

PERTSHIRE SOCIETY OF NATURAL SCIENCE

BOTANICAL SECTION

BULLETIN No. 25 - 2002

Editorial

The year 2002 will be chiefly remembered by botanists as the year that *Atlas 2000* finally became a reality. Now sensibly called just the *New Atlas of the British and Irish Flora*, its publication was celebrated last July by the Department for Environment, Food and Rural Affairs as the main funder and the Botanical Society of the British Isles as the main doer. Although priced at nearly £100, the initial print run was sold out by October, and it is only now (late Feb 2003) that it is available again. It is a monumental work of reference, both literally (it has 910 pp and weighs nearly 10 lbs) and botanically (it has dot-maps of over 2000 species and information in the text and on an accompanying CD-ROM on over 4000 items when hybrids, aggregates etc are included). It is a fitting conclusion to a lot of hard work by bodies like ourselves, which is duly acknowledged in the list of contributors. A copy has been purchased at a great discount by the Section and will soon be deposited with the Section's other books at the A K Bell Library's Local History desk.

The dot-maps of the *New Atlas* convey far more information than did those in the original one of 1962. The dot appearance classifies whether the most recent record for a 10-km grid square is modern, pre-1987 or pre-1970. And the dot colour differentiates between a species reckoned to be native in that square (blue) from one reckoned alien for whatever reason (red). Accompanying each dot-map is a paragraph or two about the species, its ecology, its distribution and sometimes its altitude range. An introduction presents interesting statistics on the methods and accuracy of the results. Instead of the simple and useful transparent overlays of geology and climate of the original *Atlas*, the *New Atlas* (whose slightly smaller maps therefore no longer fit) comes with a CD-ROM which includes species dot-maps and environmental maps, these a computer user, after some practice, will be able to combine in innumerable ways to shed new light on plant associations.

The *New Atlas* will undoubtedly become a major reference source in future botanical research and publications.

Freddy French has drawn to my attention the names of three Botanical Section members or former members who have recently died and has kindly provided some biographical details.

Jack Myles belonged to Ruthven. After working in the raspberry industry he established the firm of Myles of Perth dealing in cleaning materials. He was active at indoor and outdoor meetings and at one time was a Committee member. An active gardener, after the death of his wife Flo he retired to a quieter life.

Isobel Carter was a physiotherapist living and working near Bridge of Earn. Along with her husband Harold who died several years ago she was a founder member with a particular interest in ferns. Latterly she did not attend meetings because of hearing difficulties.

Bill Gauld had a distinguished Civil Service career. Born in 1919, a son of the Manse at Callander, he was educated at Fettes and Aberdeen University, taking 1st Class Honours in Classics. After World War 2 service he entered the Dept. of Agriculture for Scotland in 1947, was Private Sec. to the Secretary of State for Scotland (1955-57) and ended as Under-Secretary at the Dept. of Agriculture and Fisheries for Scotland, 1972-79. He had wide natural history interests and was President of the Botanical Society of Edinburgh 1978-1980. Following his retirement to Crieff he joined this Section and became a regular attender at both indoor and Field meetings. In 1982 he took over as Chairman of the Section and carried out that role until March 1992, guiding it with ability and a fine sense of humour. Always bright and cheerful, he is sadly missed.

(more information can be found in recent editions of Who's Who up to 2002)

Richard Thomas (Editor)

PS Last year's 2001 Bulletin should have been no. 24 and not no. 23 as printed. I noticed it too late last year but by this year had forgotten all about it and was on the point of perpetuating the error when Liz Lavery submitted her report with the correct Bulletin number on it! So apologies to all and many thanks to her. (This is what easily happens when you use a word-processor with the previous year's copy as a template for the current one!)

Reports from 2002 Field meetings:-

1. River Almond, Perth

Sunday 10th March 2002

The theory of chaos says that the movement of a butterfly's wing on one side of the world can have a significant effect on the other. I was due to be working with volunteers in Crieff on this day, but an overnight fall of snow blocked the roads in the morning. By midday much of the snow had disappeared and so I turned my attention to the River Almond instead.

Cold as the wind was, five of us braved the elements, including the section's youngest member, aged seven. We encountered our first specimen of *Gagea lutea* (Yellow Star of Bethlehem), near the old bridge that used to carry the A9. Soon after, we were rewarded by many more specimens, some of which were in flower.

The broad bright green leaves with hooded tips and three ribs on the undersides of the mature leaves allowed us to distinguish this species from the spring foliage of other plants. Flowering had started, but when I visited this colony the following week, many more plants were in flower. An associate growing with these plants was *Saxifraga granulata* (Meadow Saxifrage).

Plants growing on the south bank of the river mouth were badly chewed by rabbits and had been nipped off in the early stages of growth before the leaves had unfurled. This species requires deep shade and a free-draining soil, and as its flowering time re-approaches a search on your local riverbank would be worth making, as I am sure the species is under-recorded.

Alistair Godfrey

2. Taymouth Castle, Kenmore

Saturday 18th May 2002

Seven members and a guest turned up on an overcast and cool day. The forecast of heavy rain fortunately turned out incorrect - there was just some occasional rain.

The river Tay's west and south bank near the Castle produced a number of interesting plants most probably of garden origin. Examples were *Sanguisorba officinalis* (Great Burnet) - not known in mid-Perth - , and the rare *Stachys officinalis* (Betony). Some curious willows were present, including *S. myrsinifolia x phyllicifolia* (*S. x tetrapla*) the hybrid between Dark-leaved Willow and Tea-leaved Willow, and another which was probably *Salix arbuscula* (Mountain Willow) washed down from the hills. There was a colourful display of *Primula veris* (Cowslip) growing in well-grazed turf.

The bridge over the Tay being closed, we circled round through policy woodland. Here was more *Arum maculatum* (Lords and Ladies) than I have ever seen before in Perthshire. Other interesting plants were a double-flowered *Cardamine pratensis* (Cuckoo Flower), *Convallaria majalis* (Lily of the Valley), *Doronicum pardalianches* (Leopardsbane), *Luzula luzuloides* (White Woodrush), *Polygonatum multiflorum* (Solomon's Seal), *Prunus laurocerasus* (Cherry Laurel) and *Viburnum opulus* (Guelder Rose).

Richard Thomas

3. Burnmouth towards Taymount and Ballathie Saturday 15th June 2002

After having led this excursion I agreed to collate the records we had made. This was a very useful exercise, because I found that everyone recorded some plants others did not and hence five sets of eyes were better than one.

As most will know, the soils of the banks of the Tay are fairly calcareous. Plants from this habitat included:- *Arabis hirsuta* Hairy Rock Cress, *Carex caryophyllea* and *C. muricata* Spring Sedge and Prickly Sedge, *Cerastium semidecandrum* Little Mouse-ear, *Geranium sanguineum* Bloody Cranesbill, *Koeleria macrantha* Crested Hair Grass, *Malva moschata* Musk Mallow, *Origanum vulgare* Wild Marjoram, *Polygala vulgaris* Common Milkwort and *Teesdalia nudicaulis* Shepherd's Cress.

Little Mouse-ear is probably under-recorded, due in part, I am sure, to the small flowers that only open in bright sunshine. Its leaves are a small tight basal rosette, often only two are conspicuous and are flattened against bare sandy soil, which have often withered by late summer. Common Milkwort is not as common as supposed. It is much less common than *Polygala serpyllifolia*, the so-called Heath Milkwort. Stace in his *New Flora of the British Isles* is characteristically brief in his key to the species. The lower stem leaves in *P. serpyllifolia* are said to be opposite, but I find this a difficult distinguishing characteristic because the lower internodes are so short and the stem so distorted that saying what is opposite and what is not is extremely difficult. *P. vulgaris* certainly produces larger flowers, and to my eye the blue colouration is more intense.

We were lucky to have Jackie Muscott from Edinburgh with us. Bloody Cranesbill in the Lothians, she relates, is restricted to Arthur's Seat and the coast, luckily this colourful plant is more widespread in Perthshire. Jackie produced a useful list of plant galls for us -

Chirosia betuleti - on *Dryopteris*, caused by a fly

Eriophyes laevis mangulis - on *Alnus glutinosa* (Alder), caused by a mite

Jaapiella veronicae - on *Veronica chamaedrys* (Germander Speedwell), caused by a midge

Taphrina pruni - on *Prunus spinosa* (Sloe), caused by a fungus

The galls formed on Germander Speedwell are very common, which are white furry swellings on the apices of the shoots. The *Taphrina* fungus affects the fruit of the sloe and makes them look like fooshtie old plums.

The sun shone for us this day and we had fine views of Campsie Linn in full surge. Thanks are due to Mike Smith for providing us parking and access on the day.

Alistair Godfrey

4. East and West Warroch Burns, Kinross

Saturday 22nd June 2002

After heavy early morning rain six of us set off up the East Warroch Burn as the weather cleared, and a fair wind brought us blue skies until we returned to the cars parked at Carnbo village hall in the late afternoon. We were lucky enough to have

with us local naturalist Malcolm Smith to show us the way and George Ballantyne, BSBI recorder for VC 85 Our first find of the day was *Ranunculus hederaceus* (Ivy-leaved Crowfoot) in wet runnels beside the first of many gates we climbed. We explored the unusual area of the Witches Knowe and walked on up the burn recording as we went. *Gymnocarpium dryopteris* (Oak Fern) and *Phegopteris connectilis* (Beech Fern) were found growing near each other on a steep slope above the burn, these two ferns seem nearly always to grow together

On clambering over an awkward fence we arrived in a beautiful orchid-rich meadow where we stopped for lunch There were many spikes of *Dactylorhiza* species: *D. fuchsii*, *D. maculata*, *D. purpurella* and others – hybridisation had produced a great variety of spikes and these were examined and discussed *Gymnadenia conopsea* (Fragrant Orchid) and *Platanthera chlorantha* (Greater Butterfly Orchid), at least 10 spikes, also occurred here and *Lysimachia nemorum* (Yellow Pimpernel) in wetter flushes The meadow perfectly illustrated the importance of grazing management on the flora The area was protected by an electric fence and, though the ground was heavily poached by cattle, there were few signs of any recent grazing Just beyond the meadow on shorter grazed heath were plants of *Viola lutea* (Yellow Mountain Pansy)

Another feature of the walk was its *Carex* (sedge) species Lynne Farrell spotted *Carex hostiana x viridula* (*C. x fulva*) (the hybrid between Tawny and Yellow Sedge) and Bill Hay discovered a large patch of *Carex laevigata* (Smooth-stalked Sedge) on a bank high above the eastern side of the burn; I shall never take *C. bimeris* for granted again. There was no time to explore the gorges of the West Warroch burn, but our final goody was a field full of *Meum athamanticum* (Spignel) as we hurried home Bill Hay and George Ballantyne made a second visit to complete the exploration of the West Warroch burn a week later and a total of 239 species were recorded on the two days

Liz Lavery.

5. Meall nan Gabhar/Meall nan Tighearn, Main Argyll (v.c. 98) and West Perth (v.c. 87) Sunday 23rd June 2002

[Although 95% of this joint meeting between the BSS, BSBI and the PSNS was to the east flank of Meall nan Tighearn (SW of Ben Lui at GR 27/2323 approx.) in Argyll and only 5% in W Perth, the Editor felt the report was of considerable interest]

We met the site manager David Pickett from SNH who kindly arranged for two long wheel-base landrovers (with Forest Enterprise); David and two of his staff came along with us The site is part of the Ben Lui NNR which is very well known botanically but this part of it is seldom visited because of its remoteness. The forestry track that we used is brand-new and permission has to be obtained beforehand for vehicular traffic

Shortly after the drop off point we were pleased to note the presence of *Carum verticillatum* (Whorled Caraway) in ditches under the electricity pylons, a plant unknown in the east of the country where most of us had come from Also in this area were masses of *Pedicularis palustris* (Marsh Lousewort), more than I think I have seen anywhere else It having been one of the wettest seasons and with plenty of rain lately, the river was coming down in near spate causing most of the party to search

well upstream for a safe crossing. On reaching the cliffs we were delighted to find how rich they were especially in *Salix arbuscula* (Mountain Willow) at quite low levels and *S. myrsinites* (Whortle-leaved Willow) higher up. Also quite numerous at lower levels were about a dozen patches of *Dryas octopetala* (Mountain Avens) although mainly hardly flowering. About 150 species of flowering plants and ferns were seen on the day, the most exciting being two Red Data Book Species *Woodsia alpina* (Alpine Woodsia) and *Bartsia alpina* (Alpine Bartsia) with about 12 and 25 respectively. The Woodsia was on the cliff in close proximity to a few flowering *Saxifraga nivalis* (Alpine Saxifrage) but the Bartsia was about 50 metres away from the cliffs at the head of a steep scree slope. One boulder we came across was carpeted with *Poa alpina* (Alpine Meadow Grass) and very occasionally we found *Hymenophyllum wilsonii* (Wilson's Filmy Fern) on wet boulders. On another boulder were about 10 plants of *Botrychium lunaria* (Moonwort). A selection of the more interesting mainly alpine plants were *Adoxa moschatellina* (Moschatel) (rare), *Asplenium viride* (Green Spleenwort), *Carex atrata* and *capillaris* (Black Alpine and Hair Sedge), *Draba incana* (Hoary Whitlowgrass), *Equisetum pratense* (Shady Horsetail), *Juncus triglumis* (Three-flowered Rush), *Polystichum lonchitis* (Holly Fern), *Potentilla crantzii* (Alpine Cinquefoil) and finally *Trollius europaeus* (Globe Flower) was quite numerous. Probably *Arabis hirsuta* (Hairy Rock Cress) was the only species found in E Perthshire and not in the Argyll VC.

Professor Watling kindly supplied a list of fungi and several others (mainly Jim McIntosh, Clive Dixon, Jackie Muscott, Stuart Maxwell, Lesley Tucker, Alison Wilson, Barbara Sumner and myself) contributed to the 150 plants seen. Presumably because of the persistent wet weather there was a distinct lack of other wildlife with virtually no birds, moths or butterflies except that on the way back I found a gold ringed dragonfly *Cordulegaster boltonii*. Generally everyone enjoyed the trip.

Douglas McKean, RBGE British Section

6. Arnbathie and Goddens Farms

Wednesday 3rd July 2002

The evening started dry but eventually soaked the four of us who attended. An artificial channel had been cut in the bog to the north of the farm but this did not seem to have seriously affected the botanical interest. There were a number of sedges with the profusion of *Carex disticha* (Brown Sedge) and *Carex diandra* (Lesser Tussock Sedge) especially noteworthy. Both *Galium palustre* (Common Marsh Bedstraw) and *Galium uliginosum* (Fen Bedstraw) were noted. We had some difficulty crossing the ditch at the north side of the bog because of the high water level but the slopes of the hill above had an interesting flora of dry rather basic ground. *Helianthemum nummularium* (Common Rockrose), *Astragalus danicus* (Purple Milk Vetch), *Sagina subulata* (Heath Pearlwort), *Koeleria macrantha* (Crested Hair Grass), *Asplenium ruta-muraria* (Wall Rue) and *Asplenium trichomanes* (Maidenhair Spleenwort) were noted. We then transferred to the pond near the Pitroddie road which seemed to be of much less interest, but even our cursory inspection was cut short by the rain now of near monsoon intensity.

Bill Hay

7. King's Myre

Saturday 20th July 2002

Heavy overnight rain had fallen and continued until lunchtime. The loch as a result was several feet above its normal level, but this did not deter the five members who paddled all round the myre. 13 different sedges were recorded of which the most interesting were two apparently different forms of *Carex lasiocarpa* (Slender Sedge) and a good clump of *Carex vesicaria* (Bladder Sedge). But *Carex limosa* (Bog Sedge) previously recorded from here was not seen. In the myre *Mentha aquatica* (Water Mint), *Lycopus europaeus* (Gipsywort) and *Scutellaria galericulata* (Common Skullcap) were recorded and at the wood edge a fine colony of *Pyrola minor* (Common Wintergreen). Alistair's grapnel found nothing more interesting from the loch than *Elodea canadensis* (Canadian Waterweed), but at the wood edge he found a colony of the hybrid between the Field and Water Horsetails, *Equisetum arvense x fluviatile*.

There is, I think, sufficient interest here for a return visit in more normal summer conditions.

Bill Hay

8. Lochan Daim, Tullochroisk and McGregor's Cave area Sat 17th August 2002

A small group of 6 (including a member of the junior section) met near Lochan an Daim below Schiehallion. We made our way round the shore at the west end investigating the wet areas. Water levels seem quite high. In the fens and water margins we found one of two plants of *Sparganium minimum* (Least Bur Reed) and *Eleocharis fluitans* (Floating club rush), as well as bladder-wort *Utricularia* sp. Neither *Carex lasiocarpa* (Slender sedge) nor *C. diandra* (Lesser tussock sedge) were located, but there are old records. In the margins of the loch was a well-calcified *Chara* which appeared to be *C. virgata*.

We investigated the calcareous stony flushes immediately to the east of the loch (the usual suspects, eg lots of *Saxifraga aizoides* (Yellow saxifrage) and species such as *Armeria maritima* (Thrift)), then followed the path down through the birch woodland towards McGregor's cave via Creag an Tuathanaich. A small adder was spotted on the way as the sun emerged.

After lunch at the Cave, with wonderful views over Dunalastair reservoir, we made our way back up the burn towards the Lochan. Sparse bits of ash woodland yielded characteristic species of base rich soils, and lichens of *Lobarion* community were present on the older trees. A small area of limestone on the east side of the burn had masses of *Helianthemum nummularium* (Rock rose). Unfortunately this area is within a fenced enclosure for woodland regeneration and may become scrubbed over. A large flat wet area further up yielded more *Utricularia* as well as some dragonflies and Scotch Argus butterflies. Chanterelle mushrooms were found in the woodland below the dam.

Neale Taylor

9. Fungus foray, Deuchny Wood and Corsiehill, Perth Sunday 29th September.

There was a large turnout for this excursion and the subject was obviously popular. We were ably led by Keith Cohen and assisted by Dallas Seivewright, both countryside rangers working for Fife Council. Bill Hay and Keith Cohen had made an investigation prior to our visit, and this made the finding and identification of species easier and more enjoyable for the rest of us.

I am going to provide a list of what we saw. This will not do justice to our enjoyment of the day, but should help beginners with identification if they visit these sites with an identification book this autumn.

Deuchny Wood – under beech trees.-

<i>Boletus subtomentosus</i>	<i>Lactarius victus</i>	<i>Lactarius blennius</i>
<i>Oudemansiella radicata</i>	<i>Tricholoma virgatum</i>	<i>Laccaria amethystea</i>
<i>Russula nigricans</i>	<i>Russula cyanoxantha</i>	<i>Russula foetens</i>
<i>Russula maraei</i>	<i>Russula sp.</i>	<i>Phallus impudicus</i>
<i>Cordyceps ophioglossoides</i>	<i>Hypholoma fasciculare</i>	<i>Collybia confluens</i>
<i>Collybia peronata</i>	<i>Pseudohydnum gelatinosum</i>	<i>Trametes versicolour</i>
<i>Lycoperdon perlatum</i>	<i>Amanita rubescens</i>	<i>Amanita excelsa</i>
<i>Inocybe sp.</i>	<i>Tricholoma sp.</i>	<i>Cortinus sp.</i>

Corsiehill – mostly under conifers -

<i>Armillaria gallica</i>	<i>Lactarius sp.</i>	<i>Hymenochaete rubiginosa</i>
<i>Calocera viscosa</i>	<i>Entyloma sp.</i>	<i>Russula ochroleuca</i>
<i>Coprinus comatus</i>	<i>Coprinus sp.</i>	<i>Russula amara</i>
<i>Tricholoma virgata</i>	<i>Tricholoma sp.</i>	<i>Russula drimeia</i>
<i>Tremella foliacea</i>	<i>Scleroderma sp.</i>	<i>Amanita pantherina ?</i>
<i>Lycoperdon perlata</i>	<i>Collybia butyracea</i>	<i>Amanita excelsa</i>
<i>Hygrophorus pustulatus</i>	<i>Collybia peronata</i>	<i>Heterobasidium annosum</i>
<i>Laetiporus sulphureus</i>	<i>Collybia confluens</i>	<i>Lyophyllum connatum</i>
<i>Inocybe patouillardii</i>	<i>Boletus badius</i>	<i>Laccaria laccata</i>
<i>Postia styptica</i>	<i>Clytocybe clavipes</i>	<i>Phallus impudicus</i>

Alistair Godfrey

Alistair Godfrey writes that we did well to extend the period for our excursions this year, from the early flowerers to the last fruiting bodies. We had many fine days; notable was our lunch at McGregor's Cave above Loch Dunalastair – a memorable day. We hope to see you on our next excursions.

Thanks to all those who provided Field Meeting reports