

# PERTSHIRE SOCIETY OF NATURAL SCIENCE

## BOTANICAL SECTION

BULLETIN No. 28 - 2005

### Editorial

A few spare lines to fill and a few moments before going to press, so a few unstructured thoughts on 'Whither recording?'

Our Section has joined in five recording schemes - the first Atlas of 1962, the two monitoring schemes, the Perthshire checklist and the second Atlas of 2003. Usually they gathered on paper information on presence or absence of each plant in a grid-defined area. They added enormously to our flora knowledge, yet didn't tackle quantities, habitats, precise localities (with GPS references), nearby species etc. Another printed Atlas is unlikely if only for reasons of cost and size, so the trend must now be for data to be stored and recovered electronically. That offers the interesting possibility of dynamic databases receiving up-to-date information direct from micro (and damp-proof!) voice-activated field recording machines. Such technical wizardry if achievable would relieve the enormous data-processing burden. Yet no automaton will ever supplant the foot-soldiers in supplying the basic information, so please, dear reader, come and join us on our Field meetings - they visit beautiful places, the leader will do the paperwork, they're healthy and fun and will always have a purpose.

At the moment of last year's Bulletin going to press, the sad news was received of the death on March 10<sup>th</sup> 2005 of Mr Freddie French, a former Section member who will have been known to most of us.

Freddie was a regular attender into his eighties, both at winter lectures and at summer field meetings. His early career was in forestry management, and his later years were spent as a biology teacher at Alyth. He always had something interesting to say on the conifers and other trees that we met on our outings, and often brought pots or specimens to our winter meetings. In the 1970s and early 1980s he acted as Section Treasurer. A fuller account of his gardening and vegetable-growing interests can be read in the obituary in the Perthshire Advertiser of March 22<sup>nd</sup> last year.

I should like to thank sincerely all the contributors of Field Meeting reports - without you the Bulletin would not exist.

21.3.06

Richard Thomas - Editor

### Reports from 2005 Field meetings

1. & 11. Methven Wood

Wednesday 18<sup>th</sup> May & Sunday 9<sup>th</sup> October

Having made a visit in glorious sunshine a few days before the first excursion, I was hoping to share in the reflected glow of *Endymion non-scriptus* (Bluebells) that completely cover the woodland floor in places. Enjoy the bluebells the members did, but from under a dark sky and unwelcome rain instead. Still, water is a feature of this

woodland and in the deep ditches at the southern end of the wood extensive patches of *Carex remota* (Remote Sedge) were seen. The fringes of the shallow, muddy water at the north end of the wood were illuminated by the white flowers of *Cardamine amara* (Large Bitter-cress). Growing just a little higher in more open ground was *Scutellaria galericulata* (Skullcap) where the ground was fed by a spring.

The latter sighting was confirmation of an old record from 1869. The PSNS assisted SNH in a survey of the woodland in 1979 and helped to establish the current condition of the woodland. The survey was unable to locate most of the orchid species. I'm sure *Corallorhiza trifida* (Coralroot Orchid) is still there; but although I did search for it after the first excursion I could not find it. A greater tease is *Cephalanthera longifolia* (Sword-leaved Helleborine) which was recorded in the Methven area for over one hundred years and was said to be plentiful by one author, but this is now a very rare plant in Perthshire.

Getting back to the present, the aims of the excursions were to encourage new members to explore plants by the different habitats in which they grow. We succeeded in attracting new interest on both the excursions. The second excursion's aim was to look at fungi in the wood, and this excursion was led by Keith Cohen, who always amazes us with the depth of his knowledge. We made a list of 64 species on this excursion; I can provide a list for anyone who would like a copy. The list would have been longer had the summer not been so dry.

Before reaching the wood we encountered *Agaricus campestris* (Field Mushroom) and on leaving the wood we discovered another gastronomic delight, which was *Fistulina hepatica* (Beefsteak Fungus). This is a bracket fungus and it was growing out of a dying oak tree. When gently squeezed the fungus oozed a red liquid like blood. Most of the other fungi we saw were small and we had to bash through bracken to see some of them. The contrast between the two excursions was interesting in itself, marking the changes of the seasons.

Martin Robinson

## 2. Fife coast (Pettycur)

Saturday 21<sup>st</sup> May

After assembling, a walk round the harbour area and the low natural rockery of the adjacent cliffs immediately brought the first goodie, *Salvia verbenaca* (Wild Clary), not only a Fife rarity but in its only known site in Scotland. It was accompanied by *Geranium sanguineum* (Bloody Canesbill), *Anthyllis vulneraria* (Kidney Vetch), *Helianthemum nummularium* (Common Rockrose) and two introduced species, *Lepidium draba* (Hoary Cress) and *Senecio squalidus* (Oxford Ragwort); nearby a lawn had *Sherardia arvensis* (Madder).

A climb to the top of the cliffs revealed much rockrose alongside two introduced stonecrops, *Sedum album* (White Stonecrop) and *S. spurium* (Creeping Stonecrop), both long known here. *Primula veris* (Cowslips) were still a feature, as were *Allium vineale* (Wild Onion, Crow Garlic), *Valerianella locusta* (Common Cornsalad), *Myosotis ramosissima* (Early Forget-me-not), *Ranunculus bulbosus* (Bulbous Buttercup), *Helictotrichon pratense* (Meadow Oat Grass), *Solidago virgaurea* (Golden Rod) and two naturalised species, *Claytonia perfoliata* (Spring Beauty) and a little *Ornithogalum angustifolium* (Star of Bethlehem), together with more, scattered, plants of Wild Clary, some bitten off by rabbits.

The neighbouring sandy soil of the cemetery supported a few rosettes of *Coronopus didymus* (Lesser Swinecress), seldom encountered in Fife or Perth, four species of *Cerastium* (plus *C. tomentosum* (Snow-in-summer) on the cliff face), *Erodium cicutarium* agg. (Common Storksbill) including the white variety, a lot of *Arabidopsis thaliana* (Thale Cress) and a good colony of *Saxifraga granulata* (Meadow Saxifrage).

A short trip along the High Water Mark below resulted in some typical saltmarsh denizens, eg *Glaux maritima* (Sea Milkwort), *Juncus gerardii* (Saltmarsh Rush), *Carex otrubae* (False Fox Sedge) and *Carex distans* (Distant Sedge), along with *Malva sylvestris* (Common Mallow), *Eupatorium cannabinum* (Hemp Agrimony) and (a surprise) a patch of *Sagina subulata* (Heath Pearlwort). Escapes were *Pentaglottis sempervirens* (Green Alkanet), *Centranthus ruber* Red Valerian - and another Scottish rarity, not long discovered here but very well-established and just coming into flower: *Erigeron glaucus* (Sea Daisy). The views up and down the Forth were fine, with the island of Inchkeith a prominent shade of yellow, not the almost fluorescent colour of *Brassica napus ssp oleifera* (Oil-seed rape) but the darker hue of its close older relative *Brassica napus ssp rapifera* (Swede). Apart from one shower at the end the weather was clement. Together with the recce, the two visits were of considerable benefit to the Vice-County Recorder as well as being visually attractive.

George Ballantyne

It is interesting that as a result of this article I had to add five entries to my file of Latin - English names of plants, which is mainly based on Perthshire plants. This shows some of the differences between the two counties - Ed.

### 3. Birks of Aberfeldy

Sunday 29<sup>th</sup> May

This was our second excursion to look at plants in the woodland habitat. The Birks offers several woodland and other habitats in close proximity, making this an interesting site in which to compare the distribution of plants in the different habitats. The soils on the east side of the Birks are watered by several burns which increase the biodiversity of the flora. An attractive plant that flowers on damp woodland floors at this time of year that we saw was *Adoxa moschatellina* (Moschatel / Town-hall Clock); another was *Chrysosplenium alternifolium* (Alternate-leaved Golden-saxifrage), which has larger flowers than its commoner cousin as well as a different arrangement of leaves on the stem.

Growing beside the path on lower ground was *Veronica montana* (Wood Speedwell); *Equisetum sylvaticum* (Wood Horsetail) was spreading on the wet banks by the path at the lower falls and *Pyrola minor* (Lesser Wintergreen) was found beside the path above the lower falls. Bill Hay was keen to find *Bromopsis benekenii* (Lesser Hairy Brome), which has been recorded for the Birks, but we were unable to find it. *Bromopsis ramosa* (Hairy Brome), which has a more extended panicle, grows on the wet ledges beside the path at the lower falls. The panicle of the latter is sometimes drooping, which makes it superficially like its rarer cousin. Other grasses we saw were *Melica uniflora* (Wood Melick) growing on the damp banks beside the path on lower ground, and *Milium effusum* (Wood Millet) and *Festuca altissima* (Wood Fescue) were putting on a fine display around the raised boardwalk leading to the middle falls.

There are two species that we saw which grow together some distance from the

path and they are *Populus tremula* (Aspen) and *Paris quadrifolia* (Herb Paris). The latter occupies a sizeable patch and Jackie Muscott said that it is the largest she has ever seen. I wonder if this is just one plant that has spread in size over the years. Two orchids we saw were *Listera ovata* (Common Twayblade) and *Neottia nidus-avis* (Bird's-nest Orchid). An interesting find was *Primula x polyantha* (*Primula veris* x *P. vulgaris*) (False Oxlip), which appeared to be a spontaneous hybrid, but *P. vulgaris* (Primrose) was the only parent that was present.

We were too early to see *Melampyrum sylvaticum* (Small Cow-wheat) in flower, which with its smaller, brighter flowers with recurved upper calyx teeth can be seen in flower beside *Melampyrum pratense* (Common Cow-wheat) from the path above the upper falls. There is a small rocky outcrop above the falls where we were able to enjoy the meadow of *Trollius europaeus* (Globeflower), and this was a fine reward for the furthest extent of our excursion.

Alistair Godfrey

#### 4. Blairgowrie Lochs

Sunday 12<sup>th</sup> June

The aim of the meeting was to visit many of the known sites for *Corallorhiza trifida* (Coralroot Orchid) in the vicinity of Blairgowrie and to search other likely habitats nearby. I had put together a list of the previously known sites, so we set off to record its present status and occurrence.

The group of about 12 members began at Monk Myre, a few miles south of Blairgowrie where several hundred spikes of Coralroot Orchid had been found by myself in 2004, which was a wet summer in this area. However, the spring of 2005 was rather different and so only about 20 flowering plants were found on this visit. But it served to illustrate the micro-habitat in which it grows - often in a narrow band where seasonally high water levels reach, under willow carr fringing the lochs in the chain of basins left from melting ice. *Lysimachia thyrsiflora* (Tufted Loosestrife) is a frequent associate.

We then went to Marlee Loch, where the owner Mr Crawford proudly showed us marshy areas where *Dactylorhiza purpurella* (Northern Marsh Orchid) grew. We divided into two groups to cover more wet and boggy ground. In the New Mills Snipe Bog 124 species were recorded including *Ranunculus lingua* (Greater Spearwort) and in the wet boggy areas around the NW side *Carex aquatilis* (Water Sedge) and *Cardamine amara* (Large Bitter-cress) were found. But no Coralroot was located.

One group then visited Black Loch, on the Blairgowrie golf course, and were safe from most flying golf balls when in the dense willow and alder thickets around the edges of the loch. In 2004 this had also proved to have a strong colony of Coralroot, but only nine flowering spikes were found in 2005. *Lysimachia thyrsiflora* was flowering here, a fact worth noting as it is a shy flowerer and the flowering shoots soon wither and fall off the main stem.

The other group visited Hare Myre, where no Coralroot was seen but 3 flowers were found on the localised patch of *Linnaea borealis* (Twinflower). Photographs and measurements of the patch were duly taken. Once again, *Lysimachia thyrsiflora* was noted nearby but this time it was just small, vegetative plants. The group also went to check up on *Goodyera repens* (Creeping Ladies' Tresses) in the woods, part of which

had been disturbed by timber thinning and removal. However, there were still many rosettes, which were not withered despite the dry winter and spring.

The following week Alistair Godfrey and myself visited Rae Loch and Myreside but we drew a blank regarding Coralroot, and no plants were found at White Loch earlier in the month, although this is a spot where it can be seen regularly.

The moral of the story is - wait for a wet spring and early summer before attempting to count your Coralroot orchid.

Lynne Farrell

## 5. Carsebreck Loch

Saturday 25<sup>th</sup> June

Carsebreck Loch has undergone a considerable change over the last 20 years or so. When we first came to Perthshire it was a large loch which in the cold winters of those years would have a thick ice covering on which bonspiels could be held (and, before our time, with a railway stop to bring contestants and party-goers): but since the enactment of legislation concerning the safety of large artificial water bodies the water level has been deliberately lowered so that the loch's area and depth have dramatically dropped, former islands are now part of the surrounding land and the loch's former shore has now become rank grass invaded by willows and orchids.

Seven of us set out on an overcast morning to update some old records. Our first port of call was one particular floating acid bog. Alongside plants such as *Vaccinium oxycoccos* (Cranberry) trailing over the sphagnum surface we came upon our first goal - *Carex magellanica* (Tall Bog Sedge) with about 400 flowering spikes counted: clearly not a worry.

On to the stony and muddy open north side of the loch, definitely subject to calcareous flushing as indicated by calcicoles such as *Eleocharis quinqueflora* (Few-flowered Spike Rush). This was where most of the sedge species were to be found, including less common ones such as *Carex acutiformis* (Lesser Pond Sedge), *C. aquatilis* (Water Sedge), *C. diandra* (Lesser Tussock Sedge), *C. dioica* (Dioecious Sedge), *C. disticha* (Brown Sedge) and large clumps of *C. paniculata* (Greater Tussock Sedge) very rare in Perthshire and probably its finest locality: altogether 20 sedges, enough to satisfy the most demanding carexophile (MS Word didn't like that, I hope you do). Other striking plants were early white flowers of *Parnassia palustris* (Grass of Parnassus), 7 species of orchid including the lovely carmine of *Dactylorhiza incarnata* (Early Marsh Orchid) and *Gymnadenia conopsea* (Fragrant Orchid) now rare in the lowlands, a huge area of *Phragmites australis* (Common Reed) and a little *Typha angustifolia* (Lesser Reedmace, Lesser Bulrush).

By lunchtime the sun had come out and a really hot afternoon ensued. We spent this wandering around the now well-grassed loch edge already overgrown with a bewildering array of willows and willow hybrids, at least 8 taxa in all. (Does that make us salixophiles?) The final crowning event was Alistair Godfrey's discovery of *Catabrosa aquatica* (Water Whorl-grass), a *Poa*-like grass which grows in shallow water, a probable new VC record for West Perth, and possibly introduced by geese.

Despite this impressive list I was aware of several important species that I had recorded in the 1980's but apparently absent today. About a month later (27<sup>th</sup> July) I returned with Alistair and recorded them all - clearly we had been too early for these

particular species. They included the calcicole *Eriophorum latifolium* (Broad-leaved Cottongrass), *Eleocharis acicularis* (Needle Spike Rush) really rare but here forming a narrow lawn along the water's edge (it must have moved 200 yds over the years), the pretty, large white-flowered *Sagina nodosa* (Knotted Pearlwort) and a striking yellow member of the daisy family *Bidens tripartita* (Trifid Bur Marigold).

Richard Thomas

## 6. Dalreoch and Straloch Moraines

Saturday 2nd July

In the morning I welcomed seven members to my home to show off a field composed of drumlins which have never been cultivated and over which I exercise grazing control under the Breadalbane ESA Scheme. These small hillocks are covered with sheets of *Meum athamanticum* (Spignel) and *Persicaria vivipara* (Alpine Bistort), and are colourful right through the summer, with successive waves of *Pilosella officinarum* (Mouse-ear Hawkweed), *Campanula rotundifolia* (Harebell) and finally *Succisa pratensis* (Devil's-bit Scabious). In a wet hollow we saw a few spikes of *Dactylorhiza purpurella* (Northern Marsh Orchid), but most of the ground is very dry. We admired the single colony of *Gentianella campestris* (Field Gentian), tucked neatly on the side of a small bank, though not yet in flower.

Naturally I didn't expect the visit to turn up anything new so I was delighted (not to say flabbergasted!) when a single plant of *Salix repens* (Creeping Willow) turned up. Bill's *Phleum bertelonii* (Smaller Cat's-tail) was also new to this particular field. The Chimneysweeper moths were out and a single Small Copper was seen, despite the lack of sun. As it was dry at least we were able to enjoy lunch in the garden before moving on to Straloch.

Straloch Moraines SSSI, although it is also mainly uncultivated grassland on glacial debris, is quite different from Dalreoch, having a much greater range of pH. The mass flowering of *Helianthemum nummularium* (Common Rockrose) was spectacular, especially down at the roadside. A very striking feature of the more heathy grassland was the *Salix repens* (Creeping willow), which, unlike at Dalreoch, here dominates the sward over large areas. There were also colonies of *Gymnadenia conopsea* (Fragrant Orchid) and *Antennaria dioica* (Mountain Everlasting) with it. We found 14 spikes of *Pseudorchis albida* (Small White Orchid) in three colonies and also a few plants of *Gentianella campestris* (Field Gentian), which is rare at this site, but not yet in flower. The 24 rosettes of *Pyrola* at two locations were almost certainly those of *P. media* (Intermediate Wintergreen), which is known to occur here. There were nice calcareous swards with *Thymus polytrichus* (Wild Thyme), *Briza media* (Quaking Grass), *Linum catharticum* (Fairy Flax), *Helictotrichon pratense* (Meadow Oat Grass), *Koeleria macrantha* (Crested Hair Grass) and *Carex caryophyllea* (Spring Sedge).

Around a damp hollow near the roadside several male Common Blue butterflies were flying and there was also a colony of Northern Brown Argus there, obviously associated with the *Helianthemum*. These showed a lot of variation, not all of it sexual, in the amount of orange around the wing edges. My first Ringlet of the year also made an appearance.

Martin Robinson

Our small group enjoyed a very successful day, seeing several rare, scarce and generally wonderful species and also making some interesting discoveries. It is remarkable that a hill so well botanised still has a secrets to reveal, but it continues to do so.

We parked in the car park above Moulin and battered straight up through the plantation to the hill, pausing only to take in the *Ribes alpinum* (Mountain Currant) lining the side of the path just above the car park. Once on the open hill one of the first stops was to see one of the two *Schoenus ferrugineus* (Brown Bog Rush) transplant sites. There were <25 healthy looking plants here, survivors/successors of the colony transferred from the side of Loch Tummel before it was flooded for the Hydro-Electric Scheme. A bonus at this site was a female *Cordulegaster boltonii* dragonfly laying eggs directly into the water, with a very rapid 'dipping into the water' movement as it hung vertically over the surface. Quite nearby was a small colony of Large Heath butterflies, and Small Pearl-bordered Fritillaries were common up this slope of the hill.

Along the base of the main cliffs, ascending towards the summit, we found that the *Astragalus alpinus* (Alpine Milk-vetch) was flowering very shyly. The colony is very extensive but the erosion there, much of it by botanists' feet, looked pretty horrendous. It does seem to tolerate this quite well, although in some areas all vegetation has gone. *Oxytropis halleri* (Purple Oxytropis) was quite plentiful as well, in isolated clumps, but unfortunately had finished flowering. There were several good patches of *Potentilla crantzii* (Alpine Cinquefoil), a strong colony of *Carex capillaris* (Hair Sedge) disappearing up a gulley, and a lovely example of *Alchemilla wickuriae* (a Lady's Mantle). By no means least we also found Bill, who had set off before us, assiduously trying to re-find *Carex rupestris* (Rock Sedge). This search was unsuccessful however.

On the way back we explored the mires below the path just downstream of Loch a'Choire and found *Utricularia vulgaris agg* (Greater Bladderwort). Lynne branched off to look at another mire on the saddle between Meall na h-Aodainn Moire and Creag Bhreac and soon started shouting. It was full of *Carex diandra* (Lesser Tussock Sedge), which was hitherto unknown in this area and at this altitude.

Instead of returning back through the plantation we came down through the field to the east. Cutting through the lower moorland to reach this we found an interesting spring, apparently iron-rich, full of a charophyte that turned out to be *Chara vulgaris*, distinctly scarce in Perthshire despite its name. There were also spikes of *Dactylorhiza incarnata ssp incarnata* (Early Marsh Orchid) here. Further down, in the field where the bracken appeared to have been sprayed, was a small forest of huge *Senecio sylvaticus* (Heath Groundsel) plants and a couple of patches of *Hypericum humifusum* (Trailing St John's-wort). These lower areas were good for butterflies, with Small Heaths, Common Blues, Ringlets and Meadow Browns. For good measure, once back in the plantation we found a plant of *Geranium pyrenaicum* (Hedgerow Cranesbill) that we had missed on the way up.

Birds were quite scarce through the day; apart from the Meadow Pipits there was the occasional Wheatear, a party of five Ravens and some Twite were heard.

Martin Robinson

## 8. Fumaria Workshop

Sunday 31<sup>st</sup> July

We spent a pleasant morning in the company of Heather McHaffie at Vane Farm looking at the six Scottish *Fumaria* species. Heather made identification easier for us by providing fresh material of each of the six species. We looked at the two common species: *Fumaria officinalis* (Common Fumitory) and *Fumaria muralis* (Common Ramping Fumitory). The former has smaller, uniformly pink flowers with small sepals and the latter is more a two-toned pink with larger flowers and large bracts.

A similar, but overlooked, species to *F. officinalis* is *F. densiflora* (Dense-flowered Fumitory). In contrast, the latter has much larger sepals and as its name suggests the flowers are more compact on the stem. Heather found *F. densiflora* at nearby Lochend Farm where we made our field visit in the afternoon.

A similar species to *F. muralis*, but again overlooked, is *F. bastardii*. The latter species has smaller sepals, but they have distinct long, forward pointing teeth.

Encouraged by our identification lesson, Lynne Farrell and I concluded the excursion with a visit to a field to the north of Stanley, which Lynne had identified as potentially rich Fumitory ground, and here we reckon we found *F. bastardii* and *F. densiflora*. I sent pressed specimens to Heather and she determined that Lynne's identification was correct. Without the workshop these specimens might have been passed over in the field without further thought.

The two remaining Scottish species are *F. capreolata* (White Ramping Fumitory) and *F. purpurea* (Purple Ramping Fumitory). Both are large-flowered species with large bracts; the flower spike of the latter is about equal in length to the non-flowering portion of the same part of the stem, but the flower spike of *F. capreolata* is considerably shorter than the non-flowering part of the flower stem.

We took a break from looking at Fumitories at Lochend Farm by first sampling the farm vegetables for sale. Then we visited the nearby shore of Loch Leven where the water level was very low. There were masses of *Limosella aquatica* (Mudwort) and *Baldellia ranunculoides* (Lesser Water Plantain) in flower. *Lysimachia nummularia* (Creeping-Jenny) and *Lythrum salicaria* (Purple-loosestrife) added splashes of yellow and pink to the vegetation. Also present were *Hierochloa odorata* (Holy Grass) and *Juncus filiformis* (Thread Rush), two of Loch Leven's other special plants.

We enjoyed glorious sunshine all day and this was a day to be remembered for its interest and variety.

Alistair Godfrey

## 9. Barry Buddon Nature Open Day

Sunday 14<sup>th</sup> August

## 10. Stuc a Chroin

Sunday 21<sup>st</sup> August

No report. From personal knowledge gained while attempting to find the group after an unavoidably delayed start, it was a cloudy, heavily overcast and frequently misty day which fortunately didn't pelt until everyone was off the hill - Ed.