

PERTSHIRE SOCIETY OF NATURAL SCIENCE

BOTANICAL SECTION

BULLETIN No.16 - 1992

INTRODUCTION

I am again grateful for the cooperation of excursion leaders and other contributors for letting me have material in good time.

We start with an appreciation of our old friend Eob Brien. He had a long and active life, in which we can rejoice.

The year was marked by the appearance of the new *Checklist of the Plants of Perthshire*. On the successful completion of this task we congratulate Ros Smith, Nick Stewart, Neale Taylor, and Richard Thomas. It is selling well, and has already been reprinted.

An article by Neale Taylor on Moncreiffe Hill continues the pattern of having a special feature in the Bulletin. I am sure this contribution will be of interest to members, and fire with desire to visit the Hill any who, like me, missed the Parent Body's excursion in June 1990.

There are no reports of the Open Meetings (1), to Keillour Castle Garden, and (12), to Cluny House Gardens, but for convenience the numbering of the reports has been left as in the programme.

THE EDITOR

R. J. BRIEN - AN APPRECIATION

Robert Jamieson Brien, a founder member of the Botanical Section, died on 5 August at the age of 88.

Bob's father was coachman to the Earl of Airlie. When he grew up he became a surveyor, working for the Water Department of Perth and Kinross County Council. During the 1939-45 war he was frequently asked to locate and assess sources of underground water. He was subsequently asked to take on the duties of Water Engineer.

He retired at the age of 62 to work full-time in the nursery he had established at Pitcairngreen, producing heathers and dwarf conifers. He also specialised in cultivated junipers and later in *Begonia sutherlandii*.

He possessed a remarkable memory, and followed many interests with great enthusiasm. He was a keen supporter of the National Trust for Scotland St Kilda Club, and was made an Honorary Life Member for his services. He developed strains of low growing heathers from plants he had collected on the island. These were then taken up commercially. He was a keen country dancer, and invented a St Kilda Reel. He also studied local history, and in 1989 the Aberdeen University Press published his book *The Shaping of Scotland, Eighteenth Century Patterns of Land Use and Settlement, which is well worth reading. He was always interested in young people, and took great delight in showing them round his nursery and his bees.*

He joined the Perthshire Society of Natural Science over 60 years ago, and continued his deep interest in it to the end. He was a founder member of the

Botanical Section, led excursions, and in his old age was able to take us to see where rare plants grew in the Den of Airlie.

He is survived by a son, a daughter, several grandchildren, and one great grandchild. We extend to them all our deepest sympathy. He will be sadly missed by his wide circle of friends, among whom the members of the Botanical Section are proud to be numbered.

W. F. FRENCH and W. W. GAULD

CHECKLIST OF THE PLANTS OF PERTSHIRE

At last it is published. Nick Stewart, Neale Taylor, Richard Thomas and I are the authors of this c.100 page publication which is basically a list of all the flowering plants, ferns and the like, occurring in the three Perthshire botanical Vice-Counties (West, Mid and East Perth), with descriptions of their distribution. Where species occur in less than ten sites we have named the locations. This book is the culmination of many years of hard work by the late Alan Robson and other members of the Section, and we hope its appearance will stimulate the submission of further records and lead to the eventual publication of a new full Flora, complete with distribution maps. Any profits from the sale of the Checklist will go towards the publication of the Flora. We hope all Section members will buy a copy, which you can obtain (price £5-00) from Neale, Richard or me, or at any Section meeting.

ROS SMITH

SCOTTISH NATURAL HERITAGE NEWS

Last April the Nature Conservancy Council for Scotland and the Countryside Commission for Scotland merged to form Scottish Natural Heritage. The new body takes over the functions of the two bodies (so Neale and I now cover landscape conservation, access and recreation as well as nature conservation), and it also has an additional remit to take account of the interests of local communities. We now have three extra scientists in the Perth office, which is the main office for the Tayside Area of the South east region of SNH, - an Area Manager (Laughton Johnston, who spoke on Rum, where he was Chief Warden for several years, at an Open Meeting of the PSNS on 20th November) and two Area Support staff. Needless to say we are all very busy.

ROS SMITH

(2) INVERGELDIE (NN 743 273)

20 JUNE 91

Eight members of the Section met at Invergeldie to collect plant records for the quadrant 27/72 NW.

We set out along the road up to Spout Rolla and Loch Lednock reservoir, recording a good selection of roadside herbs and grasses, including Soft Brome (*Bromus hordeaceus (mollis)*). Above Spout Rolla a number of calcicoles were noted, including Yellow Mountain Saxifrage (*Saxifraga aizoides*), Lesser Clubmoss (*Selaginella selaginoides*), the uncommon Limestone Bedstraw (*Galium sternerii* - calcicole counterpart of Heath Bedstraw (*Galium saxatile*), and Dove's-foot Cranesbill (*Geranium molle*), which is unusual in the Highlands.

After lunch the group split into three, with two investigating more of the lower ground and the lower portions of a burn off the Allt Mathaig. Mountain Melick (*Melica nutans*) was an attractive find. The third group struck westward across the higher ground to reach Lochan Mhaoil na Meidhe. The weather was pleasantly sunny and breezy, with clear visibility from the top. On the way ~~the~~ westerly Few-flowered Sedge (*Carex pauciflora*) was spotted, also Lesser Twayblade (*Listera cordata*), as usual under heather. The lochan itself had little of interest beyond a mass of Shoreweed (*Littorella uniflora*) in flower.

On the return track Marsh Ragwort (*Senecio aquaticus*) and Bristle Club Rush (*Isolepis setacea*) were noteworthy finds.

A total of 217 species was recorded. We are grateful to the landowners concerned for permission to visit.

R. E. THOMAS

(3) PADDOCKMUIR WOOD (NO 21 & NO 22)

1 JULY 92

This excursion was chiefly held to examine an under-recorded 5X5 kilometer square (NO 21 NW). En route we added further records for the adjacent NO 22 SW. We left the cars at Gallowflat farm (NO 209 212) and, after recording a few weeds in the farmyard, we proceeded down the track towards Paddockmuir Wood. We then recorded in the under-recorded square, splitting into two groups to make the most of the rapidly fading light. The evening was not notable for rarities but perhaps the most interesting finds were the arable weed Cut-leaved Crane's-bill (*Geranium dissectum*), Bugloss (*Anchusa arvensis*), Sand Spurrey (*Spergularia rubra*) and Hairy Tare (*Vicia hirsuta*), and in a ditch by the trackside Celery-leaved Buttercup (*Ranunculus sceleratus*) and Common Duckweed (*Lemna minor*). Although we found nothing exciting in the wood we brought the number of records for NO 21 NW to 99 - one less than needed for 'fully recorded'. One new record urgently required!

ROS SMITH

(4) CLEISH HILLS

5 JULY 92

This was a joint excursion with the BSBI, held to update the records for this area of Fife and Kinross, and also to collect information for the BSBI Scarce Plants Project.

A group of fourteen met at point NO 099 958 on the hill road from Dunfermline to Cleish via Bowershall, and walked into Loch Glow along the fishermen's track. George Ballantyne, the Vice-County recorder, was able to join us for the first part of the day, and gave us the historical background of the area, and tips on what to look for on our walk. We visited Dow Loch and Lurg Loch, recording Tall Bog Sedge (*Carex magellanica*), Lesser Tussock Sedge (*C. diandra*), and Common Quillwort (*Isoetes lacustris*), and then walked along the tops and through the forestry plantation to the hillfort of Dumglow. Here, on the south-facing cliffs, we found a magnificent rock garden with Bloody Crane's Bill (*Geranium sanguineum*) and Burnet Saxifrage (*Pimpinella saxifraga*) among the more interesting species. We rounded off the day by searching the Black Loch successfully for Lesser (or Hybrid) Yellow Water Lily (*Nuphar X spenneriana* (= *N. lutea* X *pumila*).

The first sunshine for the week made this a very enjoyable outing.

JO BABBS

(5) BLACK WOOD OF RANNOCH

12 JULY 92

At the request of Forest Enterprise (FE), who manage the estates of the Forestry Commission, fourteen of us went to the Black Wood of Rannoch Forest Nature Reserve to identify rare plants occurring beside tracks that FE are planning to widen by swiping to create firebreaks to stop the spread of any fires (There have been two fires in the last ten years, both fortunately rapidly brought under control by Rannoch School Volunteer Fire Brigade).

Armed with maps, bamboo canes, and photocopied illustrations of the 'target' plants we set out in pairs to walk allotted sections of track. We were looking mainly for four species - Lesser Twayblade (*Listera cordata*), Common Wintergreen (*Pyrola minor*), Serrated Wintergreen (*Orthilia secunda*), and Coralroot Orchid (*Corallorhiza trifida*). The first three were found, but most of the sightings were of Lesser Twayblade. Locations were marked by canes and noted on the maps. A collated map was sent next day to FE, who have permanently marked our locations. They have also written to thank us for our hard work, and said how invaluable the exercise was. (Take a bow, everybody! ED.)

ROS SMITH

(6) GLEN GARRY (NN 66 NW)

26 JULY 92

The object of this trip was to visit the remote area south of Loch Garry where a 5 km square lies in both Vice-Counties 88 and 89. Eight necessarily well-equipped botanists gathered at Dalnacardoch Lodge before driving in two cars down to the end of the Hydro-Electric track on the west side of the loch. We were able to view the various enclosures erected over the years by the Loch Garry Tree Group both from the cars and as we walked to the end of the loch; many of the trees seemed to be doing extremely well, especially the alders, although some looked distinctly non-native.

Starting off in VC 89, we found mostly common species in the heathland and flushes along the track with Mountain Everlasting (*Antennaria dioica*) and Viviparous Bistort (*Polygonum viviparum*) of most note. Few-flowered Sedge (*Carex pauciflora*) occurred in some of the peaty areas. Then some of the stony flushes in the morainic knolls beyond the end of Loch Garry proved to be highly calcareous and we were delighted to find Great Sundew (*Drosera anglica*), the first VC 89 record since the Buchanan White Flora of 1898 (The Flora record is for Isla - Loch Broom, but no date is given. It must be doubtful if this species still occurs there). Also in these flushes were Scottish Asphodel (*Tofieldia pusilla*) and Broad-leaved Cottongrass (*Eriophorum latifolium*) as well as all the characteristic sedges and related species. *D. anglica* proved to be quite frequent also in some of the peaty channels further on, presumably because they were being flushed with calcareous ground-water.

We stopped for lunch at Duinish Bridge over the Allt Shallainn and lo and behold the sun appeared! On the VC 89 side of the river we found Tea-leaved Willow (*Salix phylicifolia*) and curiously on the rocks on the edge of the river, Dwarf Cudweed (*Gnaphalium supinum*), a species characteristic of gravelly snow-beds in the mountains. On the VC 88 side were Northern Bedstraw (*Galium boreale*) and Oak Fern (*Gymnocarpium dryopteris*), and, in the path just after the bridge, Annual Pearlwort (*Sagina apetala*), a lowland weed! The bridge appeared to have recently been renovated, and it is presumed that seeds of the pearlwort were brought in at that time. The VC recorder for VC 89 walked back over the bridge, but was disappointed not to find it in her Vice-County too.

Most of the party then walked on to the bog north of Creag a' Mhadaidh. This proved a little disappointing, though we did find Dwarf Birch (*Betula nana*), Bog Sedge (*Carex limosa*) and more *C. pauciflora*.

On the return walk the rain appeared in earnest, but at least it was on our backs. Bearberry (*Arctostaphylos uva-ursi*) and Petty Whin (*Genista anglica*) were found on some of the morainic knolls in VC 89 as we made our way back to the cars.

Thanks are due to Mr Roger Adams for permission for access.

NEALE TAYLOR

(7) EARLSFERRY, FIFE (NT 47 99)

8 AUGUST 92

The weather was not very promising, but seven of us braved the elements and met at the golf links car park, Earlsferry (NT 481 996), where we ate our sandwiches.

From there we were guided by Anne Mathers and Bob Mitchell along the coastal path to Kincaig Point. First we were taken down to the sea wall on which was growing a fine specimen of the Duke of Argyll's Tea Plant (*Lycium barbarum*, *Solanaceae*), which is naturalised along the coast about Elie, and on the opposite shore of the Firth of Forth. In spite of intermittent rain the walk along the coast was enjoyable and rewarding - since we were not on recording duty in our own territory, a bit of bird-watching was included - and a list of some 119 plant species was sent to the Vice-County Recorder, George Ballantyne, who was unfortunately unable to accompany us.

Our most noteworthy finds were Agrimony (*Agrimonia eupatoria*), Sea Wormwood (*Artemisia maritima* - later on we also saw Mugwort, *Artemisia vulgaris*), Sea Aster (*Aster maritima*), Sea Rocket (*Cakile maritima*), Greater Knapweed (*Centaurea scabiosa*), Field Bindweed (*Convolvulus arvensis*), Viper's Bugloss (*Echium vulgare*), Common Rock-rose (*Helianthemum chamaecistus*), Scots Lovage (*Ligusticum scoticum*), Burnet-saxifrage (*Pimpinella saxifraga*), Lesser Meadow-rue (*Thalictrum minus*), and Upright Hedge-parsley (*Torilis japonica*). We found some strange yellow 'buds', which turned out to be galls, on Lady's Bedstraw, and we had the usual fun trying to sort out the Atriplices.

The afternoon was rounded off with a very welcome cup of tea and home-made cakes provided by Felicity Mitchell at their home in Elie.

ANNE MATHERS

(8) KEITHICK (NO 208 383)

23 AUGUST 92

Ten people assembled immediately beyond the old railway bridge at the north end of Woodside on the Coupar-Angus road, at the southern boundary of the policies of Keithick House. Our objective was to explore an unrecorded lowland area of Vice-County 89.

We split into two groups for the first part of the excursion, to allow exploration of both banks of the stream, reuniting at Mill of Keithick, about half a mile downstream. The southern party made a particularly noteworthy discovery at the site of an old pond, where Wood Club Rush (*Scirpus sylvaticus*) was found growing. The northern group, inside the policies, were in mixed woodland throughout, and found several introductions, eg Solomon's Seal (*Polygonatum multiflorum*), as well as a

range of native species, including Sanicle (*Sanicula europaea*) and Hairy St John's Wort (*Hypericum hirsutum*). Brittle Bladder Fern (*Cystopteris fragilis*) and Ivy-leaved Toadflax (*Cymbalaria muralis*) were found on the ruins of the old water-mill. A group of Giant Puff-Ball (*Langermannia gigantea*) was unfortunately far too old and decayed to be picked.

The return trip was over fields with clumps of Shaggy Ink Cap, or Lawyer's Wig, (*Coprinus comatus*), some young enough to be edible. We then walked back along the disused railway line, which proved unexpectedly interesting. Quite a number of unusual plants were growing among the ballast, including Hop Trefoil (*Trifolium campestre*), only 'occasional' in Perthshire, Musk Mallow (*Malva moschata*), Annual Pearlwort (*Sagina apetala*), Goatsbeard (*Tragopogon pratensis*), Small Toadflax (*Chaenorhinum minus*), which is almost confined to old railway tracks, and Thyme-leaved Sandwort (*Arenaria serpyllifolia*).

The entire excursion took a pleasant three and a half hours, in the course of which participants might be surprised to learn that the total distance covered amounted to less than one mile and a half!

We are grateful to Keithick estate for permission to go on their ground.

LES SMITH

(9) OPEN - BELL'S CHERRYBANK GARDENS

28 AUGUST 92

On a fine, if slightly cold August evening, Mr Norman Robertson, the gardener at Bell's Cherrybank Gardens, met members of the PSNS to guide them round the National Collection of heathers which is in his charge there. *Erica*, *Calluna*, and *Daboecia* are planted in complementary groups providing colour of foliage and bloom for every month of the year. Many plants provide the bushy growth so welcomed by some gardeners for ground cover, but the tight cushions of rarely-flowering *Calluna vulgaris* var. 'Foxii Nana' are equally attractive in their own right. The water features of the Garden, produced by ingenious engineering, were a further attraction.

The Garden contains a huge mosaic of Bell's Coat of Arms, constructed to the design of Sadie McLellan in 1979. When the garden was being replanned this was moved *en bloc* to a new location. One of the most interesting parts of Mr Robertson's talk dealt with the way this magnificent feat had been organised by Heriot-Watt University.

At the end of the evening a most welcome cup of tea was provided in the Reception Centre, where our gratitude and thanks were expressed to our guide.

IRENE MCKINNIE

(10) TUMMEL SHINGLE ISLANDS

12 SEPT 92

Six of us (with two dogs) met at the designated layby at Logierait (NN 974 522), piled into two cars, leaving the dogs in charge of the others, and drove up the Foss road to Tomdachoille Farm, where Ros Smith awaited us, having got permission from Mrs Stewart to park our cars in the farmyard. It was quite sunny, reasonably sheltered from the wind, and the weather was improving, so we looked forward to the afternoon's foray.

We walked down the farm and fishermen's track to the river bank, at the north end of Tomdachoille Island. The verges, being disturbed ground, were bare of

fungi, and so at first were the river banks, which were covered with tall grasses and shrubs. From the fishermen's hut onwards however, where the haugh widened out, we began to find fungi, many specimens unfortunately too old and battered by recent heavy rains to be identifiable. The open grassland with birch and occasional beech trees, and fringing willow and alder, provided a mixed habitat with a variety of species. Our list mounted, and the 'for further study' basket filled. Several *Amanitas* were spotted, including *phalloides* (Death Cap - wash your hands after handling, just in case), *pantherina* (Panther Cap), *rubescens* (Blusher), and *muscaria* (Fly Agaric). In the open were several fine Parasol (*Lepiota procera*), and various specimens of Conical Wax Cap (*Hygrocybe conica*) obligingly demonstrated their capacity to turn from yellow to black when bruised. Other finds included Poison Pie (*Hebeloma crustuliforme*), very common but poisonous, as its name implies, an uncommon member of the same genus *Hebeloma radicosum*, with long tap-root, Snowy Wax Cap (*Hygrocybe nivea*), Milk-white Russula (*Russula delica*), and *Lepista sordida*, an uncommon member of the Blewit tribe.

As we walked back up to the farm, arable weeds at the end of a field of ripe oats caught the eye, and Ribbed Melilot (*Melilotus officinalis*) was added to the Vice-County tally - not the first new record (and us with our brand new copies of the *Checklist* still smelling of printer's ink).

We thank the tenant farmer, John Anderson, chairman of the reserve management committee, and the estate, for permission to visit the island.

I also thank Barbara Hogarth for identifying specimens taken home.

W. W. GAULD

(11) INTRODUCTION TO MOSSES AND LIVERWORTS

26 SEPT 92

A dozen hopefuls met Martin Robinson at the NTS Hermitage Carpark at 10 am.

We all knew Martin as the RSPB Warden at nearby Balroddie. We were to see him revealed as an enthusiastic and very knowledgeable bryologist. Under his guidance that monotonous-seeming green stuff revealed itself to our hand-lenses as full of variety and interest, both rarity and common or garden species. When we got back to the Museum, however, and tried to distinguish finer details through our microscopes, the limitations of my understanding appeared, and I was not the only one who had to appeal to Martin for help and explanation.

The total recorded comprised 13 liverworts and 30 mosses, most of them new so far as I was concerned, so a certain feeling of being overwhelmed was pardonable - *pourvu qu'on se recule pour mieux sauter!*

We are most grateful to the Trust for letting us collect enough samples to study, and to Martin for leading us on this most educational expedition.

BILL GAULD

MONCREIFFE HILL REVISITED

In 1863 a small book was published called *The Wild Flowers and Ferns of Bridge of Earn*. The author of this unsurprisingly little known example of the more invidious practices of 19th century botanists was John Sadler FRPS. He is described on the title page as follows:-

Assistant to Professor of Botany in the University of Edinburgh; Vice-Secretary and Curator of the Botanical Society, and Fellow of the Geological Society, Edinburgh; Secretary of the Scottish Arboricultural Society; Corresponding Member of the Botanical Society of Canada, etc, etc, etc.

One wonders what the 'etc, etc, etc' referred to; to judge by most of the rest of the book it is highly surprising that we were not informed. The preface gives a good indication of the type of language used further on (although happily it does not contain any of the flowery poetry of the 'let's go prancing round the leafy boughs dressed as faeries' variety which appears later, and for reasons of good taste will not be repeated here).

The preface starts: 'The present brief notice of some of the indigenous vegetable productions of the district round Bridge of Earn has been drawn up in the hope that it may in some degree aid those who take a delight in the study of Wild Flowers and Wild Ferns' (Confusion reigns in the mind of the reader at this point. How can a text on carrots and turnips help those interested in botany? But never mind).

He goes on to say that in the case of ferns 'special reference is made to the localities and situations in which the various species occur, which may prove serviceable to the collector of these graceful plants whether for the album, rockwork or Wardian Case (this last being a sort of fern terrarium).

And again: 'Should this work meet with encouragement, we hope to be able at a future time to give further details and lists. It is surprising that no attempt has been made to furnish a popular Guide-book for the neighbourhood of Bridge of Earn, abounding as it does with so much that is interesting and beautifully romantic, and visited as it is yearly by strangers from every part of the kingdom. It is certainly a desideratum that has often been felt, and one which we hope some day to see supplied.'

I must say I find it extremely surprising that anyone has ever bothered to write a booklet about the flora near Bridge of Earn, and unfortunately for the erstwhile author, it does not seem that anyone did meet the work with encouragement because no further 'details and lists' were produced. A clue for this is given in the booklet itself, in which 'Bridge of Earn' included Invermay, Forteviot, Glenfarg, Kinnoull Hill, Methven and Scone Woods! Furthermore, it would appear that botanists subsequently paid very little attention to the Bridge of Earn area itself, and in particular its most important botanical locality - Moncreiffe Hill.

It would be extremely self-satisfying to be wise over a hundred years after the event, and to condemn heartily the morals and lack of scruples of the time with regard to the enthusiastic collecting that went on then, so I shall not. What I find very difficult not to condemn, so I shall, is the practice illustrated (*sic*) in this booklet of including pressed specimens, in this case ferns, in the text! In the copy in the Sandeman Library are pressed specimens of Green Spleenwort, Rustyback, and most horrendous of all Mountain Bladder Fern, now found in only four localities in Perthshire. It is to be hoped that either the specimens were from cultivated material, or the print run was extremely small.

Sadler's little booklet has one saving grace - it contains lists of plant species from ~~from~~ a number of localities, including 'On the Hill and in the Ponds and Woods of Moncreiffe'. To be fair, if he alone did produce the list for Moncreiffe Hill and its surrounds, then it would appear that he was a fairly sound botanist, because almost without exception it consists of species found on the hill today. In fact, it is unlikely that he did produce the lists on his own since he almost certainly visited the area with John Hutton Balfour when he and his students from Edinburgh botanised on Moncreiffe Hill in 1857, 1860 and 1862. There are also some records in the *New Statistical Account of Perthshire* (1844) (NSA), and Francis Buchanan White must have visited the area, in an entomological capacity at least, when Sir Thomas Moncreiffe, one of the foremost lepidopterists of the period, was in residence at Moncreiffe House.

Perhaps therein lies the reason for the publication of this odd little booklet, which to modern eyes seems somewhat obsequious, and which would more properly have been called *The Wild Flowers and Ferns of Perth*. Even in those days Moncreiffe House was open to visitors one day a week, so it seems possible that Sadler produced the book to cater for these visitors, maybe even at the request of the laird, or, to take a more cynical view, to ingratiate himself with him.

It would seem that Moncreiffe Hill was not visited again for almost a hundred years, until the PSNS made several trips there in the early 1960s. If there are any records in the intervening years I have not yet found them. More recently Ros Smith made a brief visit in 1980 on behalf of the Nature Conservancy Council when the new M90 was proposed, and since the Woodland Trust acquired most of the Hill in 1988 a number of PSNS members have been there including, to my knowledge, the late Joan Thomson, Freddy French and Irene McKinnie, and I have paid a number of visits, both official and unofficial. A brief visit in 1989 suggested the area was worth further investigation, especially when I discovered there was a number of old records in Buchanan White's *Flora*. In 1990 and 1991 I had a very close look at the crags and one or two other places, most notably round the car park.

Having turned up a number of records not listed in the *Flora*, I tried to track down any other old records. As mentioned above, J H Balfour went to the Hill with his students, and some of the species in his lists are localised to Moncreiffe Hill. I found the NSA records (some of which are highly dubious, but none the less intriguingly possible) and had a look at the Perthshire Herbarium in the Museum. It was thanks to Mike Taylor at the Museum that I discovered Sadler's booklet.

So how has Moncreiffe Hill changed since the 19th century? Of the 31 rare or uncommon species recorded pre-1900, 17 (54%) have been refound, including Purple Milk Vetch, Common Centaury, Stinking Hellebore, Wild Onion, Cornsalad and Field Gentian (its only lowland locality in Perthshire). 14 have not been refound, including Forked Spleenwort (intriguingly given as being present in a hand-written inscription in Sadler's own copy of the book in Perth Museum), Rustyback, Long-stalked Cranesbill and Hoary Cinquefoil (the last two species now being extinct in Perthshire). On the credit side a further 8 species not certainly found pre-1900 have been discovered, notably Fragrant Agrimony, Scarlet Pimpernel, Spring Vetch, and Hairy Violet.

In fact it is encouraging to note that despite over one hundred years of coniferisation, tree planting, intensive agriculture, the M90, and the creation of a put-and-take fishery, Moncreiffe Hill is still in such good heart. In the *Checklist* it is the most frequently named single locality. The 'indigenous vegetable productions' have certainly proved as tough as old swedes!

NEALE TAYLOR