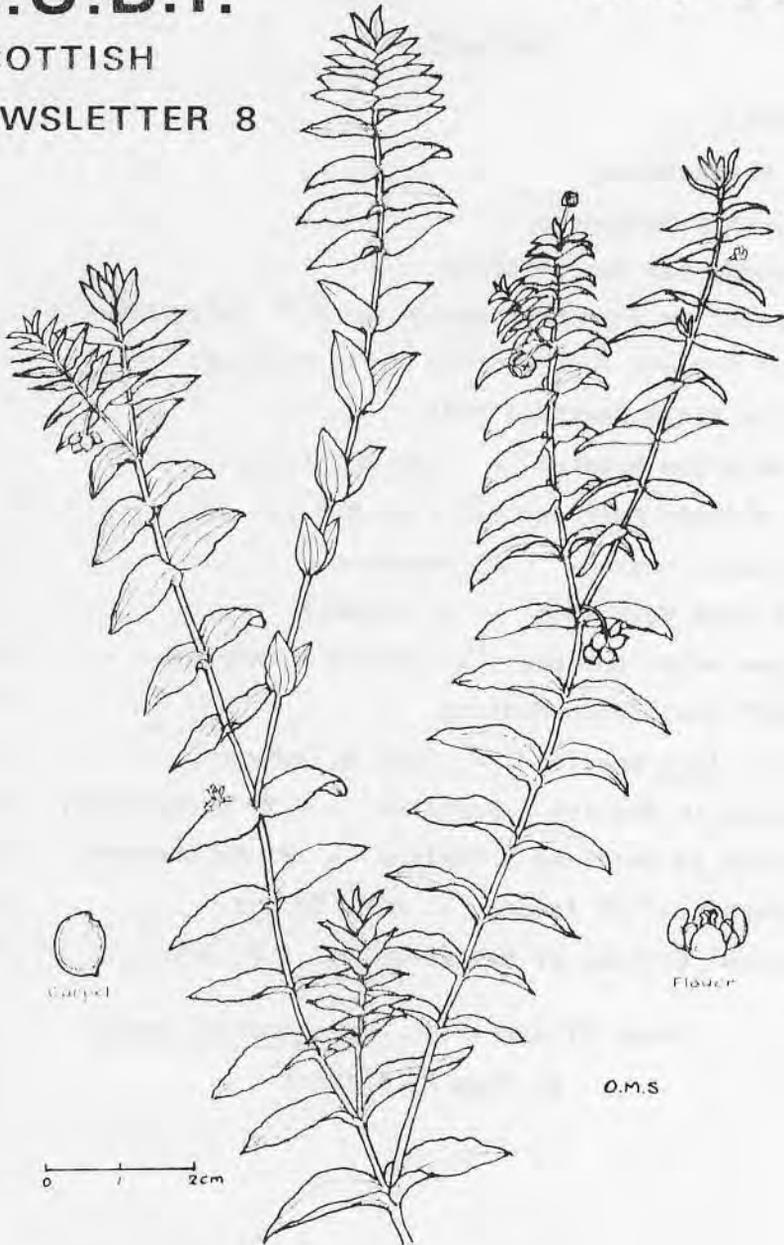


B.S.B.I.

SCOTTISH

NEWSLETTER 8

Spring 1986



GROENLANDIA Densa

BSBI SCOTTISH NEWS LETTER

Number 8

Spring 1986

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Cover Illustration - Greenlandia densa

By Olga M. Stewart

EDITORIAL

It is most gratifying that so many varied contributions have been received enabling the editors to compile what we trust will be an interesting News Letter. Over 30 copies are now sent to BSBI members furth of Scotland, and since our last issue the New York Botanical Garden has ordered a set of back numbers and wishes to purchase future ones.

Once again we have been saddened by the death during the year of members who have contributed much to Scottish Botany. Obituaries to Miss C.W. Muirhead and Miss Mary McCallum Webster are included elsewhere in these pages.

We are very pleased that Dr Alastair Lavery, the new Director of the Scottish Field Studies Association Ltd, wishes to maintain the connection with the BSBI and has agreed that the News Letter will continue to be produced at Kindrogan.

We look forward to your contributions for News Letter No.9 which should reach us, if possible, by 31st December 1986.

A.McG. STIRLING

P. MACPHERSON

FROM THE CHAIRMAN

I was greatly honoured to be elected at the AGM last November. I feel very humble following in the footsteps of our three previous Chairmen - Brian Brookes, Allan Stirling and Richard Thomas. I am particularly indebted to Richard since I have inherited a most efficiently run Committee. He has not only been a most able Chairman but he has also encouraged the Society in Scotland to become more involved in conservation matters, about which he writes elsewhere in this issue. We, whose primary aim is to record the British Flora, must have some input, even if it is only the giving of advice to bodies like the NCC and the Scottish Wildlife Trust, otherwise we stand a good chance of losing some of the more interesting aspects of our flora. BSBI News 31 summarised the Society's policy towards conservation. If any member considers that a botanically important site is under threat please let me or any committee member know so that we can take appropriate action.

One major project has come to fruition since the inception

of the BSBI Committee for Scotland - the publication of A Map Flora of Mainland Inverness-shire, for which the Inverness Survey Committee and all other members who helped must feel justifiably proud. We still await the Census Catalogue on which Alan Silverside is working hard, but hampered by competing demands on computer time. Members will be delighted to know that the new Scottish Field Cards, produced by the Biological Records Centre, have at long last been published - the lettering may pose problems for those of us with less than perfect eyesight unfortunately. Your Committee has also been involved in giving advice on the species to be included in the revised Schedule of fully protected plants in the Wildlife and Countryside Act (1981) and you might be interested to know that the current list of proposed additions includes the following Scottish species :- Homogyne alpina, Erigeron borealis and Scheuchzeria palustris.

One of the most important recent developments has been the creation of a Conservation Officer for botanical societies in Britain, including the BSBI, and we were all delighted when Nick Stewart got the post. I'm sure that everyone would like to offer their congratulations and best wishes to him. It is a job with enormous potential - reading the job description one almost feels that ten people might have been more appropriate!

The national Society's gain was our loss, but before he left Nick had completed arrangements for this year's field meetings which looks most inviting. I hope we shall see you on these and that after last year's non-summer may I wish you all an excellent season of botanising in tropical sunshine (but interspersed with the odd downpour so that everything does not dry up completely!).

ROSALIND SMITH

VICE-COUNTY RECORDERS

It is expected that the vacancies recently occurring in VCs 92, 94, 95 and 96b will be filled without delay. Nominations have been sent to the BSBI Records Committee.

Changes of address :-

Mrs O.M. Stewart (VC73) now 30/5 Colinton Road, Edinburgh
EH10 5DG

N.J. Stewart (VC87) either as above, or Conservation
Association of Botanical Societies,
c/o South London Botanical Inst.,
323 Norward Road, London SE21

Dr R.A.H. Smith (VC89) now :- 'Holburn', Dalcrue Road,
Pitcairnngreen, Perth PH1 3LU

B.H. Thompson (VC98) now :- 'Glenlussa', Ford,
by Lochgilphead, Argyll PA31 8RM

FILE DRAWERS FOR BSBI INDEX CARDS

These drawers which can be supplied free of charge to VC Recorders are for holding the 8" x 5" index cards which are a convenient way of storing flora records. They remain the property of the BSBI however and should be handed on when a change of Recorder occurs. Dr R.A.H. Smith has three of these units available, and any recorder interested in acquiring one should get in touch with her at the address above.

BSBI COMMITTEE FOR SCOTLAND

The following is the composition of the Committee from November 1985 to November 1986 :-

Chairman - Dr R.A.H. Smith; Vice-Chairman Dr R.E.Thomas;
Secretary/Treasurer - Dr P. Macpherson; Field Meetings
Secretary - H.J. Noltie; Minutes Secretary - Mrs M. Barron;
Meetings Secretary - Miss J. Muscott. Members of Committee
- Dr J.H. Dickson; Dr H.A. Lang; S. Payne, A.A.P. Slack;
Miss H. Stace and A.McG. Stirling.

Representing the NCC - Miss R. Scott; representing the
Botanical Society of Edinburgh - D.R. McKean.

At the AGM on 1st November 1986, three members will be elected to the Committee. The retiring members will be Dr J.H. Dickson, S. Payne and Miss H. Stace, all of whom will be eligible for re-election. Nominations, signed by two members of the Society normally resident in Scotland, or who are Recorders for a vice-county in Scotland although not resident there, and with the written consent of the candidate who must also qualify as above, should reach the undersigned at 15 Lubnaig Road, Glasgow G43 2RY by the 30th September 1986.

Peter Macpherson, Hon. Secretary, Committee for Scotland.

"Ah, I hear you are a botanist". "We would like you to join our scientific sub-committee". "Can you give us some advice on what we should plant in this piece of ground we have been given". "What's the difference between a cyme and a raceme?".

Every time I am confronted with one of these comments or questions or their like I groan! Because I've been interested in the countryside, especially wild flowers, for some thirty years now, and because I am the official Botanical Recorder, naturally people assume that I am a botanist, that is 'one skilled in the science of plants' (Chambers Dictionary). But I am far from deserving of That description! True, I did manage to scrape a pass in biology (lower) at school, but I failed miserably in pure science subjects and maths. What bent I have is towards literature, a fact reflected in my profession, that of librarian (though nowadays many of my colleagues would scoff at the association). So it is daft to pretend that I am a scientist.

What to call myself, then? Flower-lover is accurate but is not quite right. Plantsman has definite gardening overtones, or maybe suggests a professional plant hunter. It can scarcely be 'wild flowerer', although increasingly bird-watcher is becoming 'birder', a word I do not care for at all. I'd long puzzled over this until, during the autumn of 1985 I came across a book called A Prospect of Flowers. The blurb indicated that it treated of wild flowers from points of view other than that of the botanist's and in particular a chapter entitled 'Botanists and botanophils' caught my eye. Unless I was mistaken, a word ending in '...phil/e' meant 'a lover of...', and sure enough the opinion was put forward that "the term botanophil may be borrowed to describe a person who, without being a botanist, is interested in plants". Me to a 't'!

The expresser of this view was Andrew Young, and he was writing in 1945. Forty years later his book was reissued to mark the centenary of his birth, at Elgin, in 1885. Young attended school and then New College in Edinburgh and after the first world war moved to Hove to be minister of the Presbyterian Church there. In 1939 he was inducted into the Anglican Church and became Vicar of Stonegate in Sussex. He retired in 1959 to near Chichester, where he died in 1971.

Now have recalled that it was

not so much as a prose writer that Young won renown but as a poet. He published his first book of poems in 1910 and by the 1930s had become recognised as a major writer, particularly as a 'nature poet'. A glance at the contents list of his Poetical Works, also issued to celebrate his centenary, confirms his abiding interest in nature - 'The Green Woodpecker', 'Sea Wrmwood', 'Walking in beech leaves', 'At Amberley Brooks', 'Drosera anglica' and so on. But he was also much intrigued by mystical experience and death, as witness his later, longer poems and verse plays, and this aspect is brought out in a short piece composed in 1920 called 'Here and there', which also captures his innate love of nature.:-

Eyes that are black as bramble-berries
 That lustre with light the rank hedgerows
 Are kindly eyes and within them there is
 Love of the land where the bramble grows.

But mine are blue as a far-off distance
 And grey as the water beneath the sea;
 Therefore they look with a long insistence
 For things that are not and cannot be.

Returning to Young's use of 'botanophil', he says "While a botanophil searches for plants, a botanist may not have time to do so, or even the interest..... The former is so much a plant seeker that in winter when there are few plants to find, he usually hibernates. Indeed it is by this habit of hibernating that he may best be distinguished. While the botanist is like an evergreen, working throughout the year, the botanophil is like one of those perennials that die down to a rootstalk in autumn and lie more or less dormant till the spring. A botanophil once confessed that in winter he could not remember the botanical names. But in spring, before the Wake-robin is itself awake, he is up and doing, wandering about in his eager search for plants". Many would agree!

Young's A Prospect of Flowers and his later A Retrospect of Flowers are well worth reading. The jacket of the new edition of the former comments that "each essay is a fragment of autobiography and a mosaic in which fascinating bits of information are subtly juxtaposed and inter-related". Perhaps a rather flowery (sorry!) description, but nevertheless a true one. As to his suggestion to use 'botanophil',

it is a pity the word is so unwieldy - not least to say 7
out loud - and I cannot really imagine my using it. Which
is a nuisance, for botanist I insist I am not.

What do others call themselves?

CODE OF CONDUCT FOR BSBI SCOTTISH FIELD MEETINGS

1. Persons attending BSBI field meetings do so at their own risk.
2. The meeting Leader has the right to refuse participation to any member or guest whose behaviour or equipment is considered unsatisfactory.
3. For certain meetings the Leader will provide a register to record the names of all participants at the start of the meeting. This must be countersigned by each participant at the end of the meeting.
4. For all meetings, each participant should carry :-

Water-proof and wind-proof clothing

Appropriate footwear

Adequate food and drink

In remote or mountainous country each participant should carry :-

Whistle, map and compass

and be familiar with their use.

5. At all times respect the property of the owners who grant access to their land. Follow the Country Code and avoid damage to delicate habitats.
6. Observe the provisions of the Wildlife and Countryside Act. Only collect specimens when strictly necessary for identification or research purposes, and obtain the permission of the Leader before doing so.
7. Pay great attention to the hazards of the terrain,

including potential dangers to others from dislodged stones, especially on cliffs or screes.

8. If participants wish to leave the main group, they should never do so on their own. A small group should be formed, one of whose members must be able to navigate using map and compass. Such small groups may only leave the main party with the permission of the Leader, who must be told of the group's intended route.

SCOTTISH FIELD MEETINGS IN 1986

The following is a brief reminder of the dates of the 1986 meetings. For further details the full programme leaflet should be consulted.

- | | |
|----------------|--|
| 24 & 25 May | BERWICKSHIRE (for <u>Taraxacum</u>) |
| 14 & 15 June | S.W. STIRLINGSHIRE |
| 5 - 11 July | WESTER ROSS |
| 12 & 13 July | GLENCOE & RANNOCH MOOR |
| 26 - 28 July | RHINNS OF KELLS, KIRKCUDBRIGHTSHIRE |
| 9 August | GLASGOW (Flora of Glasgow Project) |
| 16 - 23 August | KINDROGAN FIELD CENTRE, PERTHSHIRE (Grasses) |
| 30 August | MIDLOTHIAN (Flora of the Lothians Project) |
| 20 - 27 Sept | KINDROGAN (Water Plants) |

Please note that the address given in the programme for the Wester Ross meeting is incorrect. The following is the correct address:- Mr T Clifford, Nature Conservancy Council, Ialtag, Anancaun Field Station, Kinlochewe, Ross-shire.

Mary McCallum Webster died on 7th November 1985, aged 78, and Scotland lost a first-class field botanist. Flowers had always been her greatest love. As a little girl she saw a white violet on the other side of a muddy ditch, and got a spanking for going to pick it against her governess' wishes. Her early education was from a series of governesses, 19 in 7 years until, aged 15 she went off to boarding school at West Heath, and then to Ham Common. After school she went to Brussels to 'finish', and then worked as a nanny. When the 1939 war started she joined the ATS, attached to the 10th Battalion Gordon Highlanders and was sent to the first school of cookery for women at Aldershot. She was posted to Orkney, and later to Shetland as cook-sergeant at the time of the Battle of Narvik. After gaining a commission she ended up as a staff captain in Montgomery's HQ in Germany in a branch disbanding the German army.

After the war Mary became a cook working both in hotels and privately. All this time she kept up her interest in plants and decided that work was only for the winter, while the summers were filled with field botany. When the botanical mapping scheme started, having no car, she walked 100 miles a week recording in the north of Scotland.

In 1958 she visited her brother in Natal, and went on a 7 month safari in Kenya and Northern Rhodesia, bringing back a valuable collection of grasses to Kew (5000 sheets). The next three winters were spent in helping to identify them there, followed by four years in the Botany School at Cambridge.

She joined the Wild Flower Society as early as 1926 and remained a faithful member of it for the rest of her life. She became a member of the BSBI in 1936, serving on its Council in later years, a Fellow of the Botanical Society of Edinburgh from 1955 and of the Linnaean Society from 1960 to 1974.

Mary organised many field meetings for both the WFS and the BSBI and many will remember in particular her excellent meetings to Arran, Skye, the Cairngorms and many other localities throughout Scotland. I, personally, learned my 'square-bashing' from her, and we went together to places at the back of beyond to ensure that there was

no part of her home counties she had not visited. All this culminated in her outstanding Flora of Moray, Nairn and East Inverness. Prior to the Flora she wrote a check list of the Flora of the Culbin State Forest. Her visits there were uncountable, and so many will have memories of being shown Goodyera, Corallorhiza and Orthilia there, but especially Moneses uniflora which she loved.

Visitors to her cottage at Dyke soon became very aware of all Mary's varied interests. Her lovely garden where even the weeds were rich and rare, and the pile of driftwood at the door for floral decoration. If you stayed the night you might have to move a string of onions, a bunch of dried flowers and several pressed specimens before you could get into bed. The pressed specimens were either as records of plants seen or for her beautiful pressed flower pictures for which she won first prize at the Royal Highland Show on several occasions.

The only time botany took second place was during Wimbledon Fortnight when she was glued to the television, or during the tennis tournaments at Nairn and Elgin where she competed till three years ago. A tennis cup in her cottage is a reminder of her excellence as a player. She was given it to keep after winning the Ladies Open Singles at the North of Scotland Tournament for four years running in the 1950s.

Having seen virtually every wild plant growing naturally in the British Isles, 'shoddy' plants became a great interest to her, and she loved the excitement of finding an unknown plant on the shingle at Galashiels or in the shoddy-manured fields in the south. She found that this knowledge was a help in identifying the grasses she saw on her two trips to Western Australia. These visits were outstanding for her.

To go on a botanical foray with Mary was a real education. Her last meeting, based at Tomintoul in 1983, attended by 30 people, was to collect records for a check list for Banff on which she was working. Although she had no academic qualifications, her knowledge and experience and, above all, her hawk-like eyesight, helped her to find and identify more plants in the field than anyone else. There were occasions, perhaps, when she didn't suffer fools gladly, but if you were willing to learn, no one could be more patient and instructive. I and many others have a great deal to thank her for, particularly her friendship.

Among the Skye VC Recorder's botanical files is a collection of letters and postcards in beautiful and highly individualistic handwriting, written over a period of 20 years. They are also concise, clear and often amusing - as when the writer said "I think that the 1964 addition No.1 to the Prabost square is the best yet" ... (our daughter!). The first letters arrived after the CSSF field meeting held at Dunvegan in 1958, asking questions about plants seen, which a then very 'basic knowledge' botanist tried to answer. Obviously Miss Muirhead (the leader) was keen on islands (though on that occasion Skye hadn't treated them very kindly), and was able to transfer both her enthusiasm and interest to her correspondents. As 'guests' at the Dunvegan meeting, we had only met the leader briefly, but in 1961 I was able to join the party of five at Easdale, on the island of Seil, and explore the Garvellachs and other islands in the Firth of Lorne (see The Flora of Easdale and the Garvellachs, Trans.Bot.Soc.Edinb. Vol.XXXIX, Part III, 316). After that, both the correspondence and the friendship flourished.

Clara Winsome Muirhead (known as 'Win') was born in Cumbria in 1915, of Scottish parentage. Her father was a Chief Engineer in the Merchant Navy, and her mother ran a small market garden, passing on a love of plants and gardening to all her family. Mrs Muirhead delighted us by appearing in a kilt on a visit to Skye in 1962. Win, being a different shape, preferred her 'WRNS' style pleated skirt. The spell in the WRNS (1943-45), during the war (mainly engaged in code-breaking, and nowhere near the sea or ships) followed two years at Studley College of Horticulture (1933 - 35) and work with the Ingwersen's Alpine Nursery at East Grinstead, and in Carlisle Museum (where she was officially in the Porcelain department, but helped unofficially with the plants, and began collecting material for a Flora of Cumberland). After the war she returned to Carlisle and the Museum, and used to visit RBG Edinburgh to check plants in the Herbarium and Library. Her interest wasn't only in pressed specimens - she also grew succulents and cacti. As well as *Sempervivum*, she liked *Cassiope*, and had a cultivar (*C.wardii* x *lycopodioides*) named after her - *Cassiope* 'Muirhead', which used to be in the 'Jack Drake' catalogue.

After being appointed to the staff of the Herbarium at RBG

1949, she had yet another interest -

Members of the public (especially BSBI recorders!) can send in specimens, sometimes rather scrappy, for identification. She was very patient with bits of supposed Polystichum lonchitis (Holly Fern), until finally it really was. She also worked, among other things, on the families Rosularia (with D.F. Chamberlain) and Sempervivum for P.H. Davis's Flora of Turkey. The Sempervivum section includes no less than eight species described for the first time.

Again, from letters, I am reminded that she only learned to drive in the 1960's, and gave BSM Edinburgh some hair-raising moments, if she spotted some interesting plant on the road verge. Then she would 'take off' for the west of Scotland or the west of Ireland, where she explored some of the more remote off-shore islands (Inishark was one), and found a very hairy Sea Pink on Achill Island. It was thought to be new to the British Isles at the time, as the nearest to her specimen came from Portugal. Was it ever sorted out?

While botanising, both indoors and out, Win lost all sense of time. Her colleagues at RBG say a lot of her work was done well into the night if she was pursuing something interesting, or merely 'catching up' after a spell away. There was one occasion when exploring the pinnacles below the Storr in Skye lasted well into the evening, and we were looking for a B & B in Broadford long after 9 p.m.

For such a quiet person, Win found herself on various committees. Her membership of BSE went back to 1947, and of the BSBI to 1952. From 1964-73 she was a member of the CSSF and led several field meetings for them. In the days when a handful of enthusiasts were allowed to be in charge of more than one vice-county she had Cumberland (VC70) from 1948, and the Inner Hebrides group of Islay, Jura, Colonsay, Mull and the smaller islands (VCs 102 & 103) from 1951, and kept the last-named going until her first stroke in 1980. She had retired from RBG on reaching 60 in 1975.

Over the years her personal herbarium (of mosses as well as flowering plants) grew to fill at least one room of the St. Leonard's Bank house in Edinburgh, and when she could no longer live there alone, the pile of boxes was taken down to Devon, to her friend of Horticultural College days, Mrs Margaret Wincott, where her family hoped she would recover sufficiently to work on the arranging of the collection. But by this time the task was too daunting and the problem was solved by offering the collection to

Plymouth Polytechnic, who were delighted to have it and have appointed someone to work on it, with the help of two 'Youth Opportunity' school leavers. When classified and arranged it will be known as the 'Muirhead Collection' and be available to all students for consultation.

I am indebted to Douglas McKean, RBG Edinburgh, and to Mrs Margaret Wincott, for their assistance with this note.

IS GROENLANDIA DENSA EXTINCT IN SCOTLAND? C.D. PRESTON

Groenlandia densa, the Opposite-leaved Pondweed, has always been rare in Scotland. The map in the Atlas illustrates this, but does not distinguish old and recent records and so gives no indication of its present status north of the border. In updating the records of Groenlandia recently, I realised that almost all the available records were old. I know of only two post-war Scottish records. This leads me to suspect that Groenlandia may be extinct in Scotland. I challenge Scottish botanists to prove me wrong!

The headquarters of Groenlandia in Scotland used to be the Lothians. Most specimens were collected from the vicinity of Holyrood Park, Edinburgh. Here it grew in at least three localities: Hunter's Bog, Dunsapie Loch and Duddingston Loch. There is also a record from a pond in Henderson's Nursery at Meadowbank. A further Groenlandia site within the city of Edinburgh was Corstorphine Hill: the most precisely labelled collection is from a pond at the foot of the Hill. The last Edinburgh record was made by W. Tweedie at Dunsapie Loch in 1854.

In East Lothian Groenlandia was collected at Gullane and at Haddington, the last specimen in 1912. The only specimens to give habitat information were gathered from a loch at Gullane Links and a mill lade at Haddington.

Outside the Lothians all the Scottish records are of single occurrences. There are undated specimens from the River Tweed at Kelso (VC80) and the Lake of Menteith (VC87). The latter specimen, from F.J. Hanbury's herbarium, is particularly unsatisfactory as it also lacks a collector's name. W. Young (1936) reported Groenlandia from Ballo and Harperleas Reservoirs (VC85), 1926, but no specimens have yet been seen to support these records which might, therefore be regarded with some suspicion. In 1937 Groenlandia was collected from a pond in the garden of Spa Hotel near

Strathpeffer (VC106). When U.K. Duncan visited the site in 1971 she found that the pond had been drained and the area built on.

The two post-war records are widely separated. Sir George Taylor collected Groenlandia from a small pond at Culzean Castle (VC75) in 1949. A.J. Souter reported it from Rochomie Reservoir south of Buckie (VC94) in 1969. This latest record is also the most northerly. It would be most interesting to know if Groenlandia is still present at either of these sites. Its apparent failure to persist at sites outside of the Lothians makes me wonder if it is a species which is occasionally introduced into Scottish waters but never survives for long. Ursula Duncan certainly considered that it was introduced at the Strathpeffer site.

If anyone has recently visited those sites where Groenlandia might still grow, or can add to the records I have listed, I would be interested to hear from them. Most of the records I cite, incidentally, are taken from the card index, compiled by J.E. Dandy, of specimens determined by Dandy and Sir George Taylor.

Reference

Young, W. (1936). A list of the flowering plants and ferns recorded from Fife and Kinross (V.C.85), p. 146

(Dr C.D. Preston can be contacted at :- Biological Records Centre, Monks Wood Experimental Station, Abbots Ripton, HUNTINGDON, Cambs. PE17 2LS)

WILD FLOWER WEEK 17 - 26 MAY 1986

The Royal Society for Nature Conservation is organising a Wild Flower Week as part of their British Wildlife Appeal. The message will be "Wild Flowers are Wonderful" and will centre on the beauty and fascination of British wild plants, and the need to protect them. In addition to the fund-raising aspect RSNC will be particularly highlighting road-verges as part of a campaign to persuade the relevant authorities to adopt sympathetic management regimes for the benefit of wild flowers.

Various national events are proposed including several exhibitions at e.g. Chelsea Flower Show and Stoke Garden Festival, and the launch of several posters as well as various articles and interviews in the press and radio etc.

Individual Trusts are organising a large number of events including reserve Open Days, guided walks, slide shows etc.

Any BSBI members who would like to help or participate should contact the secretary of their local Trust.

Nick Stewart, C.A.B.S. Conservation Officer

PROBLEMS WITH 'ESCAPES'

ALISON RUTHERFORD

Compiling of the records for a local Flora really tests the knowledge of writer and helpers regarding naturalised non-native plants. During work on the flora of Dunbarton (VC99) it is only in the past two or three years that this group has been given the attention it deserves by seeking out garden escapes in the various odd corners so easily overlooked in the course of field work. I have been interested in garden escapes for many years and have found that recording with a basic unit of a 1 kilometer square has been of great value in the more populated areas of the county, particularly around Helensburgh and the Garelochside - a specially lucrative field. Having lived in this area for many years I had knowledge of the places likely to prove rewarding, and most have turned out to be so, but unfortunately for the plant-hunter much 'good' ground has been lost to development over the past ten years.

Today, increasingly, local floras are concerned with naming garden escapes more accurately - not, for example, calling all snowdrops Galanthus nivalis, or all daffodils Narcissus pseudonarcissus, or always referring to the pheasant's-eye as N. poeticus. The latter has been variously listed as N. poeticus subsp. poeticus var. recurvus (Haworth) Fernandes, or subsp. radiiflorus (Salisb.) Baker var. exsertus (Haworth) Fernandes. Whether these are the same, I don't know. Again, one must not confuse the common pheasant's-eye with the improved 'Actaea' which is larger-flowered, with neater, broader perianth, but just as likely to become naturalised. Nowadays some authors include N. x incomparabilis Mill., the very double forms of which are the old 'Poached Eggs' and 'Suphur and Orange Phoenix'. Some also include certain of the 'trumpet' daffodils. In the recently published Flora of the Isle of Man reddish, purple and green flowered forms of Primula vulgaris are mentioned.

A new British Flora is badly needed. The past twenty

years have seen a welcome increase in awareness of non-natives, but little guidance to the species likely to be found or their distinguishing characters. It might be supposed that shrubs would be easier to identify accurately, but it seems that even the new 'Bean' is fallible in certain cases. Herbaceous plants are inclined to be tricky, as most popular works tend to show only illustrations of the very improved kinds, and the species and older cultivars are overlooked. Fortunately, two useful books were published in 1984 covering large numbers of herbaceous plants.

There are the specialist societies, but they can seldom cope with the older cultivars or the species. I wonder, for instance, how the Fuchsia Society would fare with the not easily placed 'wild' fuchsias about our landscape? Some specialists who are also botanists have wrestled with certain groups, so that it may be possible with their help to determine the species and primary hybrids of Aster, for instance, or the Geraniums so commonly found as escapes, to name only two. Are your Asters all novibelgii, your blue Geraniums all G. x magnificum or G. x ibericum? - and your G. phaeum may be a subsp. or var. of which there are a bewildering number to master. Another teaser is the commonly escaped Cerastium 'tomentosum'. It seems from recent investigations that this, in the west of Scotland at least, is more likely to be the very similar C. biebersteinii, but there are puzzling plants which do not easily fit either of these species. Then there are the Solomon's Seals - in England and Wales P. multiflorum and P. odoratum are native, but in VC99 we have only P. x hybridum Brugger. It is not always the robust, shining-leaved plant of illustrations. We found a small, heavily-fruiting form in a wood (the hybrid rarely retains ripe berries) and thought we had something different, but it proved, on submission to a specialist, to be a form of the hybrid.

The commonly naturalised Montbretia (Tritonia x crocosmiflora) is often included in local floras, but how many have the reader, bolder Antholyza (Aunt Eliza) - Curtonus paniculatus, or the hybrid C. x masonorum? These are not hardy everywhere, but they are in Dunbarton where we have 12 stations for Antholyza and 3 for the hybrid. There is a useful way of telling these two from Montbretia. With the latter it is quite easy to pull up a corm accidentally, but with the others you will get

only the brown skin of the corm.

You may think that to have Saxifraga x urbium and S. x geum for the garden London Prides is being very up to date, even erudite, but recently a specialist examined our Dunbarton colonies and we now boast a population of S. hirsuta and two of S. x polita, as well as plants tentatively determined as 'aff. S. umbrosa' and 'aff. urbium' form'. I make no pretence to understand these, being just grateful that someone else is able and willing to do so.

Finally, a word about Solidago species (the garden Golden Rods). It is now being appreciated that S. gigantea (smooth-stemmed) is just as likely to occur as an escape as S. canadensis (downy-stemmed). Rarely, other species may be found - we have S. rugosa in Dunbarton.

I hope that these examples will at least give some idea of the problems likely to be encountered during the preparation of a local Flora if introduced plants are to be given the attention they deserve.

Useful references :

Flora of the Isle of Man. D.E. Allen (1984)

Trees and Shrubs hardy in the British Isles. W.J. Bean

4 Vols.(1970-1980)

The Damp Garden. Beth Chatto (1982)

Ferguson's Garden Plant Directory. Nicola Ferguson (1984)

The Complete Book of Garden Plants. Michael Wright (1984)

Hardy Geraniums. Peter Yeo (1985)

THE 1985 EXHIBITION MEETING 2nd November 1985

1985 was Edinburgh's turn for the annual Scottish Exhibition Meeting, arranged by the BSBI Scottish Committee and the BSE, and held at the Royal Botanic Garden. In the morning the customary assembly of Scottish Recorders heard Lynne Farrell talk on her "summer's" rare plant recording in Scotland as part of the Quinquennial Review, and Nick Stewart outline the background to his appointment as the new Conservation Association of Botanical Societies officer.

The exhibits provided the usual variety, as is evident from the following brief list, and the day an all too short opportunity to exchange views and catch up with what is going on. Inevitably, the first 'live show' (at this particular meeting) involving a computer was on view,

as well as the more conventional displays. The exhibitors were :-

- G.H. BALLANTYNE Which Scottish county has most brambles?
(At present, Stirlingshire)
- J. BEVAN Hawkweeds in Scotland in 1985.
- M. BRAITHWAITE Whitadder Water survey (Berwickshire)
- R.W.M. CORNER New records from Roxburghshire
" " Flowering Plants and Ferns of Selkirkshire
& Roxburghshire (New publication)
- J.H. DICKSON & G. STEVEN Late Glacial Plants now extinct
in Scotland.
" , H. NOLTIE & A. WALKER Recording the Flora
Glasgow, 1985.
- L. FARRELL Quinquennial Review (NCC).
- C. FERREIRA Rare Sutherland species recorded in 1985.
- G. HALLIDAY Distribution maps of recent Cumbrian records,
including brambles.
- C. JERMY Pilularia in Scotland (map distribution)
- R.E. KEMP Photographs of Fungi - mainly Scottish Coprinus.
- C. LEGG Sedges made easy with a BBC computer.
- M. LITTLE An interesting hybrid swarm of Viola tricolor
x arvensis (VC80)
- D. McCOSH Distribution of some Hieracia in south Scotland.
- D.R. McKEAN Two new names for Amsinckia menziesii auct.
" " Overlooked taxa in Parnassia and Odontites.
" " New and overlooked records from Lewis.
" " Some interesting finds in the Lothians.
- A. RUTHERFORD Established garden escapes (and some others).
- N. STEWART & H. STACE Plant recording in Perthshire (VC87)
- O.M. STEWART Some Scottish records and flower paintings.
- A.McG. STIRLING Recent plant records for Dunbartonshire.
- A. WALKER The BSBI Islay meeting, June 1985.

The BSBI Scottish Regional AGM occupied a full hour, much of it devoted to discussing conservation problems. Advantage was taken of the presence of one of the Watsonia editors to talk about its contents. Tribute was paid to Elizabeth Conacher who demitted office after 14 years as Meetings Organiser. Thanks were also extended to Richard Thomas on his retiral as Chairman.

After tea Dr Jim Dickson gave an address on "Additions to the late and post-glacial flora of Scotland" in which he tempted us with a number of alpine plants which have disappeared from our flora. The cold period of 11,000 radiocarbon years ago was particularly interesting, with

a number of species more typical of the steppes and Greenland. Notable plants present then included the Polar Willow and Arctic Bramble.

The evening's buffet supper was followed by a good variety of colour slides, several depicting the 1985 field meetings. These included numerous transparencies of the Beinn Udlaidh and Creag Mhor excursions (Messers Lang, Braithwaite, Slack and Thomas), and Islay (Messers Slack and Stirling). Other outings featured were Dumfries-shire (M. Braithwaite) and the annual hawkweed hunt (J. Bevan). Orchids featured in several contributions, especially Orchis morio (Ayrshire) and Anacamptis (Islay). The Borders were covered by Rod Corner and M. Little, both of whom particularly highlighted Smailholm Craig. The evening concluded with "Things that grow on things" - rusts, galls, smuts and so on, by J. Muscott.

CRITICAL AIRA SPECIES

OLGA M. STEWART

At the Exhibition Meeting in Edinburgh and at the British Museum in November 1985, Mr Len Margetts and I exhibited various specimens of the Aira caryophyllea aggregate. Among them was one of A. armoricana Albers found by Len Margetts in June 1976, on a cliff top near Portreath, West Cornwall, VC 1. When he first found it he could not assign it to either A. caryophyllea subsp. caryophyllea or subsp. multiculmis. The late Dr C.E. Hubbard thought it was referable to the latter, but sent seeds to Dr Albers of Kiel, who grew them on. The plants proved to be the same as others found in N.W. France, and in 1979 (Willdenowia 9: 283 - 284) Dr Albers published the new taxon Aira armoricana. A second site was found in a similar habitat in VC 2. So far it appears to be a plant of Cornwall, as specimens in the BM, also from VCs 1 and 2 have been determined as the new taxon.

A. armoricana has a branched panicle with flowers larger than those of A. caryophyllea, (3.0 - 3.5mm as opposed to 2.5 - 3.0mm), and with very short pedicels, usually much shorter than the length of the spikelets.

The two subsp. of A. caryophyllea are very difficult to differentiate. As Dr Hubbard wrote to me - "It is very difficult to distinguish between the two subspecies except when one can call upon a cytologist. Ac. has $2n = 14$ and A.m. has $2n = 28$ chromosomes". (A. armoricana also has $2n = 28$). A. multiculmis has greater size and clustering

of the spikelets at the tips of the branches". In the Edinburgh herbarium there are twelve or so specimens identified by him and agreeing with this description. They also have their branches directed upwards at 35 to 20 degrees from the vertical.

Len Margetts has specimens from Upton Towans, VC2 which he considers to be subsp. multiculmis (also identified by Dr Hubbard as such), but these are very different from the material in Edinburgh. Those from Upton Towans are very short - not more than 15cm high, very upright, the branches at 10 to about 15 degrees from the vertical, with the florets about 3mm. They are distinct, never tall and always tufted. There is one sheet at Edinburgh with 9 specimens on it, that were collected on Arthur's Seat in the early 1900s, which are similar to the ones from Upton Towans, but I have not been able to refind any there like them.

Another variety of A. caryophyllea that I found in 1985 near Muir of Ord, VC106, was growing all over a bank and embankment by a dam by the Falls of Orrin. It differed from both subspecies by its slender growth, 25 - 30cms high, very divaricate branches, and florets only 2 - 2.5mm. (All other Aira specimens that I have measured were 2.5mm or more).

Having looked at the material in the Edinburgh herbarium and seen the great variation in the A. caryophyllea complex, obviously there is a great deal of work to be done. I would be very interested to know if anyone has found either of the two latter varieties in places other than those mentioned above, and also if they have noticed much variation in A. subsp. caryophyllea. I would be grateful to hear from them and would repay the postage.

BLUEBELLS IN ENGLAND AND SCOTLAND E.T. HUNTER-BLAIR

Different names for the same plant within Britain, and indeed elsewhere in the world, can cause some confusion which is easily avoided by indicating the plant's scientific name.

An example of this is Endymion non-scriptus (L.)Garcke which has been adopted as the emblem of the BSBI. This attractive woodland plant, confined in the wild to N.W. Europe, is known in England (and probably in Wales, though there is no doubt a Welsh name) as Bluebell. In Scotland however, the name Bluebell has been given in the past to

Campanula rotundifolia L. with its equally attractive blue flower, found in dry grassy places, and on fixed dunes, widely throughout North Temperate regions.

In Scotland E. non-scriptus has been known as Wild Hyacinth while the common name Harebell, used in England for C. rotundifolia, has I think never been greatly used in Scotland. With the increasing, almost official, use of Bluebell as the common name for E. non-scriptus, the name Wild Hyacinth for it is probably heard less than before in Scotland.

However, the use of the name Bluebell for Campanula rotundifolia remains frequent in Scotland. I have a coloured card entitled "Harebells, or Scottish Bluebells" which is published by the Natural History Centre, Ardnamurchan, Argyll. And doubtless Harry Lauder's song about "Mary, my Scots Bluebell" is still sung.

The lesson to be learned from the situation is probably that it is best to use the Latin or scientific name where there is any possibility of doubt. Do ornithologists I wonder, who rarely seem to use the Latin names of birds, find this causes difficulties?

(Ellis - Flowering Plants of Wales. 1983, gives Clychau'r Gog as the Welsh name for E. non-scriptus. Ed.)

BLUEBELLS IN SCOTLAND AND ENGLAND

P. MACPHERSON

The above article, "Bluebells in England and Scotland" has proved thought provoking and stimulated action on my part. The author suggests that confusion in plant nomenclature could easily be avoided by the use of scientific names. To be contraversial, it is my opinion that anyone with sufficient knowledge to refer to Endymion non-scriptus would know that it reffered to Bluebell and not Harebell. Also, I do not think there is much chance of getting members of the general public to use a scientific rather than a common name. I would go further and state that any attempt to make young people use only the Latin names would reduce considerably the chance of their becoming interested in Natural History. The use of a scientific name is not, unfirtunately, the definitive last word as these names change not infrequently, even in the example quoted. E. non-scriptus has been Hyacinthoides non-scriptus, Scilla non-scriptus and S. nutans.

Ornithologists do not have difficulties because the names of birds, with few exceptions, are the same in all parts of the British Isles and I cannot think of any case where the same name is used for different species. In contrast, each common plant has been differently named in many parts of Britain (e.g. Lotus corniculatus - Common Bird's-foot Trefoil has had at least 82), and in many cases the same name has been used for different species (Grigson, G. 1958 The Englishman's Flora). While regretting the loss of local names, to avoid ambiguity, but to maintain general interest in wild flowers, I think it would be better if each comes to be known by only one name, and to this end I welcome the increasing use of English Names of Wild Flowers (Dony, Perring and Rob, 1974) as the standard.

I have always thought it to be a misconception of some English authors of popular floras that people in Scotland would more commonly name Campanula rotundifolia "Bluebell" than would non-botanical people in England; however I have shown a photograph of C. rotundifolia to comparable groups in the two countries with the following results :-

	Don't know	Harebell	Bluebell
Scotland	30%	25%	45%
England	31%	57%	12%

This difference is statistically significant, so I have been proved wrong.

When those who had answered "Bluebell" were asked to name the plants with blue flowers which carpeted woodland in spring, most looked a little puzzled and then replied slowly "Bluebells". Only one said "Of course, the other is the "Scottish Bluebell" and none replied "Wild Hyacinth". The photograph was from the calendar of a Norwegian drug firm and the caption, which I had covered up, read "Blaklokker - Bluebells". This problem of nomenclature is, therefore, not confined to Britain!

At the November AGM a considerable portion of my report as Chairman was devoted to an account of some conservation issues dealt with by your Scottish Committee during the previous year. The main outstanding issue was the application by a private forestry company to afforest some of Creag Meagaidh's lower slopes. My enquiries about the status of this application were in fact answered by two reports I read in 'The Times' - that the application had been approved, and that the NCC had purchased a large acreage of these slopes, at a considerable cost to themselves and an unearned profit for the forestry company.

At the 1984 AGM a member had brought to my attention an outline planning application by the Glenshee Chairlift Company to erect a puma ski-tow in a corrie just N.W. of Glas Maol, attaining the watershed and also encroaching on the Caenlochan NNR - an NCC Grade 1 site. Objections had to be lodged with the Kincardine & Deeside District Council (K. & D.D.C.) within a few days! I immediately sought botanical information, which was swiftly and comprehensively provided by Mr Sandy Payne who confirmed the floristic richness, not only of the general area but also of the ski-tow corrie and site itself. I also communicated with the Chairman and Secretary of the BSBI Conservation Committee who considered it more appropriate for the Conservation Committee (rather than the Scottish Committee) to deal with threats to Grade 1 sites. The BSBI thereupon joined with a number of conservation bodies, including NCC, RSPB and SWT in outright opposition to the application.

The K.&D.D.C.'s Planning Committee, and later its full Committee, approved the application which was then sent to the Secretary of State for Scotland. At this stage the BSBI Conservation Committee reached an agreement with the Scottish Committee that we would be better placed to handle conservation issues in Scotland. A letter I wrote to the Secretary of State elicited the reply that the planning application had been returned to the K. & D.D.C. for further consideration and consultation, but my letter to the latter body requesting all further correspondence with the BSBI to be addressed to myself either did not arrive or got lost within K. & D.D.C., for they called a site meeting of all interested parties on 2nd May to which BSBI was not invited! (It later emerged that K. & D.D.C.

did not consider it appropriate to notify the BSBI's Conservation Committee as its address was in Huntingdon, England). Fortunately, Sandy Payne was present wearing another hat and did a good job answering hostile questions. Following this site meeting, K.& D.D.C. produced a new set of planning conditions to be imposed, on which they invited comment to be passed back to the Secretary of State again. This new set represented a considerable improvement on the almost laissez-faire original. It restricted the Chairlift Company in its methods of ski-tow construction, time of the year for tow use, use of vehicles in maintenance etc., but still failed to answer the fundamental conservation objections that ski access to the watershed would open up a large area of sensitive botanical interest on both sides of the ridge to the effects of skiing, of which erosion and litter are the most deleterious. So I entered a renewed general objection on behalf of the BSBI, adding a clause that in my opinion planning conditions for any sensitive area should provide for open, independent, authoritative and regular (annual?) ecological assessments backed by legal sanctions.

Only one thing has happened since - a 'Times' report that the Secretary of State had declined to 'call in' the application and had returned it to the K.& D.D.C. to determine; which action effectively destroyed the incentive for the Chairlift Company to conclude further compromises in discussions which were then current! The K.& D.D.C. has confirmed its approval of the application, demonstrating clearly that NNRs are not inviolate. It seems that, like Duich Moss, this one too has been lost. Others are still to come perhaps; e.g. skiing at Drumochter and on the Nevis range, mining at Crussa Field in Shetland have all been proposed.

There are some important lessons which are gradually being learned :-

1) The Scottish Committee must be the active body in Scotland. Nothing raises every local authority hackle so much as 'foreigners from England' seeming to interfere in potential employment opportunities in the economically impoverished Highlands.

2) Planning authorities are sensitive to the weight of opinion expressed by the public. We must all be more

active in expressing our opinions, and show that people care about the countryside and its flora.

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Earlier this year Richard Thomas wrote to the new Secretary of State expressing our disquiet at the apparent lack of concern of his predecessor for conservation interests where these applications were concerned. He also took the opportunity to express the hope that the change of incumbent would also herald a change in attitude to representations by the conservation bodies. We would have liked to include this letter as a postscript to Richard's contribution, but this would have further extended an already unusually long issue.

P.S. A long, but unconvincing, reply has recently been received from a Mr E.R. Robertson of New St. Andrews House. Apparently, because the intrusion at Caerlochlan only encroaches onto 0.2% of the NNR area, it is not significant!

POTENTIAL FOR BIOLOGICAL CONTROL
OF HAWKWEED BY RUST FUNGI AND OTHER AGENTS A.P. BENNELL

The stoloniferous hawkweeds, Hieracium spp. (more correctly Pilosella), originate from Europe and UK. Many of the species have reached the status of weeds when introduced to other parts of the world - in particular mouse-ear hawkweed (Pilosella officinarum agg. = Hieracium pilosella) in New Zealand and orange hawkweed (P. aurantiaca = H. aurantiacum) in eastern North America and Japan. A rust fungus, Puccinia hieracii subsp. piloselloidarum) confined to these species has not yet spread to the weed affected countries. Following the successful introduction into Australia of Chondrilla rust for the control of their introduced broad-leaved weeds, New Zealand is undertaking preliminary investigation of similar control of Pilosella by Puccinia hieracii subsp. piloselloidarum. David Scott of Grasslands Division, DSIR, New Zealand will be based at the Royal Botanic Garden, Edinburgh from April to October 1986 and would be grateful to hear of the location of any substantial colonies of Pilosella species, especially where there is evidence of fungal infection or aphid

or gall insect damage. Please contact :-

Dr David Scott
c/o Royal Botanic Garden
EDINBURGH EH3 5LR

Tel. 031-552-7171

(It is to be hoped that our British Pilosella species do not suffer unduly from the combined attentions of the micro-biologists and Puccinia hieracii - they are, after all, attractive plants rather than troublesome weeds here!
Ed.)