Grass-of-Parnassus
Editorial ................................................................. 2
Chairman's Remarks .............................................. 3
BSBI Committee for Scotland ................................. 4
Scottish Annual Meeting 2000 ................................. 5
Wandering in Wester Ross ..................................... 14
Trunk Road Verges ................................................ 19
Scottish Field Meetings ........................................ 21
Dalmarnock Viaduct .............................................. 22
Field Meeting Addition ........................................ 23
Raasay Update ..................................................... 24
Cardamine flexuosa x c. hirsuta ............................... 25
New Hybrids for Moray .......................................... 26
Slender Trefoil in Scotland ..................................... 26
Mountain Mishaps ................................................. 29
Profiles of Committee Members .............................. 31
Arable Weeds South of the Border .......................... 34
Grass-of-Parnassus ............................................... 36
Tufted Loosestrife flowers again ............................ 37
Some Carex Hybrids ............................................. 38
Climate Change or What ....................................... 41
Marine Species on Roadsides ................................. 42
The Queen Mother - An Appreciation ....................... 43
Editorial

We extend congratulations to Dr RAH Smith on being awarded an MBE for services to conservation. She was a founder member of the Committee for Scotland and served with distinction as Chairman.

We also congratulate Ms Ro Scott on obtaining a Winston Churchill Memorial Trust Travelling Fellowship to visit the USA and three major islands off New Zealand to study wild herbivore management (which we understand to have been deer related). She has been the Scottish Natural Heritage representative on the Committee for Scotland.

It was interesting to receive the article on arable weeds from England. The author has been a subscriber to the *Scottish Newsletter* for 16 years and has done a comparison of his findings with those described in our previous issues.

This year the Annual General Meeting of the BSBI will be in Scotland, the event being held in Edinburgh on May 11th. It had been hoped to have a celebration of Atlas 2000, but as we go to press we understand that it will not quite be ready, which is disappointing. However, there should be much of interest and we are sure that the meeting will attract a large proportion of the membership in Scotland.

We are assured that the profiles of the committee members given in this issue have been partly written by and wholly approved by the individuals concerned!

The cover illustration was kindly provided by Mrs JM Millar to compliment the article on Grass-of-Parnassus. The flower inset shows the appearances on a close-up photograph taken by PM on a field meeting in Ayrshire led by AMcGS.

The Editors:
Peter Macpherson
15 Lubnaig Road
Newlands
Glasgow G43 2RY

Allan Stirling
17 Austen Road
Jordanhill
Glasgow G13 1SJ

Chairman’s Remarks, 2002

GORDON ROTHERO

Despite the seemingly inevitable delays involved in bringing a complex project to fruition, the new atlas will appear later this year. The Atlas is a product of the main strength of the Society, a network of experts spread across the whole country who not only hold and disseminate large amounts of data but who can also act as ‘quality control’ on data provided by others. At the last AGM, the Society voted to adopt a new strategy, at least part of which is designed to give us a more central role in the burgeoning ‘biodiversity and conservation industry’. I suspect that many of us have some reservations about what this might involve but the prospect of the Society pottering on in its own quiet, esoteric backwater is even less appealing.

What this means in terms of work for Society members in Scotland, particularly VC recorders is not yet clear, although the trawling for information for the Threatened Plants database continues. Another suggested project is for each VC to produce a County Rare Plant Register; this will be of interest in itself but will also be of value to conservation bodies. The methodology is already in place so all you need to do is plug in your information!! Other suggestions range from re-visiting the Monitoring Scheme 15 years on, to attempts to revive interest in sub-species and hybrids, to reverse the “widespread apathy and ignorance … apparently revealed by the Atlas”. In Scotland, there is a strong possibility that the Society might again be involved in some monitoring of nationally rare and scarce species for SNH. There is the prospect now that this work will be underpinned by paid officers of the Society, part of whose role will be to provide help to VC Recorders where necessary.

At the Scottish AGM in November last year I spoke, somewhat incoherently, about some concerns that the Scottish Committee had about the state of the VC Recorder system in Scotland in the face of the new BSBI strategy. The Atlas had revealed certain specific weaknesses but we were more generally concerned with the prospect of Recorders retiring though age, infirmity or overwork and the Society being faced with a post unfilled and with no obvious candidates. In the end, the case that sparked our concern was resolved very satisfactorily and subsequent events suggest that at least some individual
recorders are aware of the problem. Perhaps we should not be too concerned.

In November I also mentioned the lack of progress with the reform of legislation concerning SSSIs in Scotland, leaving them significantly less well-protected than similar sites in England and Wales. The Nature of Scotland proposals were better than one might have hoped given the tone of the original consultation document, People and Nature, but are still of no use until they are enacted. Further lobbying by conservation groups and others seemed to have been successful in that the First Minister announced in November that a Bill would be introduced as soon as possible. Nothing has happened since then and readers of the Herald letter page recently will know that the whole question of conservation designation is still a very contentious issue.

The Society AGM comes to Edinburgh in May and the hope is that it will be just as social an event as our Annual Meeting in November. This will be your chance to find out where the Society is heading both during the meeting itself and more informally over drinks, food or during the field trips on Sunday. I hope lots of you make the effort to attend!

BSBI Committee for Scotland

The following is the composition of the Committee from Nov 2001 - Nov 2002.
Chairman - GP Rothero; Secretary/Treasurer - Miss L Farrell; Field Meetings Secretary - JW McIntosh; Minutes Secretary - Dr MF Watson; Meetings Secretary - Mrs EW Stewart; Members of Committee - Mrs PF Braithwaite, PS Lusby, Drs CJ Miles and IM Strachan. Representing SNH - Dr C Sydes; Representing BSS - J Lyth.

At the AGM on 2nd November 2002, Miss L Farrell, CJ Miles and MF Watson retire, the last two being eligible for re-election. Nominations for the vacancies, signed by two members of the Society normally resident in, or recorders for, a vice-county in Scotland, although not resident there, and with written consent of the candidate, who must also qualify as above, should reach the undernoted at Scottish Natural Heritage, Kilmory Estate, Kilmory, Lochgilphead, Argyll PA31 8RR by 30th September 2002. L Farrell - Hon Secretary.

Scottish Annual Meeting 2001

Introduction
The Scottish Annual Meeting of 2001 was held in the Graham Kerr Building, University of Glasgow. This was a good meeting, with plenty of exhibits, in spite of two disastrous events that might have been expected to have an impact. These were the Foot and Mouth epidemic, which lead to the countryside being put out of bounds to the public for a large part of the summer; and in the week before the meeting, the fire in the Bower building, which did not affect the Graham Kerr building, but made access slightly more awkward, and caused a great deal of consternation.

It was appropriate that since The Changing Flora of Glasgow has been recently published, one of its co-authors should give the afternoon talk.

Scottish VC Recorders Meeting

Gordon Rothero was in the chair. 35 attended, of which 26 were Scottish VC Recorders.

David Pearman spoke on the Strategy for BSBI. It should be “officer led”. He has been finding funding for this. Sources could be HLF, Plant Life, NBN, and BRC. Posts would be 1) Project officer, 2) Data base manager, 3) Executive secretary. The NBN could provide core funding, with a series of projects which could contribute to the officers’ salaries.

He would concentrate on the County Rare Plant Register and many other projects. He mentioned Rhynchospora fusca as an example of a rare plant which was recorded in 4 squares in the last Atlas, but 13 in the new one. He asked VC recorders for their help in this project.

Richard Pankhurst spoke on the VC Census Catalogue. This lists all species in each VC, gives status and time scale. It was started by Druce in the 1930s. It is compiled from a number of sources, eg from a county flora. The data-base has the source. It is sent to Recorders for comment.

Gordon Rothero mentioned several problems concerning recorders. What
happens when a Recorder retires and no replacement can be found? Should consultant botanists be involved, or would a Field Meeting help? There should be an exact definition of a VC Recorder’s duties, so that new recorders are aware of what is expected of them.

There was a discussion on SWT’s “tick list”. It was thought desirable to reply with a check-list for each VC, but flag up difficult or rare species.

Lecture
An illustrated talk on the “Changing Flora of Glasgow” was given by Dr Peter Macpherson. Although a personalised account of the subject, the presentation was based mainly on the recently published *Flora* and the speaker was at pains to stress the contributions of the co-authors, Professor Jim Dickson and Keith Watson.

The first part concentrated on the methodology. There followed information on the 1277 taxa recorded during the survey period 1983-1999. Then an account of the 203 taxa (including 68 natives) recorded prior to, but not during the recent survey period. A number of sites were mentioned where there had been appreciable losses and explanations given for the losses. Disappearing habitats had resulted in some plants becoming less frequent eg Bog-rosemary (*Andromeda polifolia*) and Bog-myrtle (*Myrica gale*). Wester Killochside was cited as an example of what had not changed. Fields used for grazing had remained as unimproved grassland and support a large colony of Frog Orchid (*Coeloglossum viride*). Plants which had increased in frequency included Reedmace (*Typha latifolia*) from one site in 1813 to 39 tetrad records and Common Toadflax (*Linaria vulgaris*) which was not recorded in 1813 but now in 70 tetrads. Recorded during but not prior to the survey had been 43 species. There followed mention of what were considered to be the most interesting plants in the various habitats, which in an area such as Greater Glasgow ranged from riverside, bog and heath to coups and bings.

Of the 14 Red Data Book species, only one was native, Young’s Helleborine (*Epipactis youngiana*), five were accidental including *Alchemilla acutiloba* and eight hortals. Twenty four came into the Scarce Plants in Britain category and of the eight natives, six were still present (eg Dune Helleborine (*Epipactis dunensis*) and Eight-stamened Waterwort (*Elatine hydropiper*). Ten of the taxa recorded were new to the British Isles including *Carex buchananii*, *Euphorbia waldsteinii* and *Linaria amythesteassp* *multipunctata* which is a widespread weed in the Botanic Gardens. Two were new to Great Britain including the inter-generic hybrid *XAgropogon robinsonii* (a third record for the world) and *Cotoneaster hylmoei*.

Finally, mention was made of new records made since the end of the survey period. These included Wood Small-reed (*Calamagrostis epigejos*), Least Duckweed (*Lemna minuta*) and Woad (*Isatis tinctoria*).

The presentation was interspersed with anecdotes as it was intended to be entertaining as well as informative.

Abstracts of Exhibits

My first year with a Computer

Michael Braithwaite

Separately from the processing of the individual records for VC 81, Berwickshire, on ‘Recorder’ by the local record centre, a table had been constructed on a spreadsheet based on a list of all taxa in the VC. The basic data was Latin and English names and BRC/Dandy/Kent numbers. To this has been added New Atlas hectad data, plant status, typical habitat and plant strategy on the CSR model. This table had been used to prepare a VC check-list in various formats, an analysis of archaeophytes and site reports. Many other ‘products’ are possible at minimum effort.

A further project was a County Rare Plant Register for VC81 of which sample pages were exhibited.

VC81 Berwickshire – Plant records 2001

Michael Braithwaite

Nine interesting records were exhibited using a mixture of photographs, herbarium specimens, drawings and captions. New VC records included *Rorippa islandica*, (Northern Yellow-cress), and *Fumaria bastardii*, (Tall
In mid-June 2001 ME and PF Braithwaite, together with CW Murray (VC Recorder) visited the Isle of Canna, one of the ‘Small Isles’ which lie within VC 104 (North Eidences).

During the visit old records were checked and new species were added to the island list. Two species were of particular interest, *Ajuga pyramidalis* - first record since that made by JW Heslop Harrison c. 1939; *Ruppia maritima* - first record for the island. The latter bore numerous small galls which were identified later by Dr CD Preston (pers. comm.) as those caused by *Tetramyxa parasitica*, an uncommon fungus closely allied to the organism which causes Club-root in *Brassicas*.

Photographs, specimens and relevant literature were exhibited.

**Caithness Plants – VC 109**

A mature colony of *Meum athemanticum* has been found in Caithness on neutral grassland at Dunnet Head. This is an extension of range of some 100km for this Scarce Species.

In the locality of John o’Groats several turnip fields have *Fumaria purpurea*. This new VCR complements the occurrence of the plant at several localities in Orkney. This is also a Scarce Species.

*Catabrosa aquatica* var. *uniflora* was exhibited to show its characteristic form on a sandy seashore where fresh groundwater infuses the sand.

*Ranunculus flammula* ssp. *minimus* was exhibited. The clifftop at Holborn Head in Caithness was searched to find the best reference colony. An 8-figure OS reference ensures that this can be re-located.

**Roxburgh and Selkirkshire Plants**

For VC 79, the following species were shown: *Carex rostrata* x *vesicaria* found by M Porter and RWMC was new as was *Geranium pusillum*. Second records were made for *Impatiens noli-tangere* and Salix triandra. *Armoracia rusticana*, not seen since 1905, was found.

For VC 80, *Salix acutifolia* (JJ Day, 1997) was a new vice-county record as was *Rumex longifolius* (ME Braithwaite). *Centaurium erythraea* (Eric and Jane Allan) was a second record, *Descurainia sophia* (Luke Gaskell) was the first record for 40 plus years and *Molinia caerulea* ssp. *arundinacea* was a second record. *Calamagrostis canescens* turned up in a fourth site where Goodman and Dony had seen it in 1960 but had not realised the significance of their find (an NCR) The specimen in the BM alerted the recorder to the possibility of refinding the site and after failing to find it after a search some years ago, found it by chance this summer while driving past a dominant stand of the plant.

**A prickly problem**

An odd-looking plant of *Cirsium vulgare* caught our eye on the roadside at Culkein, Drumbeg, Assynt, West Sutherland (NC 110328) on 11.9.2001. All the inflorescences were a curious subglobular shape, somewhat flattened apically, the bracts were finer and more numerous than usual, and although some heads showed a sign of colour, they never opened and flowered. There was also a slight conical enlargement of the peduncle.

At first we thought that the plant might have been galled by a tephritid fly *Urophora stylata*, since one of the heads contained larval chambers and frass. However the shape was wrong, other heads contained no larvae, and Margaret Redfern (BPGS) identified a larva as that of the micro-moth *Eucosma cana*, which feeds in thistle heads, but is not a gall-former.

The only other suggestion is a peculiar form of fasciation, affecting just the inflorescences. Herbicides are not used on rural roadsides in Assynt, and damage to a growing point seems unlikely to affect independently all the
inflorescences. Comments were invited.

A collection of 36 photographs taken during wanderings in VCs 89,94,104,108 and 110

Kathy Fallowfield

As this was a joint meeting with the Glasgow Natural History Society it seemed appropriate to include animal as well as plant photographs. The subjects were selected to show life during the four seasons and included Red Deer stags in velvet, a trapped Wildcat, orchids, Dryas octopetela (Mountain Avens) at sea level and Juncus trifidus (Three-leaved Rush) on Lochnagar at 3,700ft. Evergreens Linnaea borealis (Twinflower) and Orthilia secunda (One-sided Wintergreen) and the annual Melampyrum sylvaticum (Small Cow-wheat).

BSBI Sicily 17 to 30 May 2001

Lynne Farrell

Eighteen members led by Richard Pryce, VCR for Carmarthenshire, and local guide, Roberto Caudullo, visited the island of Stromboli and areas on the east and south coasts of the mainland before reaching the first of two main stops in the Madonie Mountains Regional Park in the north central part of the island. The rich limestone flora was explored over three days before travelling to the Mount Etna region. The next few days saw us visiting the north, south and east slopes to explore the different ages of lava flows and the associated flora, as well as many of the endemics.

Some Carex Hybrids

MJY Foley and MS Porter

During the 2001 season, we had planned to collect and study all the previously recorded Carex hybrids of Cumbria. However, due to foot and mouth restrictions, only a small proportion of the sites were accessible, and these late in the season. We therefore had to supplement our material with specimens collected in Dorset and the Scottish Borders, and are very grateful to David Pearman and Rod Corner, respectively, for information on localities. The five hybrids shown were;

Carex x involuta (C. rostrata x C. vesicaria)

Carex x fulva (C. hostiana x C. viridula subsp. brachyrrhyncha)
Carex x pseudaxillaris (C. otrubae x C. remota)
Carex x alsatica (C. flava x C. viridula subsp. oedocarpa)
Carex x boenninghausiana (C. paniculata x C. remota)

Notes on principal distinguishing characters are given in this newsletter. We should be interested to receive any comments.

A Cornish Miscellany

G. Halliday

Exhibited were a number of specimens and photographs of interesting aliens including garden specimens of Luma apiculata (Chilean myrtle), Itea ilicifolia and Agave Americana, the last one of the very few records of flowering plants from mainland Britain. Urban weeds included Catapodium rigidum var. majus, Ceratochloa cathartica and Cyperus eragrostis.

Limes in Milngavie

Bill Hansen

Milngavie is still yielding new finds of Limes (Tilia ssp.). Last year saw the discovery of T. tomentosa, several T.x euchlora and surprisingly a T. cordata stool risen from a fallen tree which has been cut back. T.x euchlora has been found at the car park at the library in Milngavie. Other fine specimens can be found at Kelvingrove Art Gallery along the River Kelvin. An earlier found ‘sapling’ has this year (2001) been confirmed as such by Prof. D. Pigott. Also MH found a 3-4 year old sapling of T. platyphyllos near where the first sapling of T. platyphyllos was found in 1993.

A white petalled Chamerion angustifolium was observed. This is thought to be caused by herbicides since the two plants later died.

Philately and Flowers (3)

Barbara Hogarth

Further postage stamps from around the world with designs illustrating wild flowers.
4000 Year-old Bracken

John Lyth

The specimen was taken from a depth of about 4 feet in the peat at the top of the Boguille, Arran, by the ranger at Brodick Castle, on the 18th August, 2001 and originally considered to be Bracken. However, Jim Dickson has identified it as Phragmites australis. Coming from the base of a peat deposit 4ft thick, it is unlikely to be less than 1,000 years old, and might be much more.

Trees and Shrubs Website

Franklyn Perring

The BSBI/Science and Plants for Schools (SAPS) website was demonstrated. It covered 80 native and established species and uses leaves and twigs for their identification. Identification is confirmed by a page which includes descriptions, photographs and distribution maps as well as some useful facts. It is also possible to access each species directly via an index. All technical terms used can be ‘clicked on’ to bring up line drawings and definitions.

The website is aimed particularly at school children of any age from 8-18 and the intention is to produce a CD Rom and make it widely available. The address is www-saps.plantsci.cam.ac.uk/trees

A Crocosmia new to UK?

Alison Rutherford

A photograph of what may be a new Crocosmia as an established escape was shown. It is believed to be the hybrid of C.x crocosmiiflora and C. masoniorum. Also shown was a pot of grass new to Dunbarton (VC 99) Echinochloa crus-galli, Acaena anserinifolia in a pot, and a pressed sample of Bidens ferulifolia, another first.

New finds in the Outer Hebrides 2001

Paul Smith & Richard Pankhurst

Photographs and specimens of three species new for VC 110, or confirming earlier unsubstantiated records were shown - Parentucellia viscosa (Yellow Bartsia), Phalaris canariensis (Canary-grass) and Papaver rhoes (Common Poppy). Several other new hectad records came from the BSBI field meeting in Uig, and photos of some of these plants and of the happenings at the meeting were shown. A few other new records and pictures from other parts of the Outer Hebrides in 2001 completed the picture.

BSBI Excursion to Sicily, May 2001

Richard Pryce

Poster with blown-up photographs and laptop with slides from the trip.

Rusty-back Fern in Ayrshire

Allan Stirling

– on the increase, or just overlooked in the past?

Since 1980 there have been eleven new sites reported for Ceterach officinarum in Ayrshire compared with six prior to that date. These were indicated on the accompanying maps. The question was posed whether the fern is really on the increase, or merely overlooked in the past due to inadequate recording, although the latter explanation seems unlikely in the case of such a distinct species.

It was of interest that two of the new records of Rusty-back were from old brick walls, a habitat which is mentioned in fern literature as rare.

Watercolours of some plants from the Lothians

Barbara Sumner

The plants illustrated are not exclusive to the Lothians, but contribute to the flora there, as elsewhere. Flowers or fruits are shown, of the following species: Hyancinthoides non-scripta, Primula veris and Viola hirta, Caltha palustris, Geranium sanguineum and Lotus corniculatus, Papaver rhoes and Tripeurospermum inodorum, Echium vulgare, Chrysanthemum segetum, Agrostemma githago, Campanula glomerata, Campanula rotundifolia and Thymus polytrichus, Hippophae rhamnoides, Rubus fruticosus agg., Quercus robur and Rosa canina agg. It was surprising to find Agrostemma githago in the Lothians because it has not been recorded there since 1934. The status of the modern record is questionable; perhaps it has been introduced with wildflower seed, either accidentally or deliberately.
Wandering in Wester Ross

The Kinlochewe and Fisherfield Forests, the large tract of mountainous country east of Gairloch and sitting in between Loch Maree and Little Loch Broom, has long been celebrated as one of Scotland’s most ‘remote’ wilderness areas. This means that for the average hillgoer, there is a lot of hard walking to be done to gain some of the more choice objectives and much the same is true for the average botanist. There are no large areas of calcareous rocks in this part of Wester Ross and, although interesting plants are to be found, it is necessary to work quite hard and take solace in the dramatic scenery and solitude when the ground is botanically dull. Not surprisingly, recent records for this area are somewhat sparse and the whole area is in need of much more attention and I hope this very partial account will whet the appetite for further exploration.

Glen Bianasdail is the narrow trough that leads through from Inverewe via the north shore of Loch Maree to Lochan Fada. It has some basic rocks on both flanks and is the obvious approach for Slioch, the imposing mountain that dominates the north side of Loch Maree. Unfortunately (or perhaps fortunately) the loch and the Kinlochewe River get in the way of a direct approach but a good path from Incheril gives a pleasant stroll to the bridge over the Glen Bianasdail burn with small diversions to see *Pinguicula lusitanica* (Pale Butterwort) and *Eriophorum latifolium* (Broad-leaved Cottongrass) in the frequent *Schoenus* flushes on the way. The path up the deeply incised burn into Glen Bianasdail is rather boggy at first but slabby rocks eventually appear and some of the low crags and flushes are quite calcareous with *Galium boreale* (Northern Bedstraw) fairly frequent and a sparse population of *Tofieldia pusilla* (Scottish Asphodel), an uncommon plant in Wester Ross.

With the summit of Slioch as the target, one now has to bite the bullet and get in some serious height gain to enter the east facing coire which then gives easier walking to the steep slopes below the summit. I have never been into this coire without seeing a herd of feral goats; on this occasion two big, smelly billies loomed dramatically out of the mist and rain which had now descended with a vengeance. Most of the coire is covered with glacial till or peat but there are some tiny areas of more basic rocky grassland with a surprisingly good population of *Botrychium lunaria* (Moonwort). The slopes and broken crags below the summit on the east side are rather dull except in those areas where snow accumulates; here there is a large population of *Sibbaldia procumbens* (Sibbaldia) and also much *Gnaphalium supinum* (Dwarf Cudweed).

The summit area of Slioch is surprisingly featureless for such a shapely hill, and with lousy visibility and horizontal rain to dull the senses, navigation became ‘interesting’. A compass seemed a sensible option, both to find the north peak where Rod Corner had recorded *Saxifraga rivularis* (Highland Saxifrage) in 1988 and to avoid dropping off the Torridonian sandstone crags which defend all the western approaches to the summit. *Saxifraga rivularis* was duly re-found in some abundance in a large gully along with *Cerastium arcticum* (Arctic Mouse-ear) and, where the gully gives out onto the main ridge, there is a healthy population of *Luzula arcuata* (Curved Wood-rush). As if in celebration of these finds, the clouds lifted to the north giving wild views down to Lochan Fada, with its white streams of spume and above to A’Mhaighdean, a contender for the most remote ‘Munro’. This respite was short-lived but an interesting steep descent to the north got me out of the wind and gave a long traverse round to the Glen Bianasdail path, the most interesting find here being *Lycopodium annotinum* (Interrupted Clubmoss) in vegetated block scree. The rain continued for the long trudge home but could not spoil an excellent day.

The only approach into the west of the area is through Kernsary which involves a long but unavoidable walk on tarmac. Today’s target was the crags and gullies on the north side of Beinn Airigh Charr, the shapely hill that dominates the skyline from Poolewe and easily approached from the path to Carnmore. Much of the area is very dull with wall-to-wall *Molinia caerulea* (Purple Moor-grass) away from the peaty morass of the path (since much-improved).
Good things appear in the scree that runs down below the crags with * Trollius europaeus* (Globe-flower), * Saxifraga aizoides* (Yellow saxifrage), * Saxifraga oppositifolia* (Purple Saxifrage), * Thalictrum alpinum* (Alpine Meadow-rue), * Persicaria vivipara* (Alpine Bistort) and a large population of * Arabis petraea* (Northern Rock-cress). The crags higher up and in Coire na Laoigh have similar plants and again have an abundance of * Arabis petraea* here with * Melica nutans* (Mountain Melick), * Silene acaulis* (Mountain Melick), * Saussurea alpinei* (Alpine Saw-wort), * Sibbaldia procumbens* and in one place * Dryas octopetala* (Mountain Avens). I'm sure that exploring this area in better visibility (yes, * Sibbaldia procumbens* and in one place * Dryas octopetala* (Mountain Avens), * Silene acaulis* (Mountain Melick), * nutans* Saussurea alpinei (Alpine Saw-wort), * Sibbaldia procumbens* and in one place * Dryas octopetala* (Mountain Avens). I'm sure that exploring this area in better visibility (yes, still raining) would be worthwhile. Heading north-west down Coire nan Dearcag, at the base of the ridge is a good mire and flushes with * Carex limosa* (Bog Sedge), * Platanthera bifolia* (Lesser Butterfly-orchid), * Dactylorhiza incarnata* ssp * pulchella* (Early Marsh-orchid) and * Eriophorum latifolium*.

The continuing rain pre-empted any thoughts of more high ground so I decided to visit lower ground in the northern part of the area, heading for the wooded crags and waterfalls at Creag a Chada Bhriste and Eas Ban from Dundonnell. A good track provides easy if somewhat dour walking to Achnageig but after this there is a large burn to cross – crossing burns in spate is one of the Scottish hills more dangerous and underestimated challenges. I had forgotten to zip up the legs of my waterproof trousers so they were held closed by velcro alone and by the time I had reached the middle of the swollen burn the pressure was too much and the legs ‘exploded’, rendering my precarious passage even more unstable. I had already decided that my decision to cross the river had been a mistake but turning back was even less inviting than pressing on; my relief at floundering onto the opposite bank was tempered by the recurrent thought that, unless the rain eased, it would be even more exiting on the way back.

The array of waterfalls at Eas Ban above my ford was awe-inspiring, the overnight downpour roaring out of the hills and into three deep ravines. Botanical exploration of these was going to be ‘trepidatious’ and common sense finally prevailed but not before a scattered stand of * Festuca altissima* (Wood Fescue) had been found along with a few woodland things like * Galium odoratum* (Woodruff), a good find this far north. These ravines would repay further exploration after a dry spell as there is at least some basic rock here. The crags of Creag Chada Bhriste proved less interesting with just the odd stand of * Galium boreale*. I found a really easy spot to re-cross the burn and returned to the track. East of this track there are interesting-looking mire areas with * Carex limosa* and greenshank and some ridges with * Arctostaphylos alpinus* (Alpine Bearberry), but my sogginess had dampened all enthusiasm.

It was surprisingly bright in the van, even with the curtains closed, and the drumming of the past few days had ceased - it wasn’t raining and the sun was trying to appear. Having finally reduced my endemic chaos to one reasonable rucksack, by the back of seven, I was able to wander along the shore of Loch Bhraoin in bright sun with the wind at my back with some hopes of finally getting to grips with Mullach Coire Mhic Fhearchair and its associated craggy hills. Quartzite is pretty grim stuff and I had done my time on Sgurr Ban and the ridge out to Beinn Chlaheim a few years ago and had no wish to repeat the exercise, so the schists on Sgurr Dubh were the target. There is a long line of north facing crags which has areas where the schist is calcareous, usually hinted at by the appearance of * Asplenium viride* (Green Spleenwort). The good things are widely spread and one needs to maintain concentration but * Draba norvegica* (Rock Whitlowgrass), * Poa glauca* (Glaucous Meadow-grass), * Poa alpina* (Alpine Meadow-grass), * Carex atrata* (Black Alpine-sedge), * Dactylorhiza incarnata* (Tufted Saxifrage) * Carex cespitosa* (Tufted Saxifrage) from An Teallach and I had a good idea where the former might be, so I made that the target of what was clearly going to be a roasting day. An Teallach is a great mountain, all pinnacles and crags but does not offer a huge variety of things for the vascular plant botanist. The sweaty haul up to the crags on the north side of Glas Mheall Liath above Glas Tholl produced little but relatively common montane species like * Arctostaphylos alpinus*, * Vaccinium uliginosum* (Bog Blueberry), * Silene acaulis*, * Epilobium
anagallidifolium (Alpine Willowherb) and higher up Athyrium distentifolium (Alpine Lady-fern). The star here, as on many of the higher Torridonian sandstone hills is Cerastium arcticum which is widespread on the ledges of the higher crags. An interesting scramble at the head of the coire brings one onto the top of Bidean a'Ghlas Thuill and the view suddenly opens open up all around, breath-taking still, despite the heat-haze.

The next peak on the ridge to the south is Sgurr Fiona and Saxifraga rivularis had been recorded at the head of the coire below this, Toll an Lochain. Getting down into the coire was not quite as easy as I imagined from above and there was lots of to-ing and fro-ing above big drops before I could piece together enough easy bits to get to the scree below the headwall. A large north-facing crag angles up to the ridge below Sgurr Fiona and there is an excellent population of Saxifraga rivularis in a gully just below the ridge. There is a lot more interesting ground on An Teallach above Toll an Lochain, but much of it is not easy to get at and the up-and-down involved takes up lots of time and it was just too hot.

The very craggy northern ramparts of Beinn Lair lie at the western end of Lochan Fada and take some getting at, so, with the weather still set fair, I decided to pack a tent and do it in style. The easiest approach is through Glen Bianasdail on a reasonable path and then heading along the south-west shore of Lochan Fada, some 11km of walking, the last of it very rough indeed. The north-facing crags on Beinn Lair are seamed with gullies and extend for some 5km so, even with an early start from close by, only a small portion of them can be explored in a day. The rock is a similar hard, friable schist to Beinn Airigh Charr and has a similar flora with Arabis petraea again being very frequent on crags and in scree. Silene acaulis, Saussurea alpina, Saxifraga oppositifolia, Saxifraga aizoides, Luzula spicata (Spiked Wood-rush), Galium boreale, Polystichum lonchitis, Cornus suecicus (Dwarf Cornel) and Coeloglossum viride (Frog Orchid) are all widespread and there are isolated occurrences of Pseudorchis albida (Small-white Orchid), Tofieldia pusilla and, in one crumbling gully, Cerastium arcticum, Poa glauca and surprisingly Juncus biglumis (Two-flowered Rush), a very rare plant in Wester Ross.

It is difficult to imagine a more beautiful place to be on a brilliantly sunny morning than Creagan an-t'Sasunnaich, the little, Cambrian limestone outcrop that juts out into the south-east corner of Lochan Fada. Dryas octopetala is abundant here and there were still a few flowers remaining; the combination of the sward of dark leaves, white flowers, white rock and the blue loch stretching away towards A'Mhaighdean is just stunning. On the crag ledges, away from grazing, there are a few spikes of Epipactis atrorubens (Dark-red Helleborine) and Listera ovata (Twayblade) occurs in the limestone grassland just a few metres away from Listera cordata (Lesser Twayblade) in Sphagnum under tall heather.

The boggy area south of here has some good mire areas with Carex limosa and Carex lastiocarpa (Slender-sedge) with the prospect of a lot of similar ground to the east. However, my target was the line of crags on Beinn a'Mhuinidh above Glen Bianasdail where there is an old record for Saxifraga nivalis (Alpine Saxifrage). The rock and the flora are, unsurprisingly, similar to that on Beinn Lair with Dryas octopetala again in at least two places. The quest for Saxifraga nivalis was unsuccessful but by this time I was finding the heavy rucksack tedious and at times positively dangerous on the steep ground. After ‘ticking’ the summit I was keen to get out of the sun and get a cold drink but the direct route south to Inverewe is well-defended and it takes a long slog across the plateau to the east to find an easy route down for tired legs. The pools in the big burn in the strath below were every bit as good as they looked from above – another great day.

Trunk-road verges and Autolink's management of the M74

DAVID WELCH

In lowland areas, road verges have become increasingly valuable as refuges for wildlife since farmland is now so intensively managed. Trunk-road verges may not support many rare plant species, often being newly created, but they do have considerable extent and are seen by very many people. So the management of trunk road verges may give conservation and aesthetic benefits, or it may cause conservation damage and spoil the vistas of touring motorists.

In Scotland just three companies now manage trunk roads: Amey, Autolink and
BEAR. This last group operates over the widest area dealing with 1270 miles of road, whereas Autolink is restricted to the southern 60 miles of the M74; Amey manages 710 miles.

During the last two summers I have been shocked by the activities of Autolink along the M74. Large teams of masked workmen have systematically sprayed with herbicides all areas planted with trees and the entire verge has been cut at least once each year, so variety in the colour and form of the vegetation is much reduced. In contrast, on the M74 further north and on the M6 to the south, sections of verge more distant from the carriageway remain uncut, adding colour in autumn and winter from the dried-up foliage of *Arrhenatherum elatius* (False Oat-grass), *Pteridium aquilinum* (Bracken), etc., and providing food for birds from seed-heads. Also on these roads broom and gorse scrub and stands of brambles have been allowed to develop, adding to the visual interest and ecological variety.

I therefore complained to the Autolink management, only to be told that theirs was a model management "a demonstration of how well trunk roads could be managed that would in time be applied to the rest of Scotland". So I enlisted the enthusiastic aid of my MSP, Mike Rumbles, who gives good support to conservation, and he has asked Parliamentary questions. From these it has emerged that in 2001 Autolink used 1904 litres of herbicide on the M74 verges, an amount greater than either of the other two companies sprayed in their much larger road networks covering the rest of Scotland. Amey and BEAR each used about 1 litre per mile, Autolink 34 litres per mile. In mitigation Autolink claim they have needed to establish several miles of new tree planting on the newly constructed sections of motorway around Beattock. But these stands were sprayed in both 2000 and 2001 and the trees were already thriving last summer; moreover it is surely not intended that they yield a commercial crop of timber.

Of greatest concern has been Autolink's spraying of the bases of older trees planted back in the 1980s and 1990s. The Scottish Executive and the previous Scottish Office have produced excellent documents guiding verge management, respectively Trunk Road Biodiversity Action Plan (1999) and Cost Effective Landscape: Learning from Nature (1998), the latter of which explicitly criticises the use of herbicides under established vegetation, whilst the former urges the minimum use of herbicides. So Autolink is contravening clearly stated Government policy.

For the year 2000, Autolink were unable to provide figures on herbicide use since the subcontractor doing the work has gone into liquidation. However, from my own observations the volume was larger, and also peripheral lagoons were needed to prevent the run-off entering water courses. The cost of this intensive road management is not so far available to me, but obviously, with only a small percentage of the total Scottish road system involved, it does not yet threaten the nation's budget. If indeed there is a move to spread the management to the rest of Scotland, then either taxes will rise or other spending cease. Far more important is the loss of wildlife that will result, and the perception that will be caused to visitors, that Scotland is a country unaware of the dangers of intensive agricultural management. I am left with the impression that Autolink have been misguided by the views of some horticulturalists who see rural roads as extensions of urban parks, and who want to create work for themselves and their companies.

Scottish Field Meetings 2002

Full details of the following meetings will be found in the Year Book

- **May 12** | Field Meetings following the Annual Meeting | ME Braithwaite
- **June 29** | Greenlaw, Berwicks | RWM Corner
- **June 30** | Shaws Lochs, Ettrick, Selkirk's | IP Green
- **July 6-7** | Culbin & Roseile Forests and Burghhead Area, Moray | AJ Silverside
- **Aug 3-6** | Tongue, W. Sutherland | CJ Miles & DM Hawker
- **Aug 23-25** | Various Lochs, Kirkcudbrights, etc. |
Taking Steps to Re-survey the Dalmarnock Viaduct

P MACPHERSON & EK LINDSAY

In a previous article we reported on the plants which had colonised a railway viaduct in Dalmarnock, Glasgow (Lanarkshire VC 77), the line through which had been closed in 1965 (Macpherson & Lindsay 1996).

When surveyed in 1994 and 1995 we entered via the end which opened onto a plateau which had been the goods yard. In our report we noted that many of the plants grew at the edges of the track and obviously the result of droppings from birds perched on the parapets. These included five taxa of cotoneaster and seedlings of Oregon-grape (Mahonia aquifolium) and Juneberry (Amelanchier lamarckii). On the clinker there were just a few scattered willows and birch the tallest being about 15ft high and smaller specimens of Common and Orange-berried Whitebeam (Sorbus aria and S. croceocarpa), but in general very little on the central part. We ended the report by stating that as there was so much bare ground, we would continue to monitor the site in the anticipation of finding new arrivals.

In recent years both ends have been blocked off by steel fencing and barbed wire. However in 2001 we noticed that at approximately its mid point there was a small gap in the side fencing. Accordingly, we took a short ladder and squeezed through onto the viaduct.

The growth in the intervening period was such that we now had to push our way through the trees and shrubs to get to either end. Some of the willows were over 40ft high. In the 300 yard length we recorded 88 taxa. There were 19 trees: of the six willows, there was an abundance of Salix caprea var. sphacelata and three were hybrids; there were three whitebeams (Sorbus spp), but the most interesting was Italian Alder (Alnus cordata) which could not have been planted in such a situation. Most of the shrubs previously noted were still present, but additions took the number to 18: the five additional cotoneasters included Cotoneaster ignescens - new to Britain in the wild and C. microphyllus - a second record; a barberry has been considered to be Berberis x lologensis. None of the nine grasses was of particular note. Tiny residual areas of open ground had Centaury (Centaurea erythraea) and Fairy flax (Linum catharticum), Cirsium arvense var. setosum has been confirmed and growing on a damper part we noted Common Spotted-orchid (Dactyloriza fuchsii).

In due course we will attempt to survey the viaduct again, but in view of the tree and shrub growth do not expect to find too many additions!

Acknowledgements

We appreciate having received help with identification from Jeanette Fryer, Douglas McKean, Desmond McEkele and Allan Stirling.

Reference


Late addition to Scottish Field Meeting Programme 2002

JIM McINTOSH

Douglas McKean, Richard Thomas and I have organised a montane field meeting to Meall nan Gabhar (743m) and Meall nan Tighearn (739m) on Sunday the 23rd June 2002. These outliers of the Ben Lui group, right on the West Perth (VC 87) and Main Argyll (VC 98) boundary, are some of the most westerly outcrops of the rich Breadalbane calcareous-schist. Many interesting species have been recorded here in the past including Saxifraga nivalis (Alpine Saxifrage), Dryas octopetala (Mountain Avens) and Arabis petraea (Northern Rock-cress). As well as looking for these species, it would be good to renew some of the older records such as that for Salix reticulata (Net-leaved Willow), last seen in 1954.

This is a joint meeting with BSS and Perthshire Society of Natural Science. As we are being transported by three landrovers to the starting point for the walk-in, numbers are strictly limited to 21 (approximately 7 per society) on a first come first served basis. Members who would like to come must be hill fit, be suitably dressed and bring appropriate hill-walking equipment and packed lunches.

For further details and to book, please contact Mr Douglas McKean, Royal...
Raasay – 2001 Update

STEPHEN J BUNGARD

Some Spargularia growing in the tarmac of a car parking area that had initially been too casually identified as S. marina (Lesser Sea-spurrey), turned out on closer examination to be S. rubra (Sand Spurrey) – a first for Raasay.

A closer look at Polygonum (Knotgrass) at Eyre showed it to be P. arenastrum (Equal-leaved Knotgrass). It may be that all P. aviculare agg. on Raasay is in fact P. arenastrum.

All specimens of Arrhenatherum elatius (False Oat-grass) examined turned out to be var. bulbosum (Onion Couch). As well as plants near habitation, plants on the east coast were checked. It may be that all Raasay plants are in fact this variety.

Suaeda maritima (Annual Sea-blite) was present this year in the shingle of Raasay harbour, the first record since it was reported as “very rare and local in the salt marsh south of Oskaig” in 1937.

A patch of Briza media (Quaking-grass) near the mermaids is only the second Raasay record, the first being made by Francis Rose in 1987 from the Fears-Leac path.

The finding of Osmunda regalis (Royal Fern) near Inver completed the rediscovery of all the old sites for this plant on Raasay.

A new site for Diphiastrum alpinum (Alpine Clubmoss) is some way south of previously known sites and also quite a bit lower at about 900 ft.

The year 2000 saw fourteen additions to the plant list for the Raasay part of hectad 18/64, including a number of plants that are not common on Raasay: Climbing corydalis (Ceratocapnos claviculata), the largest population of Wood Avens (Geum urbanum) known on Raasay, Heath Cudweed

(Gnaphalium sylvaticum), Three-nerved Sandwort (Moehringia trinervia), Adder’s-tongue (Ophioglossum vulgatum), Heath Pearlwort (Sagina subulata), Figwort (Scrophularia nodosa), Fragrant Orchid (Gymnadenia conopsea), Upland Enchanter’s-nightshade (Circaea x intermedia), Rough Meadow-grass (Poa trivialis), Sneezewort (Achillea ptarmica), Broad-leaved Dock (Rumex obtusifolius), the spiral form of Soft-rush (Juncus effusus f. spiralis), and a variety of Compact Rush (Juncus conglomeratus var. subuliflorus).

Charophyte specimens were sent to Nick Stewart who identified Nitella opaca (Smooth Stonewort) from a roadside lochan and Chara virgata var. annulata (Delicate Stonewort) from Loch a’ Chadhachamaich and Loch na Meilich. The Nitella opaca may be the source of a 1954 record of water crowfoot “in a lochan above Oskaig by the road” which has not been recorded before or since.

Away from Raasay, Trientalis europaea (Chickweed-wintergreen) was found at Pol Domhain on the mainland marginally over 10 km from Raasay, reopening the question of whether a 1960 record for Raasay was an error as has been assumed.

Cardamine x zahlbruckneriana (C. flexuosa x C. hirsuta) - A new hybrid for Scotland

IP GREEN

While recording for the Atlas 2000 on the 31 July 1999 along the old railway line near Knockando in Moray (VC 95) NJ180409, now part of the Speyside Way, I came across this odd looking Cardamine. There was this one plant amongst many plants of C. hirsuta (Hairy Bittercress) and C. flexuosa (Wavy Bittercress) that was much taller and bushier. The seedpods were shorter as well, which is often a character of a hybrid. I took part of the plant and sent to Tim Rich, but he had never seen this hybrid, so could not be sure. To make matters worse one of the seedpods had a single seed in it. In the end, he had to check the pollen and found it 100% sterile. A specimen has been placed in the National Museum of Wales.

I would like to thank Tim Rich for the efforts he put into naming this for me.
Five New hybrids for Moray (VC 95)  IAN P GREEN

In July 2001, I led a two-day meeting for the Bradford Botany Group in Moray. Luckily for me, several exceptionally good botanists attended. Consequently, five new hybrids were found, all confirmed by BSBI referees.

Elytrigia × laxa (E. repens × E. juncea) - Common x Sand Couch; on sand dunes on the edge of Culbin Forest (NH9863).

Cochlearia × hollandica (C. anglica × C. officinalis) - English x Common Scurvygrass; on the banks of the Muckle Bum where it meets the Findhorn Bay (NJ0162).

Crataegus × media (C. monogyna × C. laevigata) - Hawthorn x Midland Hawthorn; One large bush on sand dunes on the edge of Roseisle Forest. This was probably introduced as it is nearby the old ruin of Millie Bothy (NJ1062).

Dryopteris × complexa (D. filix-mas × D. affinis) - Male Fern x Scaly Malefern; by coastal path east of Burghead (NJ1269).

Equisetum × litorale (E. fluviatile × E. arvense) - Shore Horsetail; plentiful around a pond in the grounds of Eight Acres Hotel (NJ1962).

The Equisetum hybrid I had noted several times while recording for the Atlas 2000, but then decided not to send in the records, as I was not sure how safe they were. I have since had some of these confirmed as well.

Slender Trefoil (Trifolium micranthum)  GH BALLANTYNE in Scotland

Until a decade or so ago most Recorders in Scotland, if asked if Slender Trefoil (also called Slender Yellow Trefoil and Least Trefoil) occurred currently in their vice-county, would have been able to say, with fair certainty, "no". If asked about the past, they might have replied "maybe", depending on how much of a historical interest they took in their local flora; those who knew their older records would probably remember T. filiforme, its old name, mentioned. However, that name was applied in nearly every case to variants of Lesser Trefoil, i.e. T. minus, or T. dubium as it became - an appropriate name for its variability can indeed lead to dubiety. 150 years ago George Johnston (1853) commented that "dwarf specimens ... are very neat, scarcely more than an inch in height; and, having only five or six flowers in a head, are apt to be mistaken for T. filiforme". Bentham and Hooker (1924) too, certainly in the later editions of their Handbook, warned that "starved specimens of [T. dubium] are much like the more luxuriant ones of T. filiforme". Much more recently, Geoffrey Halliday (1997) considered that there is "Frequent confusion with depauperate forms of T. dubium". So, did/does T. micranthum actually occur in Scotland?

By 1970, when I compiled my Wild Flowers of Kirkcaldy, I'd never seen T. micranthum and so excluded it as I was pretty certain that records of T. filiforme in older lists were likely to be errors, even those of that doyen of 19th century field botanists, Professor J.H. Balfour. Also, William Young (1936) in his Fife & Kinross list said, under T. filiforme "no doubt mostly T. dubium", for once getting off the fence where uncertainty was concerned. Thereafter I gave very little further regard to T. micranthum, until 1992. Then, as related in Ballantyne (1993), I was botanising in the grounds of St Mary's College in St Andrews. The lawn looked interesting, with Mind-your-own-business (Soleirolia soleirolii), Least Yellow Sorrel (Oxalis exilis - not O. corniculata, as stated in the article) and, as well as Lesser Trefoil, a smaller version of it. Gathering both, it did not take me long to decide that they were quite distinct, the smaller plant having few flowers and more or less sessile leaflets, as well as being tidier and, well, just different = T. micranthum.

At the time I thought that the species' occurrence at that particular site was a one-off. However, in 1997, Bill Hay, who had retired to his native Fife, refound it in that lawn and in others in St Andrews; I realised then that it might well be present in Kirkcaldy and sure enough found the plant in several spots, including two or three hundred yards from my home. Since then Bill and I have found it elsewhere in the county, as has Mary Benstead at Tayport (sent for verification in a matchbox, into which it fitted very well) while in November last I came across it in the grounds of Kinross House. Thus it would seem that Slender Trefoil has taken a liking to VC 85.

I then decided to try and find out the position in the rest of Scotland, starting with older authorities. Seventy years ago, Druce (1932) gave only VC 80 in Scotland, with VCC[77,82-85,90-96,106] as records he considered to be errors. He also mentioned Northumberland and Cumberland where the species
was, and apparently still is, very rare. In 1962 Clapham, Tutin & Warburg indicated Wigtown and Roxburgh only while in the same year the Atlas showed a dot in both these counties along with five introductions in the general Moray Firth Area. More recently, in 1991 (repeated in 1997) Stace says scattered to W Ireland and S Scotland, casual in C & N Scotland.

The actual occurrence of Slender Trefoil in Scotland up to about 1960 may never be properly known, given the confusion over earlier names. One of the few authenticated records is from a garden lawn in the 1870s in Kelso (VC 80), and there on turf lifted from another site in the county (specimens in E and BM). It would be worth getting an expert view on other material in RBGE Edinburgh, especially that collected in the Arthur's Seat area in (?) 1822 and 1958 which may include both species; similarly, there could be material in other herbaria which might yield early records. Other than a 1921 specimen from Leith Docks, a 1937 report from Wigtown and one in imported soil in Dunbarton in the 1950s, it was apparently 1960 until the species was seen again, predictably by Mary McCallum Webster, in Cawdor Castle lawn (VC 96) and also in the same county at Dochfour House in 1975. By that time it had appeared in the Royal Botanic Garden grounds, collected in 1970/74, and it is still there (Olga Stewart found it elsewhere in VC 83 in 1982) while it was also seen in the SW (VCC73/74) in the 1970s and probably in the 1980s.

And so the spread in Scotland had begun, or perhaps just begun to be noticed. During the early/mid 1990s the little trefoil was increasingly reported: in Fife, East Lothian, Mid Perth, Roxburgh, Ayr and Banff, and, later in the decade, from East Perth, Angus and Moray. For the record, the post-1970 records which have come to my notice are from VCC 73,74,75,80,82,83,85,88,89,90,94,95,96. The only areas where it was reported as definitely not occurring were Arran and Mull and I would hazard a guess that this is in fact the case in most offshore islands. Several recorders said they had not looked for the plant and that it could be present.

The above account must not be taken as complete. I'd hoped that the new Atlas, with presumably up-to-date records, would have been published before the deadline for submission of articles to the Newsletter but rather than wait for another year I decided to press on and report what information I'd gathered. I did not get in touch with every recorder personally, relying on recent checklists and floras for some vice-counties, which may now be out-of-date, of course. I am indebted to those recorders who did supply details.

For those readers now imbued with the urge to get down on their knees with lenses at the ready, Slender Trefoil is most likely to be found on garden and park/mansion house lawns and greens, gravel paths and flower beds, old walls and in pavement chinks. "It likes basic(ish) well-drained soils, low rainfall and a good 'bake in summer'" to quote Alison Rutherford (pers.comm.), who also quaintly but accurately warns that "it is confusable with bonsai'd T. dubium".

Finally, there may be a parallel to be drawn with the spread of another lawn weed, Slender Speedwell (Veronica filiformis). Effectively first recorded in Britain in 1927, it was seen in three or four Scottish counties prior to the Second War, including Fife where it was noted as a "pest of lawns since c. 1935" - at St Andrews University! It was not then much found until the mid-1950s, after which it was reported from 33 Scottish VCs (see Bangerter & Kent (1962)) and it is now of course widespread.

References

Mountain Mishaps

Our mountain flora has always held a fascination for Scottish botanists as shown by our tradition of having at least one mountain field meeting in each year's programme, but the habitats of our native arctic-alpines can tempt us into dangerous situations if we are not very careful. It is perhaps a tribute to the vigilance of leaders of mountain excursions and adherence to codes of conduct
on the hills that incidents involving injury to participants are usually confined to the occasional sprained ankle or bruising from a tumble resulting from an incautious approach to some botanical treasure, and such incidents rarely achieve mention in the field meeting reports.

It is therefore of interest in this connection to recall some events, evidently alarming at the time, although fortunately not resulting in serious harm to those involved, which occurred during mountain excursions led by the notable Professor JH Balfour and related in the published version of his field meeting diaries.

One of Balfour’s longest and widest-ranging excursions was based in Braemar from 3 to 18 August 1849 and the Cairngorms, Clova and Lochnagar were all included in the rigorous itinerary. On the cliffs of Lochnagar on 14 August the following incident occurred - and I quote from the published account. "... Dr B. ascended to the Mulgedium station which he reached with some difficulty and found to his disappointment that none of the plant was in flower. Mr McMicking had stationed himself at the upper part of the ravine in order to direct Dr B. to the spot. Mr M. afterwards, in attempting to descend the cliff, was precipitated from the top to the bottom and sustained some bruises. Had he rolled a little further than he did, he would have gone over steep cliffs and would in all likelihood have been killed. The fall rendered Mr M. very nervous and Dr B. had some difficulty in conducting him to the bottom of the cliffs where the rest of the party were waiting." The Dr B. involved was almost certainly Balfour himself. Mulgedium is an older name for Cicerbita.

Another somewhat similar incident occurred during an excursion to Clova when Loch Brandy was visited on 6 August 1863. Again I quote from the diaries. "Mr Cadell and Mr H Mitchell got into a difficult position on the high crumbling rocks. Mr Cadell with great difficulty was enabled to extricate himself and descended, but Mr Mitchell got into such a dangerous position that we had to send to the inn for ropes. Mr Lightfoot and Mr Barnes came up with ropes and we were enabled to extricate Mr Mitchell. Mr Irving descended with a rope to give Mr M. assistance. Before the ropes arrived we handed down some wine and water to Mr M., and we pulled up his botanical box and field book by means of string and our straps. By uniting all our straps we were able to throw a long strap to Mr M. and thus give him confidence until the ropes arrived. We were occupied about three hours with Mr Mitchell. He remained for at least two hours or two and a half hours in his perilous position".

Becoming lost in mist conditions can be a hazard with possible dangerous consequences. The following incident is described from a visit to Ben Lawers on 8 August 1870 - "The mist became very thick, and we found our way towards Lochan-a Chait. We reached this with difficulty on account of the mist. Mr Cameron and Mr Shaw went to the rocks, and called loudly to each other in the mist with the view of knowing where each of them was. The sound of their voices was responded to by a call from someone high up on the rocks. Mr Cameron answered the call and ascended the rocks, and to his astonishment found that it was the Misses Jex-Blake who had lost their way and had wandered in the mist into the dangerous position in which they were now placed. We conducted them down the rocks, and after some difficulty got them brought home thoroughly tired and drenched".

Happy days! Perhaps more of Balfour’s activities another time.

Reference

The Low-down on Scottish Committee Members L FARRELL

Gordon Rothero (Chairman)

Gordon was born in Sussex but soon developed an interest in higher ground and whilst attempting to climb mountains he frequently rested on pitches which had small green plants growing on them. So his interest in Bryophytes as well as vascular plants developed and for the past 21 years he has been based in Scotland. He is sometimes to be found in the grounds of Benmore Gardens which is his work-base as a part-time teacher of outdoor recreation for the City of Edinburgh Council, but his more common habitat is in the wild and remote parts of Scotland usually in his other part-time employment role as a self-employed botanist. He has co-authored Plants of Argyll and the recently published Flora of Assynt. When off duty he can be located in Glenmassan on his farm or at his local pub. He is keen to encourage new botanists and can...
nearly always be persuaded to join in field trips.

Lynne Farrell (Secretary and Treasurer)
Born in Manchester, Lynne developed an interest in plants from the age of 3 and had progressed from the Observer's book of plants onto more comprehensive works by eleven, encouraged by her biology teacher and friends in Sale, Cheshire. Having failed Chemistry A level, she was forced to get a job to earn her living instead of going to university. Fortunately she ended up at Monks Wood research station where she discovered that other people were as devoted to conservation and the natural world as herself. She then migrated to Coleraine University and worked on ecological surveys in Eire before returning to the Institute of Terrestrial Ecology Biological Records Centre where she co-authored the first British Red Data Book on vascular plants. She was a co-ordinator for English Nature's Species Recovery Project and now works for Scottish Natural Heritage. Lynne is a keen table tennis player and sports fan. At present she is working on a tetrad flora of Mull and welcomes assistance in the field.

Mark Watson (Minutes Secretary)
Another product of southern climes, Mark's interest in botany was kindled on the salt flats of Kent by his biology master. He progressed to Reading University and became acquainted with gastronomic picnics, electric folk music and the genus Oxalis, for which he is still a referee. Although based at the Royal Botanic Garden, Edinburgh he is often to be found in higher places or damp valleys in the Far East, collecting and identifying exotic species and sampling the local cuisine. He specialises in the Umbelliferae. Mark is an enthusiastic vascular plant person and always ready to share his knowledge with others. He is a keen cricketer and dingy sailor.

Edna Stewart (Exhibition Secretary)
Definitely a lady of Scottish origin, Edna is a Munroist and has canoed around much of Scotland and foreign coasts. After teaching biology for many years she is now recorder for Stirlingshire and is working on a flora for that area. A member of the Ladies Scottish Climbing Club, she is sometimes found near Aviemore and the Cairngorms, although she also ventures abroad frequently and gives slide shows about her travels. Edna is a keen gardener and has an interest in fungi. She also has cultural interests in the theatre and music.

Jim McIntosh (Field Meetings Secretary)
Originally of Perthshire farming stock, Jim has developed from 'twitching rarities' to being a keen mountain botanist. After an early career with the BBC bringing television and radio reception to far flung outposts of the Highlands and Islands, he changed tack to the Scottish Agricultural College and graduated from Auchenruive with a diploma in Countryside Management and Conservation and now works as an Area officer for Scottish Natural Heritage in the Strathclyde and Ayrshire patch. He is most at home in the hills and so not found often below 2000 feet, and needs no excuse to organise mountain field venues.

Paddy Braithwaite
Paddy was a native of Suffolk for many years where she had a keen interest in plants of wet places and in particular Marsh Pea (Lathyrus palustris) for Biological Flora study. Her early inspiration was through an extra-mural course on geology and vegetation. She worked as a scientific officer in the Pathology Department both in England and later in the Borders after marrying the present BSBI Treasurer, Michael. They live near Hawick and are working on recording in Berwickshire and often visit Scottish islands to help with recording. Paddy has served on the conservation and science reserves management committee of the Scottish Wildlife Trust. She is a keen craftswoman and occasionally gives demonstrations on embroidery and lace work, in addition to being a choral singer.

Phil Lusby
Of southern horticultural stock, having a diploma from Kew Botanic Gardens with particular knowledge of orchids in Britain, he then discovered Cerastiums (Chickweeds) and took to the hills in search of the rarer species, travelling as far north as Shetland and Faroe in their pursuit. Phil now works at Edinburgh Botanic Garden. He was previously working on several of Scotland's rarer species with a view to re-establishing them in the wild but has now returned to teaching horticulture. In his spare time he is renovating an old house in the Borders whilst living in it.
Ian Strachan
Although normally based at SNH Fort William, Ian is a frequent commuter to Peterborough where he works for the Joint Nature Conservation Committee as Habitats Adviser. With a childhood fascination for invertebrates he trained as a zoologist, before undertaking ecological research at the bottom of lakes in Cumbria and later Norway. He worked as a coastal ranger in East Lothian and Fife, where his interests in plants flourished. He joined the Nature Conservancy Council in Fife and later moved to Lochaber. He is recorder for Westerness and writes a regular nature column in the *Oban Times* as Highland Darter. During his leisure time he is a keen musician and often accompanies his very musical family.

Chris Miles
Chris was first introduced to wildflowers in the Forest of Dean by his uncle, and he went on to do a degree in botany and an MSc in Bryophytes at Reading University. He then moved to Essex where he worked for the Wildlife Trust as the Conservation Manager and overseeing 80 nature reserves. Chris is vice-county recorder for Dumfriesshire, where he is leading a field meeting in August 2002, and he hopes to work on a County rare plants flora. He has a wide knowledge of natural history and now works for Scottish Natural Heritage as Area Manager for Dumfries and Galloway. In his spare time he is a keen gardener and is developing a garden in the challenging Southern Uplands climate near Eskdalemuir.

Arable Weeds ~

**A View from the Other Side (of the Border)**

ALAN SHOWLER

I was very interested to read of the survey of arable weeds in SE Scotland by Gaskell and Velander (2001) especially since I was involved in a similar survey in 2000 in SE England. This was carried out for the Northmoor Trust in the Buckinghamshire Chilterns (which, it must be said is in the extreme NW part of SE England) in arable, chalky fields in almost all of which barley was being grown. The species of arable weeds seen differed so considerably from those in Scotland that a southerner's comments and comparisons might be of interest.
seems the arable weeds of our two countries differ considerably, though differences due to the chalk soils of the Chilterns must be borne in mind in this very subjective comparison.

In conclusion, I would just warn Scottish botanists heading south to look for weeds, beware, you may be disappointed. And you will probably see me heading in the opposite direction looking for something rather better in the hills. I do have a favourite weed though, which I associate with Scotland - *Galeopsis speciosa* (Large-flowered Hemp-nettle) but those where it grows may have a different opinion!

Reference:

**Grass-of-Parnassus**

I recently visited the exhibition of Stella Ross-Craig's drawings of British plants at the Royal Botanic Garden, Edinburgh. They are very attractive and are reckoned to be highly accurate. However I was taken aback by the drawing of *Parnassia palustris* (Grass-of-Parnassus); one of the flowers had 5 erect mature anthers positioned more or less as below: Fig 1

![Fig. 1 as drawn by Stella Ross-Craig](image)

As I regard Grass-of-Parnassus as one of our most beautiful native flowers and I have spent quite a lot of time looking at and photographing it, and I have come to the conclusion that the plant is (a) protandrous and (b) that the stamens mature one at a time. When the flower first opens the filaments (an inappropriate term for such substantial items) are all short and the anthers lie appressed to the base of the large ovary. Each stamen in turn lengthens until the anther lies over the stigma, and presumably dehisces in this position. Then it bends back, out of the way, and the anther shrivels and soon falls off. After all 5 stamens have dehisced and bent back the stigma matures. Diagrammatically the process is as shown in Fig 2.

![Fig. 2. Stamens mature one by one (anticlockwise).............. stigma matures](image)

It follows that the flower is never seen as illustrated by Stella Ross-Craig, so how did she come to draw it like that? Was she working from a fully dehisced specimen, and drew what she "knew" it would have been like? Incidentally there is a second flower in her drawing which looks as if it may be part way through the cycle. When I returned home from my visit to the RBG, I started looking through popular illustrated floras (I've obviously never looked at them properly before) and discovered that Francis Rose, the recent Collins Handbook by Fitter and Blamey and the large illustrated flora by Blamey and Grey-Wilson all follow Ross-Craig. The exceptions were the old Collins guide to wild flowers by McClintock and Fitter, and the Inglis drawings for the NTS booklet on Ben Lawers. Both of these show at least some of the anthers immature and pressed against the ovary.

Tufted Loosestrife flowers again!

When I walk along the Union Canal I usually do a quick check on the *Lysimachia thyrsiflora* (Tufted Loosestrife) which is one of the few rare plants in VC 84. In a previous issue I have commented on it being a shy flowerer (Muscott 1999). So last spring I was delighted to see it in bud again, and sure enough it had a good flowering in 2001. Did it flower elsewhere last year?
Some Carex Hybrids

M J Y FOLEY & M S PORTER

During the 2001 season, we had planned to collect and study all the previously recorded Carex hybrids of Cumbria. However, due to foot and mouth restrictions, only a small proportion of the sites were accessible, and these late in the season. We therefore had to supplement our material with specimens collected in Dorset and the Scottish Borders, and are very grateful to David Pearman and Rod Comer, respectively, for information on localities. Five of these hybrids are described here alongside their parents. We have added notes on the principal distinguishing characters as we have observed them in the field and in the herbarium. We would be interested to receive any comments.

Carex x boenninghausiana (C. paniculata x C. remota)
Intermediate between parents and sterile.

<table>
<thead>
<tr>
<th>Character</th>
<th>C. paniculata*</th>
<th>C. remota</th>
<th>C. x boenninghausiana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflorescence</td>
<td>50-150 mm long, spikes broad, lax, to 30 mm, in a +/- compact panicle</td>
<td>50-100 mm long, spikes ovoid, small (usually 5-8 mm long), well separated (remote)</td>
<td>80-160 mm long, spikes +/- lanceolate, to c.20mm in length, well separated below, crowded above</td>
</tr>
<tr>
<td>Bracts</td>
<td>usually absent</td>
<td>long, exceeding the inflorescence, usually subtending all the lower spikes</td>
<td>usually present, if so long but rarely exceeding the inflorescence. Only subtending the lowest spike</td>
</tr>
</tbody>
</table>

* In some plants examples can be found where the inflorescence is of very similar appearance to the hybrid but is fertile; this may well equate to the taxon sometimes described as var. simplex.

Carex x involuta (C. rostrata x C. vesicaria)
Varially intermediate between parents and sterile.

<table>
<thead>
<tr>
<th>Character</th>
<th>C. rostrata</th>
<th>C. vesicaria</th>
<th>C. x involuta*</th>
</tr>
</thead>
<tbody>
<tr>
<td>colour of leaves</td>
<td>glaucous on upper surface</td>
<td>yellowish-green on upper surface</td>
<td>yellowish-green on upper surface</td>
</tr>
<tr>
<td>stomata</td>
<td>mainly on upper surface</td>
<td>only on lower surface</td>
<td>sparsely on both surfaces</td>
</tr>
<tr>
<td>female spikes</td>
<td>30-100 mm long; utricles tightly compact in spike</td>
<td>20-40 mm long; utricles not tightly compact in spike</td>
<td>30-60 mm long, utricles fairly compact in spike</td>
</tr>
<tr>
<td>utricles</td>
<td>patent; ovoid, beaked, inflated, 4-6 mm long</td>
<td>erecto-patent; ellipsoid tapering evenly into beak, 6-8 mm long</td>
<td>erecto-patent to +/- patent; broadly ellipsoid, inflated, 6-7 mm long</td>
</tr>
</tbody>
</table>

* Utricles which are apparently empty may occur on the parents as well as the hybrid

Carex x fulva (here C. hostiana x C. viridula subsp. brachyrrhyncha)
Intermediate between parents and sterile.

<table>
<thead>
<tr>
<th>Character</th>
<th>C. hostiana</th>
<th>C. viridula ssp. brachyrrhyncha</th>
<th>C. x fulva*</th>
</tr>
</thead>
<tbody>
<tr>
<td>inflorescence</td>
<td>spikes separated</td>
<td>spikes +/- contiguous</td>
<td>spikes fairly well separated</td>
</tr>
<tr>
<td>lowest bract</td>
<td>+/- erect, short</td>
<td>sometimes deflexed, long, exceeding inflorescence</td>
<td>often erect, moderately long but not exceeding inflorescence</td>
</tr>
<tr>
<td>female spikes</td>
<td>cylindrical</td>
<td>ovoid</td>
<td>cylindrical, but tapering above</td>
</tr>
</tbody>
</table>

Reference
* Compared to herbarium specimens, the pale yellowish colour of the female spikes is often readily apparent in the field.

**Carex x pseudaxillaris** (*C. otrubae* x *C. remota*)
Intermediate between parents and usually sterile.

<table>
<thead>
<tr>
<th>Character</th>
<th><em>C. otrubae</em></th>
<th><em>C. remota</em></th>
<th><em>C. x pseudaxillaris</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>lowest spikes</td>
<td>contiguous</td>
<td>remote</td>
<td>distinctly separated</td>
</tr>
<tr>
<td>appearance of lowest spikes</td>
<td>extremely bulky; utricles patent</td>
<td>slight; utricles +/- appressed</td>
<td>bulky; somewhat triangular, compact; utricles appressed</td>
</tr>
<tr>
<td>lower bracts</td>
<td>setaceous, usually rather short</td>
<td>very long</td>
<td>usually quite long on lowest spike; not always present</td>
</tr>
<tr>
<td>stem</td>
<td>stout; winged</td>
<td>very slender; not winged</td>
<td>less stout than in <em>C. otrubae</em>, not, or slightly, winged</td>
</tr>
<tr>
<td>utricles</td>
<td>5-6 mm</td>
<td>2.5-3.5 mm</td>
<td>3.0-4.0 mm (empty)</td>
</tr>
</tbody>
</table>

**Carex x alsatica** (*C. flava* x *C. viridula subsp. oedocarpa*)
Intermediate between parents and sterile.

<table>
<thead>
<tr>
<th>Character</th>
<th><em>C. flava</em></th>
<th><em>C. viridula subsp. oedocarpa</em></th>
<th><em>C. x alsatica</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>overall colour of plant</td>
<td>yellowish-green</td>
<td>green</td>
<td>almost bluish-green</td>
</tr>
<tr>
<td>inflorescence</td>
<td>large, typically very compact and bulky</td>
<td>much smaller and more lax than in <em>C. flava</em></td>
<td>intermediate between parents in size and disposition of spikes</td>
</tr>
<tr>
<td>female spikes</td>
<td>large, round</td>
<td>small, +/- ovate</td>
<td>+/- cylindrical</td>
</tr>
<tr>
<td>utricles</td>
<td>patent, +/- deflexed, 6.0+ mm long</td>
<td>patent, not deflexed, 3-4 mm long</td>
<td>patent, not deflexed, 4.5-5.0 mm long Empty and readily compressible</td>
</tr>
<tr>
<td>length of beak</td>
<td>2.0-2.5 mm</td>
<td>c. 1.0 mm</td>
<td>1.5-2.0 mm</td>
</tr>
</tbody>
</table>

**Climate Change or What?**

It might be due to the former, or one of the 'warm spells', but in the last few seasons novelties in garden escapes have appeared round Helensburgh. *Lobelia erinus*, (Window-box Lobelia), has occurred in pavement and kerb chinks. Sweet Alison (*Lobularia maritima*), now occurs in certain places regularly. Snapdragons, (*Antirrhinum majus*) are almost becoming common and Early Pampas-grass, (*Cortaderia richardii*) is seeding copiously in kerb-chinks and hedge-bases. None of these species were known before about three years ago.

*Helianthus annuus* (Sunflower) was similar, now it occurs randomly, some on an old wall. Both the small Bellflowers, the Adria and Trailing (*Campanula portenschlagiana* and *C. poscharskyana*), have suddenly begun to invade footpaths and outside garden boundary walls, where previously they had remained firmly inside their bounds. Broad Bean (*Vicia faba*) has now been seen in two km squares, a new record. *Bidens ferulifolia*, (Basket Bur-marigold) appeared as a bushy plant in the town centre when no Council hanging baskets or any window-boxes had any. It was cut short when the pub at its back was stripped down and repainted! Common Fennel, (*Foeniculum*
is recorded in three squares. Mrs Robb's Bonnet (Euphorbia amygdaloides ssp. robbii) has increasingly crept out through hedges well into the ground beyond. Griselinia is now seeding in the town.

Calendulas (marigolds) though not able to self-seed, crop up randomly, usually near the coast or actually on the shore, also Tomatoes (Lycopersicon esculentum) though often too late to ripen. In March 2001, VC 99 (Dunbarton) got its first Pittosporum tenuifolium seedling.

Has anyone else noticed a lot of novelties in their area?

Maritime Species of Roadsides - MICHAEL BRAITHWAITE

It was only in August 1992 that I first encountered Spergularia marina (Lesser Sea-spurrey), on a moorland roadside in the Scottish Borders. Since then it has been found increasingly widely in Scotland, particularly in the Lowlands. In September 2001 we travelled to Skye and the Outer Hebrides and I was interested to note that the Spergularia was with us all the way. It is plentiful at intervals from Hawick to Edinburgh, but becomes scarce on the bypass and up the A9 to Perth, as it is suppressed by the concrete kerb and the small colonies on top of the kerb are not very easy to spot at 70 mph. Further north it becomes plentiful again on the A9 right to Dalwhinnie and then especially so on the A86 to Spean Bridge. It continues along the A82 and A87 to Kyle of Lochalsh.

In Skye it is most plentiful on the moorland roads and across the sea in Harris it is plentiful a little south of Tarbert. That's some conquest in a mere decade for a plant whose seeds lack any specialised means of dispersal.

In Skye and Harris we noted an abundance of Plantago maritima (Sea Plantain) along the roadsides both by the sea and up onto the moors. Although Plantago maritima has a long standing claim to be an inland colonist the abundance seemed something new. On the way south I chose this species as the one to follow. It was with us right through to Loch Cluanie, but we lost it when we turned south into Lochaber. It will be interesting to see whether this species too can colonise the length and breadth of Scotland.

Stop Press:

Her Majesty Queen Elizabeth the Queen Mother

In common with the membership generally, we were saddened to learn of the death of our Patron on 30th March 2002.

In Scotland, we remember especially the occasions on which she invited the Society to visit her at the Castle of Mey: August 1972 and August 1992. An article relating to the latter visit appeared in our 1993 issue (Macpherson & Macpherson). As the visit is an abiding memory for those who were present, we think it appropriate to mention some of the highlights, particularly as it emphasised the nature and character of the Queen Mother.

The party was greeted at the entrance to the Castle and the President was invited to present each member - an unexpected pleasure. There followed a tour of the walled garden in which we presented Her Majesty with a terracotta container planted with flowering gentians.

We were then invited into the Castle for afternoon tea, during which Her Majesty passed round sandwiches and spoke of the delights of the chocolate cake! During a little speech the President remarked that 16 years previously he had been asked why the puzzled look and had replied “I'm wondering where the Queen Mother should go.” He was designing the headed notepaper for the BSBI Committee for Scotland and agonising as to the best site for the Patron. Her Majesty interjected “That's a relief”. The youngest daughter had suggested that he limit the number of sheets purchased as the QM was rather an old lady! To applause he concluded by saying that he was sure that all members of the BSBI would wish that the name of our patron would grace the Society publications for many years to come.

A minibus was then made available to convey members to the site of 'her' Oyster Plant (Mertensia maritima). On our return Her Majesty came down to the forecourt to see off the party, and appeared pleased to have individual members go over and make a personal goodbye. Those present were impressed that here was a lady who had presided on state occasions receiving the
members of the Society with the utmost courtesy and consideration.

It was our definite impression that she appreciated the story relating to herself and that she enjoyed our visit. This was also the sentiment expressed in a letter later received from her Private Secretary. We have been fortunate in having had such a gracious Patron for almost a further 10 years.

In honour of the occasion, Oyster Plant was chosen as the front cover illustration for the 1993 issue of the *Scottish Newsletter*.

**Reference**


The Editors.