

PERTSHIRE SOCIETY OF NATURAL SCIENCE

BOTANICAL SECTION BULLETIN No. 18 - 1994

Introduction

A very brief introduction to say thank you to all those who provided articles for this, the first Botanical Section bulletin under my editorship. All contributions were made in good time - the rest was up to me!

1994 was an eventful year as the Society commemorated the 100th Anniversary of the death of one of its founder members, Francis Buchanan White. It therefore seems fitting that the accounts of field meetings should be preceded by a report from his great grand-daughter, Anne Mathers, for whom some of the preparations proved rather fraught.

Barbara Hogarth, Editor

Chairman's thoughts on F.B.W. Centenary

When celebration of the centenary of the death on December 3rd 1894 of my great grandfather Francis Buchanan White was proposed by Michael Taylor at a PSNS Council meeting in October 1993 I welcomed the idea. It seemed to be a good way to give publicity to the Botanical Section's work helping the Vice-county recorders of the Botanical Society of the British Isles, for Perthshires three vice-counties, to update his Flora of Perthshire. The Checklist of plants currently recorded, compiled as a preliminary to the Flora had been published so it would all be to the good.

One year on, I'm certain it was a good idea from the publicity angle, both for the Botanical Section and the PSNS and its success was a tribute to the hard work of Michael and others involved in organising the weekend's events. On Friday 2nd December 1994 Michael lectured on F.B.W. and his work to a capacity audience, both PSNS members and visiting specialists. The one day Conference on Saturday, 3rd December, consisting of speakers who were specialists in the various fields of interest in Natural History that formed F.B.W.'s life work, was very well attended and of a consistently high standard - a very full day. Michael in his summing up felt that further days of this type would be worth repeating in years to come.

From my own point of view, while not having any of the organisation to cope with, things proved remarkably stressful in the run up to the event. Some members have already heard the saga but the Bulletin Editor, our Secretary, thought there should be a record for all to read.

In my ignorance I thought that arranging for a sculptor to clean up the family memorial stone and recut the inscription was straightforward. None

the less I put the matter in hand in good time - a year in advance - so that the press could be involved in the Council's commemorating the centenary at the graveside in Welshill by planting some of F.B.W.'s favourite alpines in the day. First difficulty, September 1994 had arrived and in spite of continual proddings no sculpting had begun. Work eventually commenced in mid-October. Second difficulty - workmen lost the inscription notes (said to have fallen between seats in their van) except for one side of the stone. This side was cleaned and the inscription begun - alas it was to commemorate Francis' brother who had nothing whatsoever to do with Natural History and was not even buried there. Apologies from sculptors - they would not charge for that work. Third difficulty - correct side of stone begun, but now the willow trees planted to commemorate the founding of the PSNS in 1867 were cut down by cemetery staff to allow freer access to the stone. Apparently no-one thought this was going to matter! Apologies from the District Council who later replaced the trees with new ones

Finally, after it became clear that unless the whole stone was cleaned etc. the resulting patchy appearance would be worse than its earlier state, I gave permission for this to be carried out, with the proviso that it must be done by mid-November. Ten days before the centenary was due the work was still not completed - threats to the sculptors that no money would be forthcoming gave the required impetus and hey presto, at last the job was done.

The footnote of course is that the weather was so clement that planting could take place, even on 2nd December, and readers of the PA the following Friday saw the Council surrounding your Chairman at the positively gleaming stone - spade in hand. Symbolically I must confess, except for one small shrub planted that day. Also it must be recorded that the week prior to the centenary the PA reporter did a good job both on the photography and the pularity of the reason for the celebration.

Den of Airlie, 22 May 1994

On a glorious day eight of us assembled to visit mainly this National Nature Reserve, with the permission of Scottish Natural Heritage. Only about a quarter of the Reserve is in the East Perthshire Vice County, the remainder in Angus. We spent most of the time recording the former, although Barbara, with the aid of binoculars, was also able to record her VC across the river.

From the onset we split into two parties - one explored the bottom of the gorge with its Old Red Sandstone cliffs whilst the other kept to the top of the precipice and did a foray into the upper reaches of the Auchrannie Burn above the Den. The gorge party was rewarded by confirming a rich flora in VC 89. This included Moschatel *Adoxa moschatellina*, Black Spleenwort *Asplenium adiantum-nigrum*, Green Spleenwort *A. trichomanes-ramosum*, Alternate-leaved Golden Saxifrage *Chrysosplenium alternatifolium*, Woodruff *Galium odoratum*, Shining Cranesbill *Geranium lucidum*, Wood Millet *Milium effusum*, Herb Paris *Paris quadrifolia*, Hartstongue *Phyllitis scolopendrium*, Stone Bramble *Rubus saxatilis* and Meadow Saxifrage *Saxifraga granulata*. The other group added nothing from the Den, finding that the higher

sections were extremely heavily rabbit grazed. They did, however, find some mildly calcareous, unimproved grassland and heath in the valley above the Den and recorded Common Rockrose *Helianthemum nummularium*, Petty Whin *Genista anglica*, Burnet Saxifrage *Pimpinella saxifraga* and Creeping Willow *Salix repens*. Whorled Solomon's Seal *Polygonatum verticillatum* was not reconfirmed in the gorge, however, this was not a particular objective (*some of us thought it was! Ed.*) of the meeting since a detailed census was conducted by the Scottish Rare Plants Project only two years ago. A total of 192 1987-onwards records were made - a very worthwhile exercise for this previously under-recorded 5 kilometre square.

Ros Smith

Moncrieff Hill, 4 June 1994

The reason for this trip was to celebrate the centenary of Francis Buchanan White, although as I explained to those present I had no direct evidence that he had ever been to the hill! We met in the afternoon at the Woodland Trust car park. The party of six started off a little late because most had become entangled in horrendous traffic problems on the motorway en route. Because of the nature of the trip it was not felt necessary to record in detail.

The bank above the car park yielded Common Centaury *Centaureum erythraea* and Common Cudweed *Filago vulgaris*. We then walked up along the forest tracks to get to Mordun Top. Below the top we found quite a lot of Purple Milk Vetch *Astragalus danicus*. The view from the top was as Thomas Pennant (I think!) had described it 'the glory of Scotland' (well, a nice view over Perth, up Strathearn and down the Tay Estuary). Further on Houndstongue *Cynoglossum officinale* was found still growing next to one of the forest tracks.

Owing to lack of time we started to make our way back (after getting slightly lost) down one of the new Woodland Trust paths, a flight of steps descending between two of the crags, and then eventually through some of the finest stands of sycamore in Perthshire.

Neale Taylor

Muirwood Wood, 19 June 1994

On a pleasant morning six members set off from Scone to explore Muirward Wood. The main reason for this visit was to try to locate One-flowered Wintergreen *Moneses uniflora*. The location for this species was very well known and collected at in the 19th century. It was so often visited that Buchanan White in his *Flora* feared that *Moneses* might become extinct here. In fact there used to be a specimen of this species in the Perth Museum herbarium (which has subsequently gone missing) dated 1922. It was felt that the Wood, which is still managed as a coniferous woodland with some Scots pine might still hold this species. Unfortunately examinations of the literature had not revealed any precise details as to the previous location except to say that it is thought that it was most likely to be in the woodland adjacent to the aerodrome.

After picking up a number of common species in the hedgerows in the approaches to the wood, we quickly found Common Wintergreen *Pyrola minor* in some open conifer woodland. The pine woodland proved to be quite dense in places, but some still held a ground flora with Blaeberry *Vaccinium myrtillus*. Although the wood appeared quite heavily grazed by roe deer in places, it was felt that it was not impossible that *Moneses* might still be present. Diligent searching revealed more *Pyrola minor*, which despite our best endeavours could not be turned into our prize!

Amongst other species seen were a very dramatic stand of Chickweed Wintergreen *Trientalis europaea*, a clump of Lemon-scented Fern *Oreopteris limbosperma* (very unusual in such a lowland situation), Oak Fern *Phegopteris connectilis* and, by some of the ruined wartime buildings in the wood, some odd alders which looked very introduced.

Neale Taylor

Kinnoull Hill, 25 June 1994

A small group of PSNS members met at the Museum to visit Annat Lodge. Unfortunately, this trip to see Francis Buchanan White's one time residence was not widely advertised by the main society and was poorly attended. Mike Taylor lead the trip and once at the lodge he gave us some interesting background information. We then had a look round the very overgrown rockery. We were amazed to find Shady Horsetail *Equisetum pratense* and Narrow-leaved Bittercress *Cardamine impatiens*, both growing as weeds (the latter extending down the drive). The former is mainly a species of montane grassland below cliffs and the latter a species of open rocky woodlands. We could only conclude that both were probably deliberately planted or accidentally introduced by Buchanan White. It will be interesting to see if the *Equisetum* turns out to be as pernicious a weed as that good old gardeners' favourite, the closely related Common Horsetail *E. arvense*.

We had planned to continue on to Kinnoull Hill, but as Mike was giving us some of his spiel, the heavens opened, the thunder started and so we beat a hasty retreat. Perhaps the main society had known something we did not!

Neale Taylor

Creagan Loch, 26 June 1994

This visit was arranged to attempt to rediscover Alpine Pennycress *Thlaspi caerulescens* at its Creagan Loch site. Details and a grid reference were known but the plant had not been recorded since 16 June 1962.

Three hardy members (Barbara Hogarth, Nick Boss and myself) gathered at the main road end of the barytes mine track near Tomphuil. We had permission to take a car up the track but were recommended to have four-wheel drive. Nick Boss kindly volunteered to drive, despite lacking it, and we were pleased to find there were few problems to negotiate right up to the very steep section above the mine, where we took to our feet. The drive certainly saved a long walk-in.

The mine is not attractive and one mine-shaft in particular disappeared into a dark and seemingly bottomless abyss right next to the track. We made our way eastwards as rapidly as possible along a grassy land-rover track and soon arrived at the grid reference which appeared to be right in the middle of this newish track. We combed the ground for nearly a quarter mile in all directions but without success. Certainly the most plausible sites were some of the gravelly edges of this track. The possibility must remain that creation of this track has obliterated the plant along with its habitat as for the most part the surrounding area is typical rough and rocky upland grassland.

During lunch, following our lengthy search, the promised bad weather arrived with a damp cold mist blowing in and cutting visibility to a hundred yards. Abandoning thoughts of visiting Farragon Hill in the distance we chose instead to contour under the rich crags of Creagan Loch and were rewarded with a number of calcicole montane species such as Green Spleenwort *Asplenium trichomanes-ramosum*, Holly Fern *Polystichum lonchitis*, Black Alpine Sedge *Carex atrata*, Mountain Willow *Salix arbuscular*, Sibbaldia *Sibbaldia procumbens* and a Hieracium of Section Subalpina. Good compass work got us back to the car! The return drive in the car certainly spared us a long and very wet walk back to the main road.

We thank the Mine Manager for permission to visit the site and for use of the road.

Richard Thomas

Glenalmond College, 10 July 1994

This excursion to the grounds of Glenalmond College focused on the golf course and a short stretch of riverside. Despite this being a change from the venue originally proposed (Logiealmond) nine members duly met at the College at 11.30 on a rather wet and humid Sunday morning.

Our first objective was to head in the direction of the golf course where there were interesting species to be seen. En route we strolled through the grounds - looking particularly at the less cultivated margins and discussing the identity of certain speedwells, namely Germander Speedwell *Veronica chameadrys* and Slender Speedwell *V. filiformis*. There followed a debate about the diagnostic features of Speedwells as some queried the difference between the latter and Common Field Speedwell *V. persica*. Also seen were Hogweed *Heracleum spondylium* and its cousin Angelica *Angelica sylvestris*. For some the main interest of the day, when we eventually arrived at the golf course, was provided by the orchids. Areas of fairly species-rich marshy grassland supported Northern Marsh Orchid *Dactylorhiza purpurella*, Common Spotted Orchid *D. fuchsii* and Heath Spotted Orchid *D. maculata*, along with an array of colourful and showy hybrids. Later that afternoon the group headed back towards the College to find a passable and safe route down to the river. For the most part the banks proved too precipitous but became accessible by a row of cottages close to the College. At the end of the day a total of 108 species was recorded for Richard Thomas.

Thanks are due to Glenalmond College for allowing access to the grounds, to the College Porter for his assistance on the day and also to Les Smith who persevered with the organisation of this meet after permission was not forthcoming for the published upland excursion to nearby Logiealmond.

Nick Boss

Seaton Cliffs, 23 July 1994

A joint excursion with the BSBI, this meeting took to the Angus Coast to visit this SWT Reserve (part of a coastal SSSI which runs north from Arbroath). The sun shone as eight of us assembled at the appointed hour. The arranged meeting place at the extreme end of the Arbroath Promenade provided conveniences and almost instant access to the Seaton Cliffs Reserve. For much of its length the path runs along a narrow remnant of coastal grassland sandwiched between intensively farmed arable land and steep, high cliffs of Old Red Sandstone.

We observed the damage being done to the site - agricultural spray drift has clearly favoured the growth of tall rank grasses in places and arable weeds have only too readily colonised disturbed ground. Add the pressure from recreational users (anglers, mountain bikers and walkers) and very dry summers which are all taking their toll on this vulnerable habitat. None the less there was an abundance of wildlife to be seen both on land and out to sea. We followed the progress of a small group of porpoises and saw a variety of seabirds including gannets, puffins, shags and eider ducks as well as the ubiquitous gulls. The cliffs are also home to a colony of house martins. The species-rich grassland flora here supports a rich insect fauna and some of the group were able to record bees, butterflies and moths in addition to the plants. Of interest were an abundance of grayling butterflies and the occasional little blue butterfly. The presence of Kidney Vetch *Anthyllis vulneraria* enables small populations of the latter butterfly to breed on this site. Also thriving along this part of the coast are common blue butterflies and six-spot burnet moths which looked spectacular in their black and red livery when they alighted on flowers of Common Knapweed *Centaurea nigra*. Some exposed areas were very parched after a prolonged spell of dry weather and plants like Purple Milk Vetch *Astragalus danicus* were far from their usual showy selves.

We had lunch on rocky slabs below a sandstone stack known as the Deil's Head (one of several sculpted rock forms in the vicinity) - having just found a small group of Carline Thistle *Carlina vulgaris* on thinly vegetated slopes nearby. As we ate and chatted the porpoises entertained us yet again and all those with the foresight to bring binoculars had them trained out to sea on several occasions.

After lunch we only had to go a short distance before detouring onto the site of an ancient fortification. Here as in some other parts gorse had been burnt leaving untidy black twigs over shallow bare earth. Luckily the fire had not damaged a fine group of Wood Vetch *Vicia sylvatica*. From here we skirted a small shingle bay before descending into Carlingheugh Bay where Greater Knapweed *Centaurea scabiosa* was flowering in abundance. We added a good number of species as we progressed slowly along the sand and

shingle shore of the bay and by the time we reached the tall sandstone cliffs at the farthest point Clustered Bellflower *Campanula glomerata*, Wild Liquorice *Astragalus glycyphyllos*, Pellitory of the Wall *Parietaria judaica* and Common Mallow *Malva sylvestris* had all been seen. Time had just flown past and we determined to retrace our steps fairly speedily and admire the views in the late afternoon sunshine. I should have known that this was a vain hope with a group of botanists - we had two fairly prolonged stops to try and identify the *Allium* spp. that were spotted on the return journey! By recording almost 140 species we had confirmed that this area is still species-rich and it is my hope that it will remain so.

Barbara Hogarth

Glen Derby, 31 July 1994

After meeting at Kirkmichael, the group of eight section members drove down to Pitcarmick Estate, where we were greeted by the landowner, Sir Michael Nairn. He very kindly led us through the estate to a suitable parking area at Dalvey. Botanising began immediately, as the grassland around the parking area was clearly lime-rich, containing species such as Rockrose *Helianthemum nummularium* and Petty Whin *Genista anglica*. A little more searching revealed Field Gentian *Gentianella campestris*, but rather surprisingly, no orchids.

The group pressed on slowly towards a nearby pond, and added many of the common waterside plants to the list. Floating Bur Reed *Sparganium angustifolium* was present on the water, and Stags Horn Clubmoss *Lycopodium clavatum* and Chickweed Wintergreen *Trientalis europaea* were discovered in the vicinity. An early lunch was taken at this point, slightly extended to allow proper appreciation of the home-grown strawberries provided as an after-lunch treat by Ros.

Venturing forth towards higher ground after lunch, we aimed initially for a small wooded stream-gorge visible in the distance. This yielded perhaps the most exciting find of the day, with several dozen plants of Serrated Wintergreen *Orthilia secunda* growing between shaded rocks above the stream. We emerged from the gorge onto open moorland, and continued on for a mile or so, in the general direction of an upland sphagnum (raised) bog. Perseverance was eventually rewarded with finds of Cranberry *Vaccinium oxycoccus* and Few-flowered Sedge *Carex pauciflora*, both none-too-common species in Perthshire.

The return to the cars, by way of estate roads, allowed many familiar roadside plants to be noted, including Burnet Saxifrage *Pimpinella saxifraga* and Spignel *Meum athamanticum*. The day's excursion ended with a not inconsiderable species list, including many species not previously listed for the square.

Les Smith

River Tay Marshes, 13 August 1994

Seven of us met at 2pm at the disused bus depot at Walnut Grove (NO 136 223) where we parked our cars with the permission of the caretaker. We then walked down the lane, across the railway line, past the drainage manholes for the new Matthew Gloag headquarters, and so reached the banks of the Tay.

A rough vehicular track led to Stock Green Fishing Lodge and then to the Perth Sailing Club premises. The first stretch appeared to be all *Rudbeckia*, almost a pure stand, with a sprinkling of Himalayan Balsam *Impatiens glandulifera*. Closer inspection showed that there was quite a number of native plants among them and we recorded steadily. Some *Alliums* were discussed, and a pre-1987 record of Keeled Garlic *Allium carinatum* was confirmed. Imperforate St John's Wort *Hypericum maculatum*, Red Bartsia *Odotites verna*, Greater Birdsfoot Trefoil *Lotus corniculatus*, Black Medick *Medicago lupulina* and Hairy Sedge *Carex hirta* were among the plants that caught the eye. Another interesting pre-1987 record confirmed was Cabbage Thistle *Cirsium oleracea*.

We reached pebbly foreshore just before the Lodge. All the plants there were covered with a fine grey silt, which made identification messy, but Water Plantain *Alisma plantago-aquatica*, Common Spike Rush *Eleocharis palustris* and Toad Rush *Juncus bufonius* stood out. Past the Sailing Club the vegetation became junglier, and we had the choice of softish muddy foreshore or Giant Hogweed *Heracleum mantegazzianum* forest. At last we broke through to an expanse of dry gravel under Friarton Bridge, and made a road to the Limeshaugh Fishing Lodge, on which was found Weld *Reseda luteola*. Beside the railway track against the sky stood a row of tall Great Lettuce *Lactuca virosa* - worthy of a painting by Joan Eardley, but 'not recommended for domestic purposes' (Launert).

After this, unfortunately, we missed the way, and failed until too late to get through to Friarton Marshes, where Alan Robson had recorded two naturalised rarities, Sensitive Fern *Onoclea sensibilis* and White Burnet *Sanguisorba canadensis*. Ros and Richard eventually found the correct line, but it was too late to look for these plants, or see whether the path back over the railway to the main road was still passable. Other unconfirmed pre-1987 records were Purple Iris *Iris versicolor*, Summer Snowflake *Leucojum aestivum*, Swamp Meadow Grass *Poa palustris*, and Chives *Allium schoenoprasum* - this last an identification problem. So the outing must be classed as 'unfinished business'. It was, however, reasonably successful in terms of new records - a total of 28 additions for an already well-recorded 5km square brought its grand total to 314!

Bill Gauld

Fungal Foray to Backmuir Wood, 28 August 1994

We surely hit an all time low for numbers attending the Fungal Foray which must cast some doubt as to the interest of Section members in these events. Irene McKinnie and I duly met at the appointed time and meeting place and once it was clear that we were not going to be joined by anyone else we

headed off for Backmuir Wood. Yes, I know it's not in Perthshire but I had been unable to make contact with the Estate Office at Rossie Priory, who in fact had only granted access to a very limited area of woodland near Knapp. With local knowledge I considered Backmuir Wood to be a good alternative venue although after a prolonged dry spell fungi were in short supply anywhere this far east.

In spite of the intermittent drizzle we had a thoroughly enjoyable afternoon wandering through mixed woodland - mostly through young, scrubby birch, beech and areas long-since planted with Scots pine and Norway spruce but still interspersed with birch and rowan. The afternoon passed remarkably quickly whilst we searched the ground and decaying tree trunks. We found and more or less identified eight fungi - a modest total but we were more than satisfied with our efforts. In previous years we have tended to depend heavily on Bill Gauld for help with identification and no doubt been a bit too reliant on his knowledge. However on this occasion we were 'forced' to get down to the nitty gritty of assessing diagnostic features and coming up with appropriate answers.

Unfortunately one can never predict when fungi are going to be fruiting well and on several subsequent visits to Backmuir Wood in October and November I found an abundance of splendid fungi. My sincere thanks to Irene for supporting the outing and so ably assisting with identification.

Fungi found:- *Cortinarius armillatus*, *Panaeolus* sp., *Paxillus involutus*, *Piptoporus betulinus*, *Pleuteus salicinus*, *Russula laurocerasi*, *Russula nitida*, *Xerocomus subtomentosus*.

Barbara Hogarth

Black Spout Wood, 11 September 1994

I passed through a number of showers and saw a rainbow or two on my drive from Dundee to Pitlochry. However, those who came to this meet were treated to a reasonably dry and sometimes sunny afternoon. A relatively large group of 13 met at the Black Spout Wood car park and under the leadership of Martin Robinson headed off in the direction of the scenic waterfall which gives its name to the surrounding woodlands.

Several stops were made on the wooded slopes en route to the Black Spout. The hillside here supports fairly even-age oak with occasional Scots pine and birch over a rather uniform, species-poor herb layer. Ramifying amongst the grasses, on both live trees and old tree stumps and along path edges we found a good selection of the more common mosses and liverworts.

After a brief pause to admire the waterfall we continued upstream to a point where it was safe to descend to the water's edge. Here Martin pointed out mosses growing on the wet rocks. In this moist hollow we also spent some time looking at bryophytes present on tree trunks and branches. Back on the path the group caused a bottle neck when gathering to look at bryophytes that colonise bare ground and are typically found along the edges of tracks.

The excursion ended with a brief look at those mosses that provided a luxuriant cover on the stone wall alongside the footpath to Edradour. Our grateful thanks to Martin Robinson for leading this, his third bryophyte field meeting for the Botanical Section of the PSNS. His enthusiasm, expertise and patience always make for an enjoyable and highly informative outing.

Bryophyte list

Oak woodland:

Atrichum undulatum
Calliergon cuspidatum
Cirriphyllum piliferum
Dicranella heteromala
Dicranum majus
Dicranum scoparium
Eurynchium praelongum
Hylocomium splendens
Hypnum cupressiforme
Lophocolea bidentata
Mnium hornum
Plagiomnium undulatum
Plagiothecium undulatum
Pleurozium schreberi
Polytrichum formosum
Pseudoscleropodium purum
Rhytidiadelphus squarrosus
R. triquetrus
Thuidium tamariscinum

Riverbank & hollow:

Brachythecium rivulare
Cephalozia sp.
Conocephalum conicum
Isothecium myurum (on oak)
Neckera complanata
Porella platyphylla
Radula complanata (on hazel)
Rhacomitrium fasciculare
Thamnium (Thamnobryum) alopecurum
Ulota crispa (on hazel)
Zygodon viridissimus (tiny, bright green moss on tree)

Edge of path:

Pogonatum aloides (and protonema)

Wall:

Bryum capillare
Rhacomitrium heterostichum
R. fasciculare
Isothecium myurum
Hypnum cupressiforme

Barbara Hogarth