

PERTHSHIRE SOCIETY OF NATURAL SCIENCE

BOTANICAL SECTION

BULLETIN NO. 38 – 2015

Reports from 2015 Field Meetings, including Field Identification Excursions

We look forward to seeing as many members on our excursions as possible, and any friends and family who would like to come along. All meetings are free to PSNS members, and new members are especially welcome. The field meetings programme is issued at the Section's AGM in March, and is also posted on the PSNS website www.psns.org.uk.

Six excursion days had been organised particularly to provide opportunities for field identification in different habitats, and one of these was given specifically to the identification of ferns. Over the six days there were 59 attendances, 352 different taxa of vascular plants were recorded and 768 records made and added to the database of the Botanical Society of Britain and Ireland. Most attendances were by members of the PSNS, including three new members who were attracted by the programme, and we were also joined by BSBI members.

The popularity of these excursions proved that field identification is what many botanists at different levels of experience are looking for, and Perthshire provides a wide range of habitats to explore. There are not many opportunities for learning plant identification such as we have been able to provide. The accounts of these days appear below, along with those of the other excursions, numbered as in the programme.

	Location	Date	Attendances	Records	Taxa	Taxa additions
1	Lady Mary's Walk	15.04.2015	5	142	142	
2	Thistle Brig	13.05.2015	9	171		57
4	Rumbling Bridge	10.06.2015	10	70		34
6	Creag an Lochain	08.07.2015	11	137		65
10	Doune Ponds	12.08.2015	8	92		21
10	Loch Watston	12.08.2015	6	137		27
12	Fern Day, Aberfoyle	09.08.2015	10	19		6
	Totals		59	768	352	

1. Lady Mary's Walk, Crieff

Wednesday, 15th April

The weather had remained cool, but we had a fair day for our exploration. To begin with we explored the woodland and open margins of the Turret Burn. We sorted out the two similar species of *Allium*, which can grow together; our native *A. ursinum* (Ramsons) and the introduced *A. paradoxum* (Few-flowered Garlic/Leek). They are easier to sort out in flower; the first produces flowers only in an umbel and the second has usually just one drooping flower among a number of bulbils in the inflorescence. These vegetative off-shoots probably account for the rapid spread of this species. When they are not in flower they can be separated by appearance; the first has matt, slightly glaucous green leaves and the second has bright, shining green leaves.

Growing on the banks of the burn was what looked like a very large *Galium boreale* (Northern Bedstraw). Jim McIntosh had mentioned this plant to me, but I couldn't remember its name. With a scurrying of identification books its identity was established quickly: *Asperula taurina* (Pink Woodruff). This species was recorded at this location first in 1965, by a previous Vice-county Recorder, Allan Robson. Introduced as a garden plant in Britain in the

18th century, this species was recorded first in the wild in Perthshire on Moncreiffe Hill in 1862; one of the earliest British records and not recorded there since. Never common, Crieff remains one of the few remaining stations for this species in Britain.

In the afternoon we explored the wooded banks of the River Earn with its fine trees and added to our list of our species. A greater number of what we regard as introductions appear to be more prominent than our natives at this time year than any other. *Meconopsis cambrica* (Welsh Poppy) is one, which can be identified easily when its leaves appear above ground level in late winter by its lateral pinnate leaflets and partially divided terminal leaflet.

I covered its origins and the first record for Perthshire in Bulletin No. 37. Authors ([Kadereit et al 2011, New Journal of Botany 1:2](#)) have argued that *M. cambrica* has a separate origin from the Asian members of the genus and is closer to the genus *Papaver* and that the name given originally by Linnaeus, *P. cambricum*, is more appropriate.

Passing above the alder wood at the foot of Laggan Hill, we were too early to see *Hyacinthoides non-scripta* (Bluebell) in flower and we continued past the ash wood on the slope to the birch wood above. From there we continued towards Crieff along the ridge where we found *Carpinus betulus* (Hornbeam) which was the first record for this hectad (10km x 10km). The rippled pattern over the smooth bark of this species is quite distinctive and visible for a considerable distance.

Further along the ridge, we enjoyed the sight of an avenue of *Acer campestre* (Field Maple). This is an occasional species, but widespread across Perthshire; Laggan Hill is the only place in Perthshire where I have seen an avenue planting. The *Flora* gives the earliest date in Perthshire: “mentioned by Sibbald (1684) as growing at Kinfauns, near Perth.” Its status in the county is given as “not common, even as a planted tree.”

Returning to Crieff by Laggan Road, we identified plants along the grass verge. Two annuals were included; *Cardamine hirsuta* (Hairy Bitter-cress) with its diagnostic four stamens and *Veronica hederifolia* (Ivy-leaved Speedwell) which is often found on shady banks and under hedges. Its Perthshire distribution is lowland and eastern, most often having been recorded in the Perth area with another cluster of records between Crieff and Comrie. In all we identified 142 taxa, which was a very respectable number for this time of year.

Alistair Godfrey

2. Thistle Brig, Stanley

Wednesday, 13th May

With rising temperatures and word of the id. sessions spreading, attendances were growing, and we identified 57 taxa we had not seen on the previous session. Such is the richness of the flora at Thistle Brig that we recorded 171 taxa in all without travelling far from the car park.

The Perthshire area currently has the largest cluster of records for *Ranunculus bulbosus* (Bulbous Buttercup) in Scotland, reflecting the neutral or calcareous soils and relatively undisturbed habitats in our area. We encountered this species in the grassy area at the top of the bank at Thistle Brig.

This Buttercup is probably overlooked. Its basal leaves are more dissected than commoner species of the genus and the flower sepals are reflexed. The only other Buttercup with reflexed sepals which is likely to be encountered in Perthshire is *R. sardous* (Hairy Buttercup), which is an annual found among arable crops and flowers later.



Ranunculus bulbosus (Bulbous Buttercup), Thistle Brig, 13 May 2015
© Sheila & Howard Sadd.

A close relative we found on the moist soil of the lade was Lesser Celandine. This was known as *R. ficaria* with four subspecies. They were renamed on account of their three-sepal arrangement, which is not shared in the *Ranunculus* genus. The genus name for these four subspecies is now *Ficaria*; two are natives, one is possibly native in part of its range and the other is an introduction. The two native subspecies likely to be encountered are the commoner *F. verna* subsp. *fertilis* and the one we saw, *F. verna* subsp. *verna*, which has tubers. These tubers form in the axils of the stem leaves after pollen has been shed and plants produce no or very few ripe achenes (fruit). Reproduction is therefore vegetative, but subsp. *fertilis* is likely to produce a full head of achenes, hence its name.



Saxifraga granulata (Meadow Saxifrage); *Valerianella locusta* (Common Cornsalad),
Thistle Brig, 13 May 2015
© Mark Tulley.

We were lucky to see *Saxifraga granulata* (Meadow Saxifrage) at its best. Before and after flowering it is not easy to find in vegetation, although its lobed, kidney-shaped leaves might give it away.

An even more delicate plant was growing nearby: *Valerianella locusta* (Common Cornsalad). This species is largely coastal in Scotland above the north shores of the Forth and Clyde, but is also found in some inland sites from the east coast, including our own.

Alistair Godfrey

3. Riverside Nature Park, Dundee

Wednesday, 20th May

(Joint excursion with Botanical Society of Scotland)

This was the first joint field meeting between the PSNS and the Botanical Society of Scotland (BSS). It was also the first field meeting devoted to the BSS 'Urban Flora of Scotland', a citizen science endeavour involving people of all levels of expertise (contributions to the project are very welcome – see the BSS website www.botanical-society-scotland.org.uk/node/349). We were also gathering records for the BSBI.

Nine of us gathered on a pleasant evening and, as well as PSNS and BSS members, we were joined by three individuals from the Friends of Riverside Nature Park, which provides a lot of active support to the site. The Nature Park opened in 2011 on a former landfill after a long delay because of the need to deal with contamination. Topsoil has been added, which appears to have been rather rich from the plant point of view, and some wildflower seed and trees have been planted.

The park includes areas in three different tetrads, and lists were made for all three. 98 species were recorded in the first tetrad, excluding obviously planted specimens, although no national rarities were found.

Near the car park were considerable quantities of *Alliaria petiolata* (Garlic Mustard), and *Lepidium draba* (Hoary Cress) was also present. *Veronica serpyllifolia* (Thyme-leaved Speedwell) and *Medicago lupulina* (Black Medick) were present in quantity. *Dipsacus fullonum* (Wild Teasel) grew in the enclosed areas and *Galium album* (Hedge Bedstraw) was present in vegetative form. *Geranium molle* (Dove's-foot Crane's-bill), *G. lucidum* (Shining Crane's-bill) and *G. dissectum* (Cut-leaved Crane's-bill) were by the path, and *Barbarea intermedia* (Medium-flowered Winter-cress) was present in several places. At the west end of the park *Armoracia rusticana* (Horse-radish) and *Reseda luteola* (Weld) were quite frequent. Les Tucker identified seven species of *Taraxacum* (Dandelion).

Primula veris (Cowslip) was sparse in the park but an adjacent meadow contained striking quantities.

Some areas in the centre of the park were somewhat overgrown by *Cirsium arvense* (Creeping Thistle) and *Ranunculus repens* (Creeping Buttercup). However the Nature Park was thought to be a very useful addition to Dundee's environment.

Brian Ballinger

4. Tomgarrow, Rumbling Bridge

Wednesday, 10th June

Again we did not travel far from the car park, and although we made only 70 records, 34 were additional taxa to the previous id. sessions, a reflection of the different habitat and a good return for the number of records made.

We identified three species of *Equisetum*. The most familiar to many is *E. arvense* (Field Horsetail). This is the one most likely to be encountered on dry soils, although it can also be

found in wetter conditions. Its presence is first announced by the appearance of shoots lacking chlorophyll that bear the spore-bearing body, commonly called a ‘cone’.

One of this species’ diagnostic characteristics is the spreading teeth on the internodes of the side shoots. If you are in a destructive mood, take the main shoot between two hands and bend the shoot to break it. Only the green outer core of the shoot breaks and the paler, inner ring of vessels bends, but does not break. This can be used for identification or as a botanical party trick.

E. palustre (Marsh Horsetail) is exactly what it says it is; found in lowland fens or any wet place in the highlands. It bears its cone on the green shoot, which persists for some time before the shoot expands. The teeth at the internodes of its side shoots curve inwards to hug the groove in the stem.

E. fluviatile (Water Horsetail) trumps all, because it can grow in marshes and it is also found in the margins of lochs. Its main shoot is quite hollow and gives easily when squeezed. It too produces a cone on the main green shoot, which can have no or several side-shoots; more so when growing in open water. Horse-tails are known for laying down silica in their stems and at the end of the year mats of the remains of this horsetail can be found around the edges of lochs, which may reflect a high silica content. The other squeezable horsetail which may be found is *E. hyemale* (Rough Horsetail) which grows in upland calcareous flushes in Perthshire and is worth searching for.

The third horsetail we identified was *E. sylvaticum* (Wood Horsetail) which produces a fine display of highly-branched side-shoots. It may be found in birch woods or conifer plantations, but it can also occur in the open, and its favoured habitat appears to be flushed slopes where the soil is slightly acid. The similar-looking *E. pratense* (Shade Horsetail) requires more calcareous conditions; its side-shoots are wiry and not branched. Shade is not essential as it grows in the open in highland flushes, although it may reach the shady banks of lower rivers. Both species produce fertile and vegetative shoots; cones are rarely seen in *E. pratense*.

Another marsh plant we identified was *Myosotis secunda* (Creeping Forget-me-not). The three *Myosotis* species of wet soils can cause confusion. Each of the species in this group has straight hairs only on the calyx.

M. scorpioides (Creeping Forget-me-not) is found on the shores of highland lochs in Perthshire or on the banks of broader highland and lowland rivers. There is a continuous string of records from just north of Pitlochry down the River Tay to Newburgh. This species has the largest flower of the three, which sits snugly on top of the wide-angled calyx lobes. The stigma is the longest in proportion of the three and often protrudes above the calyx lobes after the flower has fallen.

The one with the smallest flower is *M. laxa* (Tufted Forget-me-not) which is more easily confused with *M. secunda*. Apart from the small difference in size of flower they share more acutely angled calyx lobes that sit just short of the base of the petals. When faced with the option of the two, the easiest way to separate them is to look at the base of the main stem; *M. secunda* has spreading hairs, often adorned with tiny water droplets and *M. laxa* has appressed hairs. Remember ‘s’ for spreading and you are unlikely to go wrong.

These two species are often found in different conditions; *M. laxa* can be found with *M. scorpioides*. However, we found *M. laxa* and *M. secunda* growing close together on a marshy shore in Glen Lyon later in the year, but the presence of spreading hairs on the latter was undisputable. *M. secunda* is found in wet soils where the breakdown of organic material is slowed down under anoxic conditions, often in marshes open to grazing. I can smell the type of soil for this species before seeing it; not a line of identification I intend to pursue.

Alistair Godfrey

5. Creag an Lochain

Wednesday, 8th July

The car park by the dam of Lochan na Lairige to the west of Ben Lawers offers easy access to upland, sub-montane and montane flora. The retaining wall of the car park provided a good start; the deeply-lobed leaves of *Alchemilla alpina* (Alpine Lady's-mantle) indicated our elevation, and the shallow-lobed, pale green, downy leaves of *A. mollis* (Garden Lady's-mantle) indicated a more recent arrival. I was surprised to find that this species had been recorded here in 1996 by Rod Corner, demonstrating its adaptation for higher altitudes, but it appeared not have spread far since then. The native range of this species is the Carpathians, therefore its presence here should not be surprising, but it does appear to be better adapted to lower elevations where it spreads prolifically. We added two other *Alchemilla* species to our list later on.

Just beyond the dam, *Botrychium lunaria* (Moonwort) was a popular draw for cameras. The reproductive frond of this fern-relative was approaching maturity.



Botrychium lunaria (Moonwort), Creag an Lochain, 8 July 2015
© Sheila & Howard Sadd.

The area in which we continued our search had been fenced off to promote the growth of tall-herb communities, which often survive only on ledges on mountains in the highlands inaccessible to grazing animals. From his visits to Norway, David Mardon, who managed the Ben Lawers National Nature Reserve for many years, saw how this type of community was missing from much of Scotland due to overgrazing. This inspired the fencing and planting of appropriate trees and shrubs at Ben Lawers.

I think the photographs below speak for themselves. We had a wonderful day and there is little more I can do justice to, apart from saying we identified and recorded 137 taxa of which 65 had not been seen on the previous id. sessions.

Alistair Godfrey



Tall-herb community featuring *Trollius europaeus* (Globeflower), Creag an Lochain, 8 July 2015
© David Merrie



Tall-herb community featuring *Vicia sylvatica* (Wood Vetch), Creag an Lochain, 8 July 2015
© David Merrie and inset © Sheila & Howard Sadd.

6. Glen Tilt

Saturday, 11th July

Faith Anstey, Eric Pryde and I met in the Old Bridge of Tilt car-park, where we were joined by an American botanist, Jessica Macpherson and her partner, from Pittsburgh, Pennsylvania, who were over here for a family convention. She had found us online and contacted me to see whether she could join us, which was a most satisfying situation for all concerned. It was very interesting that she was familiar with many of the species we saw during the day as aliens in her home country. We were also joined by two of the Atholl Estate rangers for the morning. Bert Barnett arrived and shot off up the glen on his bike, whilst we all drove up to Gilbert's bridge.

The day's objective was to record the part of the tetrad NN87V that we didn't do last year, i.e. the part on the north-west side of the Tilt, but as it had turned into something of a training day we didn't cover as much ground as planned. We did, however, explore the 'Broken Burns' area quite well, where a parallel series of burns plunge steeply down the hillside to the river, leaving steep-sided ridges between them. The westerly of these ridges had short, herb-rich heath on the top, ideal for *Pseudorchis albida* (Small White Orchid), of which we found 7 spikes in two colonies. As usual there was *Gymnadenia borealis* (Heath Fragrant-orchid) with it, *Pyrola media* (Intermediate Wintergreen) and *Arctostaphylos uva-ursi* (Bearberry). The best colony of *Pyrola media* was around an isolated oak tree on the side of the ridge and extended over 10m x 3m, and as usual there were hardly any flowers. Other species in the Broken Burns area included *Genista anglica* (Petty Whin), *Antennaria dioica* (Mountain Everlasting) and *Helianthemum nummularium* (Rock-rose), with the odd *Neottia cordata* (Lesser Twayblade) rosette in the less herb-rich areas. We didn't manage to find any *Platanthera bifolia* (Lesser Butterfly-orchid), which I had found in 1992 in pre-GPS days.

We descended to the River Tilt, where we met up again with the semi-detached Bert Barnett, and had a good look at a nice, isolated flowering bush of *Rosa sherardii* (Sherard's Downy-rose), and then returned through a marshy haugh adding many new species including *Glyceria declinata* (Small Sweet-grass). Back at Gilbert's Bridge I collected a frond or two of *Cystopteris fragilis* (Brittle Bladder-fern), to check that it was just that and not *C. dickieana* (Dickie's Bladder-fern) and we all had a good look at *Arabis hirsuta* (Hairy Rock-cress).

It was a lowr'ing sort of day, with rain threatening but never quite materialising, so not good for insects. We did see the odd Ringlet and Common Blue, and there was a July Belle moth. The plant taxa list was 166.

Martin Robinson

7. Upper Glen Lyon

Saturday, 18th July

A small party arrived in a howling gale near Gallin in Glen Lyon. Thankfully the strong wind and heavy rain started to subside not long after we left our cars for a brief exploration. We enjoyed the sight of *Gymnadenia borealis* (Heath Fragrant-orchid) flowering in the verge, the aptly-named *Carex pauciflora* (Few-flowered Sedge) in the bog pools and the equally aptly-named *Sagina nodosa* (Knotted Pearlwort) in richer grassland. In Mid-Perthshire this species is commonest on limestone, with scattered records in the highlands and no recent records from the lowlands.

We drove up the Glen and stopped to look at other roadside vegetation. A number of ferns were seen growing in damp conditions around a burn. The largest was a member of the *Dryopteris affinis* group (Scaly Male-fern). Members of this group have undergone considerable taxonomic revision recently and there is ongoing discussion about recognition and status within the group. One of the characteristic features of the group is the many brown or golden scales at the base of the frond, called the stipe, which continue up the rachis, the

section of the stem that gives rise to the green pinnae. Scales vary in extent, density and shades of brown between members of the group.

The member of the group we saw was *D. cambrensis* which has the unlikely common name of Narrow Scaly Male-fern. This fern is the commonest of its group in the Perthshire hills, forming large tussocks which give rise to new fronds in the spring. The fronds start in shades of gold which shine brilliantly in the sunshine and darken to shades of green later in the season.



Dryopteris cambrensis (Narrow Scaly Male-fern) and *Dactylorhiza incarnata* (Early Marsh-orchid), Upper Glen Lyon, 18 July 2015, both © David Merrie.

We had a more extended stop beside the weir below Stronuich Reservoir and recorded a number of species from the dry verge to river margins. We recorded one species of orchid there: *Dactylorhiza maculata* (Heath Spotted-orchid); and later, from the margins of the reservoir, *D. purpurella* (Northern Marsh-orchid) and *D. incarnata* (Early Marsh-orchid).

Among the aquatics at the edge of the reservoir were *Nymphaea alba* (White Water-lily) and *Myriophyllum alterniflorum* (Alternate Water-milfoil). Along the edge expected species were seen, including *Littorella uniflora* (Shoreweed) and *Eleocharis palustris* (Common Spike-rush).



Leaves of *Carum verticillatum* (Whorled Caraway), Upper Glen Lyon, 18 July 2015 © David Merrie.

Growing a little farther in from the edge were white flowering heads of a smallish umbellifer that had caught David Merrie's attention. He called me over and I looked at the flowers and then down to the feathery leaves and I

was pleased to tell him that he had found *Carum verticillatum* (Whorled Caraway). This was the first record for Glen Lyon and was known only from one other area in Mid-Perthshire (VC88), from Loch Iubhar in Glen Dochart to just above Tyndrum. This is a species with a distinctly western distribution; a little more widespread in western West-Perthshire (VC87) and absent from East Perthshire (VC89).

As if this were not enough of a treat, an osprey arrived as we were preparing to leave and it hovered over the water not far from us. Then the osprey dropped down and rose up with a fish and flew off with it. What an end to a day!

Alistair Godfrey



Glen Lyon, the cliffs of Coire Loaghan with the peak of Meall Ghaordie beyond, 18 July 2015
© David Merrie.

8. Doune Ponds and Loch Watston

Wednesday, 12th August

Ten people gathered at the car park on the edge of Doune Ponds Nature Reserve, which is owned and managed by Stirling Council. The area is very accessible from the village and is extensively used by local dog walkers and families with children. It includes three ponds surrounded by a large area with Silver Birch (*Betula pubescens*) and willow (*Salix* spp.) regeneration. Some of the latter soon grabbed Alistair's interest at the entrance to the reserve and we had an introduction to this difficult group. The following species were noted: *Salix alba* (White Willow), *S. caprea* (Goat Willow), *S. myrsinifolia* (Dark-leaved Willow), *S. viminalis* (Osier) and the hybrid *S. x holosericea*, the cross of *S. viminalis* and *S. cinerea* (Grey Willow). Much of the area is shaded by birch, but amongst the trees we found carpets of *Neottia ovata* (Common Twayblade). When we reached the main pond, Alistair produced a grapple and dishes for specimens, and we were soon all busy with lenses and identification books as Alistair trawled plants from the depths of the pond for us to examine. Interesting species found included *Potamogeton berchtoldii* (Small Pondweed), *P. crispus* (Curled Pondweed) and *Ranunculus trichophyllus* (Thread-leaved Water-crowfoot). *Equisetum*

palustre (Marsh Horsetail) was found on the edge of the pond, and this concluded the main finds of the morning.



Loch Watston with Alistair Godfrey venturing as close to the loch edge as possible, 12 August 2015
© Jane Jones.

After lunch we drove the short distance to Kilmadock cemetery so that we could explore Loch Watston SSSI. This is a relatively small lowland loch approximately 2 km south-west of Doune. It supports the notified features of open water transition fen and eutrophic loch. The open water habitat is fringed by a small zone of open water transition fen with a rich sedge flora, including *Carex rostrata* (Bottle Sedge), and the locally-rare *C. disticha* (Brown Sedge), the latter unfortunately not found on this occasion. There are extensive beds of *Phragmites australis* (Common Reed), with species such as *Solanum dulcamara* (Bittersweet) and *Lycopus europaeus* (Gypsywort), all of which were recorded along with *C. hirta* (Hairy Sedge). Nutrient-rich freshwater systems of this type are rare in the Stirling area. The muddy substrate of the loch supports a rich assemblage of aquatic plant species. The emergent vegetation is dominated by stands of *Nymphaea alba* (White Water-lily), *Nuphar lutea* (Yellow Water-lily), and fine-leaved pondweeds such as *Potamogeton pectinatus* (Fennel Pondweed) and *P. pusillus* (Lesser Pondweed). However, it was not possible to investigate these delights without full waders or an inflatable boat, none of which we had! We therefore contented ourselves with those species located round the edge of the loch.

In total 92 species were recorded from Doune Ponds and 137 records obtained from Loch Watston area. The tetrad recording day around Doune originally scheduled for Saturday 25 July did not take place, but this was good compensation for it.

Jane Jones

9. River Tay, Guay – Kindallachan

Saturday, 22nd August

This venue was a last-minute substitute for Culponach Moss, and the switch turned out to be a happy decision. Alistair Godfrey, Bill Hay, Alison Wilson, Joanna Thomas and I met at Guay,

with the principal aim of seeing *Butomus umbellatus* (Flowering Rush), which Ron Youngman had found in an old backwater at Kindallachan. That turned out to be the icing on the cake of what turned out to be a 260-taxa day, just in one monad (NN 99-49-). We crossed the railway line at the Guay level-crossing and followed the river bank upstream. The whole area was mown to a lawn by cattle and by two Clydesdale horses, but we still managed to identify virtually everything. Along the river side and river wall were masses of *Filago minima* (Small Cudweed) and we also found *Lysimachia nummularia* (Creeping Jenny), *Sherardia arvensis* (Field Madder), *Artemisia vulgaris* (Mugwort), *Silene vulgaris* (Bladder Champion), *Aira caryophyllea* (Silver Hair-grass), *Cerastium arvense* (Field Mouse-ear), *Erodium cicutarium* (Stork's-bill), *Galium boreale* (Northern Bedstraw), *Lepidium heterophyllum* (Smith's Pepperwort), *Ononis repens* (Rest-harrow), *Vulpia bromoides* (Squirreltail Fescue) and the odd willow, including one *Salix x fragilis* (Crack Willow). A shingly ramp leading up the flood wall boasted a nicely-displayed fruiting plant of *Teesdalia nudicaulis* (Shepherd's Cress), spotted by Bill.

We weren't able to reach the Big Island as the channel cutting it off has increased enormously, however as we sat and had lunch a bunch of cattle waded out there up to their bellies for some fresh grazing. An Osprey flew over and a Kingfisher zipped upstream.

Halfway between the northern end of Big Island and the railway is a pond, with *Persicaria hydropiper* (Water-pepper) along the edge, lots of *Carex vesicaria* (Bladder Sedge), some *C. hirta* (Hairy Sedge) and a small plant of *Hypericum humifusum* (Trailing St John's-wort) hanging off the edge of the bank. We fought our way through the undergrowth alongside the backwater to the north of here and soon saw a single flowering plant of the *Butomus*. There were many stands of it where the flowers had gone over however. Francis Buchanan-White saw it here and wrote that he could see no reason why it couldn't be native, and neither could we. The open water areas were a mass of *Elodea nuttallii* (Nuttall's Waterweed) and *Potamogeton natans* (Broad-leaved Pondweed). *Persicaria amphibia* (Amphibious Bistort), *Cardamine amara* (Large Bitter-cress) and more *Lysimachia nummularia* were also growing there. The whole area was fenced off and gave the impression that no-one has set foot in it for a very long time indeed.

Coming out at Kindallachan we then had a look at an arable field corner with a good selection of weeds and then returned to Guay along the old Wade road, which is now a cycle path. There was a lot of beautiful *Clinopodium vulgare* (Wild Basil) along here and a clump of *Carex muricata* ssp. *pairae* (Prickly Sedge). When we got back to the cars we found a packet from Alison Wilson, who had left early, containing int. al. *Gnaphalium sylvaticum* (Heath Cudweed) and both of the common fumitories *Fumaria muralis* ssp. *boraiei* and *F. officinalis*. It was a good site for roses, especially along the railway line, and during the day we recorded *Rosa sherardii* (Sherard's Downy-rose), a *R. rubiginosa* (Sweet-briar) hybrid, probably with *R. sherardii*, *R. canina x caesia* ssp. *caesia* (m x f and f x m), *R. canina x caesia* ssp. *glauca* (m x f and f x m) and *R. mollis x caesia* sp.

Martin Robinson

10. Aberfoyle: Fern Identification Day

Wednesday, 9th September

A small group met at Cuilvona Cottage, Aberfoyle to look at ferns in more detail. Initially we were inside learning what the best features are to look at when trying to tell different species of ferns apart. Then we had time outside in the garden, in oak woods behind the house and down by the shore of Loch Ard before having lunch. The following ferns were found:

Scientific name	Common name
<i>Asplenium trichomanes</i>	Maidenhair Spleenwort
<i>Asplenium scolopendrium</i>	Hart's-tongue Fern
<i>Athyrium filix-femina</i>	Lady Fern
<i>Blechnum spicant</i>	Hard Fern
<i>Cystopteris fragilis</i>	Brittle Bladder Fern
<i>Dryopteris borrieri</i>	Scaly Male Fern
<i>Dryopteris cambrensis</i>	Scaly Male Fern
<i>Dryopteris carthusiana</i>	Narrow Buckler Fern
<i>Dryopteris dilatata</i>	Broad Buckler Fern
<i>Dryopteris filix-mas</i>	Common Male Fern
<i>Gymnocarpium dryopteris</i>	Oak Fern
<i>Oreopteris limbosperma</i>	Lemon-scented Fern
<i>Phegopteris connectilis</i>	Beech Fern
<i>Polypodium vulgare</i>	Polypody
<i>Pteridium aquilinum</i>	Bracken

After lunch we had a brief trip to the western end of Loch Ard to see *Osmunda regalis* (Royal Fern) growing by a small gravelly beach under an eroded shore bank before heading to Aberfoyle. Here we explored an old graveyard and ruins of a small church and walked along forestry tracks finding and identifying ferns we had already seen in the morning to aid consolidation. Two additional ferns found at the old churchyard were *Asplenium adiantum-nigrum* (Black Spleenwort) and *A. ruta-muraria* (Wall-rue).

Jane Jones

11. Kinnoull Hill fungus foray Saturday, 12th September (Joint excursion with Dundee Naturalists' Society/Tayside & Fife Fungal Group)

This Dundee Naturalists' Society foray had not been advertised as a joint excursion with PSNS, but was promoted more widely by the new Tayside & Fife Fungal Group, so attracted around a dozen attendees drawn from all three bodies. It was a wet and chilly day, the rain unfortunately having arrived too late after a dry week to bring on many fruiting bodies. We met in the Jubilee Car Park and spent quite a while searching the conifer plantation before reaching the northern slopes of Kinnoull Hill proper where we stopped for lunch in steady drizzle. By the time we climbed to the summit, the rain had eased off, but the cloud base remained below the treetops – although we still managed to spot a couple of red squirrels. We were glad to have use of the Forestry Commission building near the car park, which once again was invaluable for providing a sheltered place to examine our specimens. A reasonable variety of more than 40 fungal species was found, although nothing spectacular. Some of the same species had been recorded here in 1984 by Margaret King of Montrose Museum, but the majority of species recorded at that time were not refound. One attendee explored Deuchny Wood and was able to add nearly a dozen further species. As much of the area falls within the Perth City boundary, we were also able to assist Brian Ballinger in gathering records for the BSS Urban Flora of Scotland, although it does seem rather like cheating to classify Kinnoull Hill as 'urban'!

Species name	Common name	Habitat/comments	1984 record?
<i>Agaricus silvaticus</i>	Blushing Wood Mushroom	Under Sitka Spruce (<i>Picea sitchensis</i>)	
<i>Amanita rubescens</i>	The Blusher	In deciduous leaf litter	
<i>Armillaria mellea</i>	Honey Fungus	Rhizomorphs (only) on dead elm trunk	
<i>Bjerkandera adusta</i>	Smoky Bracket	On fallen branches and dead wood	

Species name	Common name	Habitat/comments	1984 record?
<i>Clavulina rugosa</i>	Wrinkled Club	In grass beside track	
<i>Cantharellus cibarius</i>	Chanterelle	On a bank at the edge of the wood	
<i>Coprinus comatus</i>	Shaggy Inkcap or Lawyer's Wig	In grass near path	
<i>Coprinellus micaceus</i>	Glistening Inkcap	On wood chippings and old stump	
[But NOT <i>C. disseminatus</i> (Fairy Inkcap) – difficult to determine but probably an error]			
<i>Collybia (Gymnopus) confluens</i>	Clustered Toughshank	Dense tufts in deciduous litter	
<i>Collybia (Gymnopus) peronata</i>	Wood Woollyfoot	In leaf litter under Beech trees	Y
<i>Coriolus (Trametes) versicolor</i>	Turkeytail	On decayed conifer stump	
<i>Cortinarius alboviolaceus</i>	Pearly Webcap	A few in deciduous woodland	
<i>Dacrymyces stillatus</i>	Common Jelly Spot	On old wet conifer stump	
<i>Diatrype disciformis</i>	Beech Barkspot	On small fallen Beech branch	
<i>Fomes fomentarius</i>	Horse's-hoof fungus	On fallen birch trunk	Y
<i>Heterobasidion annosum</i>	Root (or Heart) Rot	On sides of conifer stumps and logs	
<i>Hypoxylon fragiforme</i>	Beech Woodwart	On fallen Beech trunk	
<i>Hypoxylon nummularium</i>	Black Bark-crust	On cut surface of Ash stump	
<i>Laccaria amethystina</i>	Amethyst Deceiver	Many, in deep Beech litter	
<i>Laccaria laccata</i>	The Deceiver	Small numbers, in Beech litter	Y
<i>Lactarius blennius</i>	Beech Milkcap	Common in litter under Beech trees	Y
<i>Lactarius turpis</i>	Ugly Milkcap	In Beech litter	
<i>Lactarius vietus</i>	Grey Milkcap	In longish grass near birch	
<i>Lentinellus cochleatus</i>	Aniseed Cockleshell	In bare soil near Beech trees	
<i>Lycoperdon perlatum</i>	Common Puffball	In grassy open patch near mixed wood	Y
<i>Lyophyllum connatum</i>	White Domecap	In moss under Sycamores	
<i>Marasmius androsaceus</i>	Horsehair Parachute	In litter on fallen Sitka Spruce needles	Y
<i>Marasmius rotula</i>	Collared Parachute	In litter under Beech trees	
<i>Mycena galopus var. galopus</i>	Milking Bonnet	Tufts in leaf litter, under conifers	
<i>Oudemansiella mucida</i>	Porcelain Fungus	Only on Beech, on fallen branches	Y
<i>Paxillus involutus</i>	Brown Rollrim	In leaf litter under birch trees	Y
<i>Phallus impudicus</i>	Stinkhorn	In litter and sparse grass under birches	
<i>Piptoporus betulinus</i>	Birch Bracket	On standing dead birch trunks	
<i>Rhytisma acerinum</i>	Tarspot	Only on Sycamore leaves	
<i>Russula delica</i>	Milk-white Brittle-gill	In litter under Beech trees	
<i>Russula nobilis (mairei)</i>	Beechwood Sickener	Numbers in Beech litter	Y
<i>Russula ochroleuca</i>	Ochre Brittle-gill	In moss under pines	Y
<i>Russula vesca</i>	The Flirt	A few in Beech litter	
<i>Scleroderma citrinum</i>	Common Earthball	Under young oak tree in quarry area	
<i>Stereum hirsutum</i>	Hairy Curtain Crust	Along length of a fallen branch	
<i>Tricholoma virgatum</i>	Ashen Knight	In leaf litter	
<i>Tremella mesenterica</i>	Yellow Brain	On small dead branch of an Ash tree	
<i>Xerocomus (Boletus) chrysenteron</i>	Red-cracking Bolete	Near birch & conifers	Y
<i>Xerula (Oudemansiella) radicata</i>	Rooting Shank	In Beech litter and base old stump	
<i>Xylaria polymorpha</i>	Dead Man's Fingers	On old deciduous stump	
Slime Moulds:			
<i>Fuligo septica</i>	Yellow/Vomit Slime Mould	On standing dead birch trunk base	
Plus, on Deuchny Hill only:			
<i>Amanita crocea</i>	Orange Grisette	Mixed woodland	
<i>Amanita vaginata</i>	Grisette	Mixed woodland	
<i>Boletus calopus</i>	Bitter Beech Bolete	Mixed woodland	

Species name	Common name	Habitat/comments	1984 record?
<i>Boletus edulis</i>	Cep or Penny Bun	Mixed woodland	
<i>Calocera viscosa</i>	Yellow Stagshorn	On an old stump	
<i>Daedaleopsis confragosa</i>	Blushing Bracket	On a fallen birch trunk	
<i>Phaeolus schweinitzii</i>	Dyer's Mazegill	Mixed woodland	
<i>Pleurotus ostreatus</i>	Oyster Mushroom	Mixed woodland	
<i>Russula cyanoxantha</i>	The Charcoal Burner	Mixed woodland	
<i>Russula xerampelina</i>	Crab Brittle-gill	Mixed woodland	
<i>Stereum hirsutum</i>	Hairy Curtain Crust	Mixed woodland	

Colin McLeod & Jim Cook

The Society's 150th anniversary

Next year will mark 150 years since 14 enthusiasts met in King James VI Golf Club on 28 February 1867 and agreed to form the Perthshire Society for Natural Science. The Botanical Section will also reach 60 years old in 2017, but botanists were active in the Society from its inception, and the first President of PSNS, Francis Buchanan White, was to be the author of the *Flora of Perthshire* (published posthumously in 1898). The Society's Council is planning to commemorate the occasion later in 2017. A few members may remember the centenary in 1967, when, amongst other events, a commemorative grove of trees was planted on Moncreiffe Island, opposite the building in Tay Street which was the original museum and home of the Society. Fifty years on, the planting has transformed the appearance of the northern part of the island, that had been described as "bare and unattractive".

Promoting our activities

The screen next to the PSNS noticeboard in the Museum is loaded with a rolling loop of photos illustrating the Society's interests and activities. The selection of images is updated periodically. It may also be possible to display the loop on the main screen on Friday meeting nights. However, there is always a need for a wider choice of images, which need to be striking enough to catch the eye without commentary. If anyone has nice photos of plants, their habitats or Section activities, please send them to Roy Craig r.craig@blueyonder.co.uk, who is in charge of the screen.

Section Bulletin

Contributions of a botanical nature (even short snippets) are always welcome for the Bulletin – preferably by email, but any format accepted. They can be submitted at any time during the year, but material that arrives too shortly before the Section AGM when the Bulletin is issued may be held over to the next year's issue – so the earlier, the better!

Bulletin Editor: Colin R. McLeod

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Taxonomic revision of Perthshire *Salix*

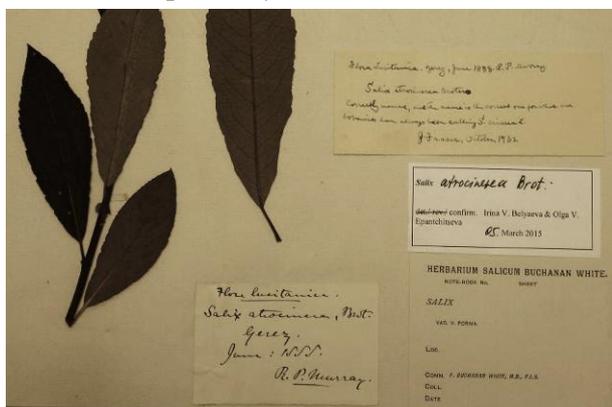
The current BSBI referee for *Salix* (Willow), Dr Irina V. Belyaeva-Chamberlain FLS, visited us for two separate weeks in 2015, accompanied by her husband and a colleague, intent on studying specimens collected by Francis Buchanan White, and visiting sites he mentioned.

Herbarium studies, Perth Museum, March 2015



L–R: Keith Chamberlain, Olga Epantchitseva & Irina Belyaeva. © Leslie Tucker

Extensive re-labelling and annotation resulted; just one such is shown below, as a snip, with some brief explanatory notes:



This has an original handwritten label: “Flora Lusitanica. *Salix atrocineae* Brot. Gerez. June, 1888. R.P. Murray”. FBW’s usual printed label is not annotated, so presumably agreement is implicit. The next authority’s repeats the original in confirmation, adding: “Correctly named, and the name is the correct one for what our botanists have always been calling *S. cinerea* L. J. Fraser, October, 1932.”

The latest label, in accord with several such on adjacent sheets, agrees: “*Salix atrocineae* Brot. det./rev./confirm. Irina V. Belyaeva & Olga V. Epantchitseva. 05 March 2015”

Field studies in the Ben Lawers range, July 2016

SS arbuscula/foetida & myrsinifolia/breadalbanensis much in prospect, but often considered inaccessible!



SS oleifolia/atrocineae, phyllicifolia/hibernica, &c were also contentious names under consideration:



Olga, despite fear of heights, was intent on collecting *S. reticulata* cuttings for repopulating the Ural Mountains:



Irina is occupied full-time as a general taxonomist and International Plant Name Index Editor at RBG Kew, so can now only pursue *Salix* studies in her private time. However, I’m sure we can expect fuller reports to follow; either as interim progress reports, or conclusions drawn when studies have been completed.

Leslie Tucker