of whom are also Vice-county Recorders. We hope that mentoring will enable more volunteers to progress to the core "Indicator" level of NPMS. There should also be benefits beyond the NPMS in terms of increased volunteer plant surveyor capacity and skills. We are grateful to all the mentors for their support.

Feedback from volunteers has been very encouraging, and drop-out rates are extremely low. Half of the volunteers are members of Plantlife or BSBI. Although about half have been involved in surveys before, a further third are new to surveying.

Plant Identification Table**Douglas McKean**

A great opportunity to get expert help with identification with so many experts in the audience! Remember to bring your specimens and handlens!

Scottish Natural Heritage**Sarah Smyth**