

PERTSHIRE SOCIETY OF NATURAL SCIENCE

BOTANICAL SECTION

BULLETIN No. 30 - 2007

Reports from 2007 Field Meetings

1. Woodland by Kindrogan, River Ardle for Bryophytes Sun, April 15th

Eight of us met at the Field Centre just as the prolonged warm, sunny spell of weather was drawing towards its close. The pleasure of being able to potter slowly and take time over bryophytes in perfect comfort was counterbalanced to some extent by them all being dried and shrivelled. Nevertheless, it can be important to know what some species look like in the dried state and everyone had the opportunity to distinguish the crisped leaves of the genus *Ulota* from the wavy, or curved, leaves of *Orthotrichum*. To see the more normal, wet state of the tuft mosses and the liverworts we had to rehydrate them with a small finger-sprayer. The instant metamorphosis to a lush-looking, green cushion when you do this seems miraculous.

Bryological excursions often don't get very far from the car-park and this was no exception. There are so many micro-habitats, all with their own species. Some tree-trunks by the drive had *Isothecium alopecuroides*, *I. myosuroides*, *Hypnum cupressiforme* and *H. andoi*, *Orthotrichum lyelli* (covered in tiny red gemmae), *Ulota crispa* and *U. bruchii*, *Radula complanata*, *Frullania tamarisci*, whilst on the ground at their feet were most of the very common pleurocarpous species together with *Plagiomnium undulatum*, *Mnium hornum* and *Atrichum undulatum*. A damp bank on the other side of the road offered the chance to compare the familiar large, whitish, flatworm-looking *Plagiothecium undulatum* with one of its more understated cousins, *P. succulentum*, all interwoven with the fern-like *Thuidium tamariscinum*. As we went up the path opposite the drive the bank on the uphill side became damp with seepages and *Brachythecium rivulare*, with its glossy shoot tips, and *Rhizomnium punctatum* became characteristic, with *Sphagnum girgensohnii* and *S. squarrosum* also present. Further on, where the bank was dry, it was more normal to see *Dicranella heteromalla*, *Polytrichum formosum*, *Pogonatum juniperoides*, *P. urnigerum* and *P. aloides*, *Dicranum scoparium*, *D. fuscescens* and *D. majus*, and in one area the beautiful golden curly shoots of *Ptilia crista-castrensis* (Ostrich-plume moss), growing through *Hylocomium splendens* and *Pleurozium schreberi*.

A nice, decorticated log lying in the edge of the wood was covered as expected with the liverwort *Lepidozia reptans* and the fine, dark-red threads of the liverwort *Nowellia curvifolia*.

Nearly all of the species we looked at were common, the main objective being to appreciate the different forms that bryophytes can take and the terms that are used to describe them. There was some spice, however, when a couple of capsules of the rare, leafless moss *Buxbaumii aphylla* were found on a tree root protruding into the side of the path. These large, shiny capsules were much admired and photographed. Interestingly its much rarer congener, *B. viridis*, used to grow very close by, but hasn't been seen for a few years.

In the afternoon we spent a couple of enjoyable hours in the lab at the Field Centre gaining another perspective on some of the specimens we had collected. That's the great thing

about bryophytes: they have different guises in their dry form, wet form, and then their cell structure. Life's too short!

Martin Robinson

2. Boddin Point

Sat, May 12th

Lunan Bay was getting the full blast of a cold, rain-bearing wind when we met at 11 o'clock. One of several alternatives was to drive a few miles to Boddin Point and from there head northwards along the shore as here rocky promontories provide more shelter.

Sea cliffs and rocky shore in the vicinity of Boddin Point support a relatively rich flora which includes several hundred plants of Nottingham Catchfly *Silene nutans*. This species flowers in May and grows along the roadside, where it is easily seen and photographed, as well as being abundant, but inaccessible, on the steep cliffs below.

A short distance north of Boddin is a promontory aptly named Elephant Rock and when the tide goes out it is possible to get below the arch that looks like the front feet and trunk of the elephant. One can then see that cracks in the rock support a good population of Sea Spleenwort *Asplenium marinum*.

Continuing north beyond Elephant Rock tall sea cliffs give way to a lower rocky shore with a mosaic of habitats. This includes species-rich calcareous grassland, freshwater seepages and pockets of saltmarsh. Grassy areas contain good patches of Purple Milk-vetch *Astragalus danicus* and in May both of the Mouse-ears found frequently along the Angus coast, Sea Mouse-ear *Cerastium diffusum* and Little Mouse-ear *Cerastium semidecandrum*, are in flower.

The weather improved during the course of the day with clear sunny skies over the sea as we headed back to Boddin having seen a variety of coastal habitats and early flowering plants.

Barbara Hogarth

3. Kirkton of Mailer

Wed, May 16th

My thanks go to Lynne Farrell and the other members who relieved me of duty on this evening, because I had double booked, forgetting at the time of putting the excursion programme together that this was my daughter's birthday! I visited the site with Lynne the following month and on my own in July. My account summarises what was found on the three visits.

The upper part of Kirkton Hill is exposed, the vegetation is closely cropped and the soils tend towards the acidic; the bottom of the south facing slopes have thickets of gorse, but they give way higher up to friable rock that yields dry calcareous soils, and to the west they are off-set by a narrow strip of riparian woodland arising from a deep cleft in the rock. The slopes lie along the line of a fault and the soils and vegetation have much in common with the Sidlaws to the east and the Ochils on the opposite side of the valley.

One of the early flowering representatives from these habitats was *Saxifraga granulata* (Meadow Saxifrage) and a good find was *Viola hirta* (Hairy Violet). The latter requires a little more irrigation than some of its neighbours and should be sought on runnels on slopes and at the base of rock outcrops. Most of the exposed rock was covered by the yellow flowering *Helianthemum nummularium* (Common Rock-rose), there was much *Astragalus danicus* (Purple Milk-vetch), and some of the superficially similar-leaved *Ornithopus perpusillus* (Bird's-foot). *Vicia lathyroides* (Spring Vetch) was another member of the pea family with *Trifolium striatum* (Knotted Clover) bearing the crown of the family jewels. This species has a largely coastal

distribution in Scotland, and is not common but was recorded from this locality in the *Flora of Perthshire*.

The hands and knees brigade was represented by *Cerastium diffusum* (Sea Mouse-ear) and *Cerastium semidecandrum* (Little Mouse-ear) with four and five petals respectively, *Scleranthus annuus* (Annual Knawel) and *Sherardia arvensis* (Field Madder). There was much discussion on the 16th over a cudweed, which was exclusively *Filago minima* (Small Cudweed) and not *Filago vulgaris* (Common Cudweed). The latter was described as "local, but not uncommon" in the *Flora of Perthshire*, but there are no recent records for Perthshire shown in the *New Atlas of the British & Irish Flora*. This poses the question of a real decline versus previous mis-identification. *Sherardia arvensis* was recorded as "common", which is no longer true, and the decline of this species and *Filago vulgaris* may be related to changes in farming practices.

Grasses were represented by *Koeleria macrantha* (Crested Hair-grass) and *Helictotrichon pratense* (Meadow Oat-grass) and ferns by *Asplenium adiantum-nigrum* (Black Spleenwort) and *Polystichum aculeatum* (Hard Shield-fern). The tough blades of these grasses perhaps reflect a thick cuticle that cuts down water loss from the dry soils in which these species grow. This is not a problem for *Juncus inflexus* (Hard Rush) which was found at the head of a spring. Its glaucous stems, spreading panicle and long bract make this an attractive species, which is on the very northern edge of its range in Britain in our area.

I'm grateful to Martin Robinson and Les Tucker who added three more interesting records *Trifolium arvense* (Hare's-foot Clover), an attractive species I expected to find in this habitat, *Sagina apetala* (Annual Pearlwort) and *Vulpia bromoides* (Squirreltail Fescue), which was spread across the dry ground and waved about in the wind - something I forgot to record!

Alistair Godfery

4. Pitroddie Den

Wednesday, May 30th

After meeting at Glendoick, nine of us condensed into three carloads and drove up to Glendruid Cottages, parking at the entrance gateway to Pitroddie Den, where botanising commenced.

We followed the most accessible footpath, wending through the rubble of the abandoned quarry workings, alongside a small stream. There is clearly sufficient mineral release from the basalt and more friable volcanic rocks to support a good range of plants, many calcicolous. Along the bottom it was congested with shrubs and trees: Bramble, Raspberry, Gorse, Broom, Buddleia, Ash, Hawthorn, Blackthorn, Elder, Wych Elm, Hazel, Gean, Sycamore, and Goat Willow. Much of this has been cut down over the 2007-08 winter, presumably to avoid contact with the power lines running through the bottom of the den. Apart from this, the only other visible signs of wildlife management are a range of bird boxes mounted on trees.

Members from inland parts remarked how much further on and luxuriant the ground herbs were here, in a moist and sheltered valley near the coast: *Orchis mascula* (Early Purple Orchid); *Origanum vulgare* (Wild Marjoram); *Primula veris* (Cowslip), *P. vulgaris* (Primrose) and their hybrid *P. x polyantha* (False Oxlip) were coming out. Of the specialities, *Viola hirta* (Hairy Violet) was fairly easily found by the path. However, others grow on the steep cliffs and fenced-off fields above the old quarry faces, on the north side. This puts them safely beyond reach of the rabbits, but also any but the most determined botanists. Nevertheless, *Lactuca virosa* (Great Lettuce) was visible in several places, even reachable.

At the north-west end of the den, a small gate gives access onto open grassland rising up

to Pole Hill. At this point, a few more reckless members of the group elected to return over the top of the quarry-edge, recording some interesting plants on the edge of the arable fields along the way: *Sherardia arvensis* (Field Madder), *Cerastium arvense* (Field Mouse-ear), *Clinopodium vulgare* (Wild Basil), *Echium vulgare* (Viper's Bugloss), *Fallopia convolvulus* (Black Bindweed), *Chenopodium bonus-henricus* (Good-King-Henry) and *Saxifraga granulata* (Meadow Saxifrage).

The final craggy outcrop is probably the jewel in the crown of this site, showing *Ceterach officinarum* (= *Asplenium ceterach*) (Rustyback Fern); with *Filago minima* (Small Cudweed) and *F. vulgaris* ("Un"-Common Cudweed) in the loose soil below. The differences between the latter two were much clearer when MR & I returned in good daylight about a month later; on that visit we also found *Trifolium striatum* in sheep 'rubs' just below the rim of Pole Hill.

From the *Ceterach* Crag it was all downhill: a steep scramble through scratchy thickets in gathering darkness, to join the rest of the group.

It seems likely that *Astragalus glycyphyllos* (Wild Liquorice), though previously recorded here, no longer survives; but there are probably still other plants worth searching for later in the growing season.

Les Tucker

5. Craighall Gorge, River Ericht

Sun, June 10th

Nine of us met up on a fine morning in Blairgowrie and proceeded to Craighall Castle, where we parked thanks to the kindness of the owners. This was a fine point of access to Craighall Gorge, a visually stunning and challenging site, which is an SSSI. Setting off northwards on the steep path down into the thickly wooded gorge we soon came on our main target species for the day, a single flowering plant of *Lychnis viscaria* (Sticky Catchfly) at the base of a steep cliff and so within photographic range. It was growing with masses of *Geranium lucidum* (Shining Cranesbill). A bit further on was a colony of at least nine plants at the top of the cliff and another single plant at the base. Later we saw more high up on the steep cliffs on the opposite side of the river. From the distance they had to be distinguished from other deep pink flowers, such as *Silene dioica* (Red Campion), but the tuft of narrow leaves and different-shaped inflorescence could be distinguished.

The bottom of the gorge is like a 'lost world'. The river, the towering cliffs above, the lush vegetation and the view up to the positively Wagnerian castle perched on the sheer edge of its precipice make this a spectacular site. The riverside is the only easily accessible part, and the flora there is quite rich. We did especially well for grasses, with *Bromopsis benekenii* (Lesser Hairy-brome), *Festuca altissima* (Wood Fescue), *F. gigantea* (Giant Fescue), *Helictotrichon pubescens* (Downy Oat-grass), *Melica uniflora* (Wood Melick) and *Milium effusum* (Wood Millet) all being found, together with the more abundant *Brachypodium sylvaticum* (False Brome) and *Poa nemoralis* (Wood Meadow-grass). The riverside also produced *Arabis hirsuta* (Hairy Rock-cress), *Campanula latifolia* (Giant Bellflower), *Galium boreale* (Northern Bedstraw) and *Trollius europaeus* (Globeflower).

Working our way along the rocks beneath the castle required a bit of care, but our reward was a patch of *Equisetum pratense* (Shady Horsetail) and a more leisurely route back up to the vehicles, adding a fine plant of *Scrophularia vernalis* (Yellow Figwort) on the way.

Les's searching concluded that it was not a particularly good site for willows, with only *Salix caprea* (Goat Willow) and its hybrid with *S. myrsinifolia* (Dark-leaved Willow) being

found.

The day's plan had been to visit another part of the River Erich further downstream, but we found enough to interest us in the gorge and there was no time left for that.

Martin Robinson

6. Woodside, Angus

Sat, June 23rd

Woodside is a small area, approximately 8.5 hectares; damp grassland with *Deschampsia cespitosa* (Tufted Hair Grass), an area of drying wet heath – a rare lowland habitat in Angus, and *Salix* (Willow) woodland situated on the other side of the road from the south part of Forestmuir SSSI. The aim of the day for me was to look for orchids. Barbara Hogarth, BSBI vice-county recorder for Angus, with everyone's help, made a complete species list for the meadow while Les Tucker identified the *Salix* species (Willows).

In June 2006 Lynne Farrell discovered about 1000 plants of *Platanthera bifolia* (Lesser Butterfly Orchid) spread through out the area, a magnificent and exceptional site for this species on the east coast of Scotland. On our visit we counted 214 plants, probably 2-300 in all, a very good number considering orchid numbers fluctuate naturally from year to year. All were closely associated with *Succisa pratensis* (Devilsbit Scabious) which was very abundant in places; the orchids grew in ones and twos or small groups both in grassland and in grassy heathland with *Calluna vulgaris* (Heather) and occasional *Erica tetralix* (Cross-leaved Heath) and *sphagnum* moss species; one large group of about 60 plants was noted with *Linum catharticum* (Fairy Flax) and *Briza media* (Quaking grass) in grassland with *Carex* species (Sedges) and 20 to 30 *Dactylorhiza purpurella* (Northern Marsh Orchid). *Platanthera bifolia* is of particular interest to Liz as she has been analysing the results of a survey in 2006 to find sites for *Platanthera bifolia*; it is one of four Species Action Framework (SAF) plant species chosen for conservation management action by SNH as records for Lesser butterfly orchids have declined dramatically over the past 40 years.

There were several small groups of *Dactylorhiza purpurella* (Northern Marsh Orchid), *Dactylorhiza maculata* (Heath Spotted orchid) was frequent, probably 100s of plants; and Les and Martin spotted a number of hybrids between *D. purpurella* and *D. maculata*, *D. x formosa* (Hybrid Marsh Orchid). Martin found a sexless, pyloric form of *Platanthera bifolia*, more robust looking than normal plants. No plants of the often confused, *Platanthera chlorantha* (Greater Butterfly Orchid) were found; Brian Allan who has known the site for many years has never found Greater Butterfly Orchid here. There were more than 100 very beautiful, sweet smelling *Gymnadenia conopsea* (Fragrant Orchid) in *Calluna* heath at the west end of the site near the road. A very vulnerable, single spike of *Pseudorchis albida* (Small-white Orchid) was admired on the edge of a weedy, recently ditched area.

Other notable species were *Hydrocotyle vulgaris* (Marsh Pennywort), *Pedicularis palustris* (Marsh lousewort), *Potentilla palustris* (Marsh cinquefoil), *Pinguicula vulgaris* (Common butterwort) and *Narthecium ossifragum* (Bog Asphodel); *Erica cinerea* (Bell Heather) in one area of drier heath and *Trientalis europaea* (Chickweed Wintergreen). Les found *Salix cinerea* ssp. *oleifolia* (Grey Willow), *Salix aurita* (Eared Willow), *Salix caprea* (Goat willow), *Salix repens* (Creeping Willow) and both the very unusual *S. repens x cinerea* hybrid and the commoner *S. aurita x S. repens* hybrid. Barbara recorded *Senecio aquaticus* (Marsh Ragwort) which is uncommon in Angus, and about 60 species in total.

We moved on in convoy into gathering gloom to Little Ballo bog; here on a lovely day

two days before, Liz with Brian Allan and members of the Hardy Orchid Society had photographed the very beautiful *Dactylorhiza incarnata ssp. incarnata* (Early Marsh orchid) but failed to re-find *Platanthera bifolia* (Lesser Butterfly orchid) in an old site known to Brian. The rain began as we stopped for lunch; after sitting in steamy cars for forty minutes while the deluge progressed to a thunderous torrent with no signs of easing we gave up and went home. The rain finally stopped in Carnbo about 5pm.

Our grateful thanks to the farmers at both Woodside and Little Ballo for giving us permission to look at these lovely places; we hope to go back to Little Ballo in 2008.

Liz Lavery

7. Meadowhead and Keithills, Kinross-shire

Sun, July 15th

After a stormy night only two of us set out to walk up the steep hill slope from Meadowhead Farm on a morning with crystal clear visibility. Numerous small burns drain the hillside in a series of steep sided gullies. Les aided by a trusty stick found no difficulty scaling the slippery uneven sides of the gullies and leapt mountain goat fashion on upwards while Liz toiled on behind.

Meadowhead is part of a much larger SSSI, Wetherhill in the Cleish hills. It has been notified for three features: an area of raised bog on a terrace just below the summit of the hill which we did not get to properly; small areas of calcareous grassland on the sides of the steep gullies, calcareous springs and flushes, the hillside is underlain by calcareous sandstone; some semi- ancient woodland where the burns run through wooded dens near the base of the slope.

On the lower slopes were *Juncus acutiflorus* (Sharp-flowered Rush) flushes with probably 100s of *Dactylorhiza fuchsii* (Common Spotted orchid), with a little *Briza media* (Quaking Grass). We discovered a few plants of *Triglochin palustris* (Marsh Arrow Grass) in a *Carex* flush as we climbed up a gully above a single big old ash tree. On our way up the hill we came across several clumps of the locally rare grass *Trisetum flavescens* (Yellow Oat Grass) and scattered plants of *Danthonia decumbens* (Heath Grass). Near the top we found a very few remnants of calcareous grassland on the rocky sides of the gully; scattered patches of *Thymus polytrichus* (Thyme), one small patch of *Helianthemum nummularium* (Common Rockrose) with a single flower, *Linum catharticum* (Fairy Flax) and *Koeleria micrantha* (Crested Hair Grass).

The view of Kinross-shire and over to the Forth was superb from the top and well worth the climb. On our way down after lunch we explored the wooded den on the eastern boundary of the farm finding a single clump of *Carex remota* (Remote sedge), *Rumex sanguineous* (Wood dock) and *Chrysosplenium oppositifolium* (Opposite-leaved Golden Saxifrage) and in a wet place just outside the wood *Glyceria fluitans* (Floating Sweet grass). Les spotted a single tree of *Salix purpurea* (Purple Willow) near the farm buildings.

Plants of note we did not see but found by a botanical outing on the 30th June 1996 were *Polygonum viviparum* (Alpine Bistort) and, with out the unerring eyes of Bill Hay to help us, several *Carex* species including *Carex sylvatica* (Wood Sedge), *C. hostiana* (Tawny Sedge) and *C. dioica* (Dioecious Sedge). Perhaps these species were missed because overall the pasture was rather tall, 40-50cms in places at the time of our visit. A small herd of cattle graze widely over the hillside during the summer months. A total of 125 species were recorded during our walk.

In the afternoon, joined by Martin Robinson, we visited Keith Hills farm where Tim Brain showed us round his outstanding Greater Butterfly Orchid meadow. The meadow is north facing on a steep, well drained slope and has been managed by Tim with the orchids in mind since he

first found two orchids in 1996. Numbers rose amazingly to over 500 but have declined in the past two years; we counted just over 50 *Platanthera chlorantha* (Greater Butterfly Orchids), still a magnificent sight. Tim is experimenting with grazing timing to try and see if the fall in numbers is a natural fluctuation or whether it can be reversed by tweaking the grazing regime. The meadow is also spectacular for the show of *Viola lutea* (Mountain Pansy) and white mists of *Conopodium majus* (Pignut).

Our thanks to both Tim Brain and David Adams for welcoming us onto their land.

Liz Lavery

8. Ballinloan, NN94Q (Drumour)

Wed, July 18th

The area we visited on a pleasant summer evening lies directly above Corbenic Camphill Community, who kindly allowed us to park very conveniently in their grounds.

The first focus of attention was a small reservoir, originally constructed about 20 years ago to supply Corbenic, but abandoned when plans changed and now virtually a natural pond. The only significant relic from that time is the survival of some pink Water-lilies (all right, they stuck out like a sore thumb, but they were very attractive to the eye): according to Stace, most species in this situation are one of the varieties of *Nymphaea marliacea*. At the other end of the scale, *Crassula helmsii* (New Zealand Pigmyweed) was very much in evidence, so the days of species richness here may be numbered. In the shallowest water, there was plenty of *Apium inundatum* (Lesser Marshwort) which is not common in Perthshire. Other aquatic species included *Menyanthes trifoliata* (Bogbean), *Typha angustifolia* (Lesser Bulrush) and *Callitriche brutia* (Pendunculate Water-starwort). Nearby, *Trientalis europaea* (Chickweed-wintergreen) was present, but *Stachys officinalis* (Betony) of which there had been quite a lot on a previous visit, was not refound.

The 'water feature' was surrounded by an area of boggy ground, with a number of different rushes and sedges, including *Carex x fulva* (*C. hostiana* x *viridula*) which might seem to be uncommon, but is more likely under-recorded. Further up the hill, clearly more base-rich than the bogs of the lower ground, we found *Helianthemum nummularium* (Common Rock-rose), *Sagina subulata* (Heath Pearlwort) and *Persicaria vivipara* (Alpine Bistort).

For such a small area, there was quite a diversity of habitats and 93 species were recorded in all.

Faith Anstey

9. Mid - Perthshire

Fri, July 27th – Mon, 30th

This excursion was a contribution to the Atlas Update Project to ensure that every hectad within the vice-county will be visited between the years 2000 to 2009. Sixteen BSBI members took part and contributed 32 recording days over the length of the excursion. Recording was carried out at tetrad level, visiting at least two in every hectad.

Meall Tairneachan (NN85), not to be confused with the similarly named Meall nan Tarmachan in the Lawers range, was our first objective. We left the car park at the limekiln near Kinardochoy, where there is quarry, and at its edge we saw *Gentianella amarella* subsp.

septentrionalis (Autumn Gentian) that was about to flower. From there we left the limestone behind and followed a burn that cuts its way through mica schist. The higher humidity beside the burn had helped to preserve a woodland flora despite the scant tree cover. More deeply cut sections of rock revealed *Rubus saxatilis* (Stone Bramble), *Arabis hirsuta* (Hairy Rock-cress) and *Carex vaginata* (Sheathed Sedge). Away from the burn we found *Carex capillaris* (Hair Sedge) and *Juncus triglumis* (Three-flowered Rush) at 600m sheltered below a crag, and beside burnt heather we found *Lycopodium annotinum* (Interrupted Clubmoss). On Meall Tairneachan we saw *Saxifraga hypnoides* (Mossy Saxifrage) as well as *S. aizoides* (Yellow Saxifrage), *S. oppositifolia* (Purple Saxifrage) and *S. stellaris* (Starry Saxifrage) that had been seen earlier. We descended a wet slope down to the barytes mine road that would take us back to the car park where we started. Barytes is mined and ground down to provide an additive to drilling fluids that helps to contain oil, gas and water encountered at high pressure during drilling for oil and gas. Martin Robinson's keen eye spotted *Equisetum variegatum* (Variegated Horsetail) in the flush and *E. pratense* (Shady Horsetail) was also seen there.

The following day we followed the Invervar Burn from Glen Lyon (NN64) and explored the crags in the corrie between Carn Gorm and An Sgorr. This was the most challenging of our four days of excursions, but our exertions were thoroughly rewarded. Willows were well represented with many signs of natural regeneration on the crags, and our sightings included; *Salix arbuscula* (Mountain Willow), *Salix reticulata* (Net-leaved Willow) and *Salix x punctata* the hybrid between *S. myrsinifolia* and *S. myrsinites*. Other delights included *Potentilla crantzii* (Alpine Cinquefoil), *Dryas octopetala* (Mountain Avens), *Sibbaldia procumbens* (Sibbaldia), *Saxifraga nivalis*, (Alpine Saxifrage) and *Carex atrata* (Black Alpine-sedge). *Helianthemum nummularium* (Common Rock-rose) graced the final descent, and no sooner was it seen than GPS receivers clicked into action measuring its altitude at 794m, which was immediately followed by the announcement from Jim McIntosh that this was an altitudinal record.

Records from Lochs Finnart and Monaghan (NN55), which lie to the south of Loch Rannoch, were sparse in the vice-county records, which was surprising despite the visits that had been made by recorders, and the arrangements for this excursion were to determine if some plants or areas had been missed. On our visit we found two sedges characteristic of different habitats; *Carex lasiocarpa* (Slender Sedge), a swamp species with almost thread-like leaves and bracts that can be mistaken for some forms of *Carex nigra* (Common Sedge), but not when in flower as *C. lasiocarpa* has hairy utricles, although it is a shy-flowering plant. *Carex pauciflora* (Few-flowered Sedge) could not be more distinct; it is short and grows in sphagnum bogs, its spreading fruit and leaves are straw-coloured and stand out at quite a distance. An aquatic growing in the shallow pools on the bog was *Utricularia minor* (Lesser Bladderwort). This is the only member of the genus that flowers regularly in our area; its pale yellow, slight flowers are characteristic. We had split into two groups to cover both shores of the lochs, but one group had covered half of one shore when the other had hardly got off the starting blocks! Problems, something interesting perhaps? Martin Robinson's ever keen eye had picked up the tiniest member of our orchid family *Hammarbya paludosa* (Bog Orchid); in all 16 flowering spikes and 22 non-flowering spikes were counted, and that must have been the best catch of the day!

In the evening we dined in a restaurant in the village of Weem near Aberfeldy where we were staying. We celebrated Lynne Farrell's birthday, who had not long retired from SNH. Some of us stayed in what had been the quarters of General George Wade during the building of the military road from Crieff to Dalnacardoch in the 1730s.

Our final day was spent at Dun Coillich (NN75), to the south west of our first excursion.

In the morning we explored a limestone cliff at the base of Schichallion that was full of interest and colour, almost as if it were a garden in the middle of the moor. *Helianthemum nummularium* (Common Rock-rose) was flowering plentifully; other plants of interest were *Galium boreale* (Northern Bedstraw), *Antennaria dioica* (Mountain Everlasting), *Helictotrichon pratense* (Meadow Oat-grass), *Listera cordata* (Lesser Twayblade), *Pimpinella saxifraga* (Burnet-saxifrage), *Parnassia palustris* (Grass-of-Parnassus), *Juncus alpinoarticulatus* (*Alpine Rush*) and *Carex x fulva*, the hybrid between *C. hostiana* x *C. viridula*. The end of the limestone was punctuated by two adders that were sunning themselves, one slipped into the undergrowth at the approach of the party, but the other adder remained for all to admire. We ascended the northern slopes of Dun Coillich where the soils are generally acid, but with pockets of slightly calcareous conditions. Our finds included *Polygala vulgaris* (Common Milkwort), much less common than *Polygala serpyllifolia* (Heath Milkwort) in our area, and *Rumex longifolius* (Northern Dock). The slopes had been planted up as part of a community woodland initiative, and trees were planted in the excavated soil that had been lifted from the ground by machine. The excavations left behind were just the right size to consume an entire botanist, which made the afternoon's excursions a little challenging to say the least.

Thanks to all who helped on the excursions and for the considerable number of records and records of interest that were made.

Alistair Godfrey

10.Cama' Choire, Dalnacardoch

Sun, August 5th

Everyone had obviously seen the weather forecast as only Les Tucker and Martin Robinson decided to brave the heavy rain in this most exposed of places. It turned out to be a real trial of endurance: when the rain was light enough the midges made botanising almost impossible, and when it was heavy enthusiasm was hard to maintain. Having driven up to the ford about a kilometre short of Sronphadruig Lodge we parked beside a colony of *Gentianella campestris* (Field Gentian), which seems to like the grassy track-sides in this area. We then struck off north along the riverside, almost immediately having the find of the day: a stand of *Equisetum x mildeanum*, the hybrid between *E. sylvaticum* (Wood Horsetail) and *E. pratense* (Shady Horsetail). Fortunately Martin had been at Heather McHaffie's workshop on hybrid Equiseta the previous day! Heather later kindly confirmed the record.

We struck off up to Am Meadar, the hill overlooking the coire from the south, in the vain hope that height might give us freedom from the midges, but this entailed crossing a large area of boggy, peaty flushes, where they were unspeakable. The most remarkable thing here was the profusion of *Carex pauciflora* (Few-flowered Sedge). At this stage of the day it was possible to enjoy the idea that one particular little group on a hummock of moss looked like a miniature windfarm. The flushes were quite acidic here but some of the better ones contained *Juncus triglumis* (Three-flowered Rush) and *Euphrasia scottica* (Eyebright) was plentiful. On the higher ground we found patches of *Antennaria dioica* (Mountain Everlasting), *Gnaphalium supinum* (Dwarf Cudweed) and *Loiseleuria procumbens* (Trailing Azalea) on the predominately acid rock, and a small bit of *Saxifraga oppositifolia* (Purple Saxifrage) on a rare basic outcrop. We overlooked Cama' Choire and contemplated that it would take several days to do it any sort of justice. There was the choice of whether to descend into it to look for some basic rock outcrops or to keep to the higher ground where the midges might be less. The rain got heavier still as we skirted the southern edge of the corrie, but as we traversed round the eastern side of the hill,

feeling that we had survived until early afternoon and honour was satisfied, we found a very fine colony of *Carex capillaris* (Hair Sedge) running the length of a flush, a scatter of *Cornus suecica* (Dwarf Cornel), a small patch of *Lycopodium annotinum* (Interrupted Clubmoss) and a large expanse of non-flowering *Carex vaginata* (Sheathed Sedge).

Two soggy tetrad recording cards later we arrived back at the vehicle and enjoyed a late lunch, which we hadn't been inclined to have on the hill.

Martin Robinson

11. Pitmedden Forest

Sun, August 26th

This excursion was planned to take place on the River Earn Meanders, but I wasn't able to carry out a recce beforehand, so I took a safe bet and meandered up to the wooded slopes to the south of Abernethy on the Perth/Fife boundary instead. Plantation forestry may provide a blanket of disappointment, but there are usually a few botanical jewels tucked away to be enjoyed. Pitmedden is not heavily managed for timber production and there is a considerable balance weighted towards recreation and conservation management; the forest cover is often light or open and there are many ponds and burns to explore.

We started by exploring some of the older ponds and found three interesting sedges. The large, brown, shaggy inflorescences of *Carex disticha* (Brown Sedge) provided a handsome show, but the carpeting of a large area of a fine-leaved one was more elusive in revealing any inflorescences. Eventually, we found a few and their hairy utricles confirmed our suspicion that this was *Carex lasiocarpa* (Slender Sedge). Near the middle of this patch was a more open area where we found the delicate drooping heads of *Carex limosa* (Bog-sedge).

Dryopteris carthusiana (Narrow Buckler-Fern) was found in the vicinity of the ponds. Its brighter coloured fronds and the damp habitats in which it is found separate it from the similar-looking *Dryopteris dilatata* (Broad Buckler-Fern). Other interesting finds in the ponds were *Menyanthes trifoliata* (Bogbean), *Hydrocotyle vulgaris* (Marsh Pennywort) and *Veronica scutellata* Marsh Speedwell, sometimes to the sweet smelling accompaniment of *Mentha aquatica* (Water Mint).

Pilularia globulifera (Pillwort) was found around the edges of two of the newer ponds. Its presence was first recorded by David Bell, who has done much to encourage the excavation of ponds in the forest, which he proudly numbered as 50 in 2000. I wonder how many there are now? *Pilularia* is an unusual relative of the ferns being an aquatic. Its name is derived from the spore-bearing bodies - sporocarps - that look like little, green pills. This species has declined over its range due to the loss of such features as cattle ponds. Thanks to David's enterprise, the support of the Forestry Commission, and possibly some assistance by birds, we are able to see how this trend may be reversed, something the newts would agree with if they had a voice.

We recorded species and hybrid willows; *Salix x reichardtii* (*S. caprea x cinerea*) and *Salix x smithiana* (*S. cinerea x viminalis*). *Larix x marschlinsii* (Hybrid Larch) (*L. decidua x kaempferi*) was included in the coniferous planting, and European Larch *L. decidua* was part of an older planting. *Pinus sylvestris* (Scots pine) forms much of the planting and provides a pleasing backdrop to the forest.

Harking back to the more open aspect of the forest, a small patch of *Potentilla anglica* (Trailing Tormentil) was found growing in a hollow next to the track. This is known as *P. procumbens* in the Flora of Perthshire; its distribution recorded there is greater than might be expected, but there is a suggestion that it might be overlooked, which I have to agree with. This

species is similar to *P. erecta* (Tormentil), but *P. anglica* has broader leaves and occasional flowers with five petals and sepals. It grows in free draining soils, which are more base rich than the majority of habitats within which *P. erecta* grows, but both will be found in grassland. *Stachys officinalis* (Betony) was another example of a plant we found that is characteristic of more base rich soils, typically the drier, lower slopes of these andesite hills.

Alistair Godfrey

12. Birnam Glen

Sun, October 7th

We were ably led on this fungal foray, as we always are, by Keith Cohen. The summer had been much cooler than the previous year's, and the variety and number of species were reduced as a result. Alistair Godfrey has produced a list of what we found, and suggests that the reader refers to an identification book for illustrations and more information. Our walk took us along the bottom slopes of Birnam Hill from the houses to the quarry, and the locations for these finds are given in most cases.

<i>Amanita citrina</i>	In birch woodland with oak and beech.
<i>Amanita excelsa</i>	In birch woodland with oak and beech.
<i>Amanita vaginata</i>	In birch woodland with oak and beech.
<i>Armillaria gallica</i>	In quarry.
<i>Ascocoryne sarcoides</i>	On sawn-up sections of beech tree bole.
<i>Bjerkandera adusta</i>	On sawn-up sections of beech tree bole.
<i>Bolbitius vitellinus</i>	
<i>Calocera cornea</i>	On sawn-up sections of beech tree bole.
<i>Calocera viscosa</i>	On sawn-up sections of beech tree bole.
<i>Chlorociboria aeruginascens</i>	On sawn-up sections of beech tree bole.
<i>Coprinus atramentarius</i>	In quarry.
<i>Coprinus comatus</i>	In birch wood with oak and beech.
<i>Coprinus disseminatus</i>	On sawn-up sections of beech tree bole.
<i>Coprinus micaceus</i>	In birch woodland with oak and beech.
<i>Cystoderma amianthinum</i>	In quarry at bottom of piles of waste bitmac.
<i>Fomes fomentarius</i>	On sawn-up sections of beech tree bole.
<i>Ganoderma applanatum</i>	On sawn-up sections of beech tree bole.
<i>Gymnopus erythropus</i>	In birch woodland with oak and beech.
<i>Hebeloma crustuliniforme</i>	In quarry.
<i>Laccaria amethystina</i>	In birch woodland with oak and beech.
<i>Laccaria laccata</i>	In birch woodland with oak and beech.
<i>Lacrymaria velutina</i>	Under larch and beech in quarry.
<i>Lactarius pubescens</i>	In quarry.

Lycoperdon perlatum	In birch woodland with oak and beech.
Macrotiophula fistulosa	In birch wood with oak and beech.
Mycena capillaripes	On sawn-up sections of beech tree bole.
Mycena galericulata	In birch woodland with oak and beech.
Mycena galopus	In birch woodland with oak and beech.
Nectria cinnabarina	In birch woodland with oak and beech.
Neobulgaria lilacina	On sawn-up sections of beech tree bole.
Paxillus involutus	In birch woodland with oak and beech.
Phaeolus schweinitzii	On the root of <i>Picea sitchensis</i> .
Piptoporus betulinus	In birch woodland with oak and beech.
Postia subcaesia	In birch woodland with oak and beech.
Psathyrella piluliformis	In birch woodland with oak and beech.
Rhytisma acerinum	In birch woodland with oak and beech.
Russula betularum	In birch woodland with oak and beech.
Russula claroflava	In birch wood with oak and beech.
Russula cyanoxantha	In birch woodland with oak and beech.
Russula heterophylla	In birch woodland with oak and beech.
Russula mairei	In birch woodland with oak and beech.
Russula ochroleuca	In birch woodland with oak and beech.
Scleroderma citrinum	In birch woodland with oak and beech.
Stereum hirsutum	On sawn-up sections of beech tree bole & dead birch.
Suillus grevillei	Under larch and beech in quarry.
Trametes versicolor	On sawn-up sections of beech tree bole.
Tricholoma columbetta	In birch woodland with oak and beech.
Typhula quisquiliaris	In birch woodland with oak and beech.
Xylaria hypoxylon	On sawn-up sections of beech tree bole.
Xylaria longipes	On sawn-up sections of beech tree bole.

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

19.3.08

Richard Thomas - Editor