

BSBI

2007

Scottish Newsletter

No 29



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BSBI SCOTTISH NEWSLETTER

Number 29 Spring 2007

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Editorial

Issue No 29:- and the first occasion that we have had other than line drawings for the front cover of the Newsletter. The photographic illustration complements an article to be found on page 25.

Our Scottish Officer, Jim McIntosh and Dr Jane Squirrell, Scottish Secretary have suggested to me that they have back issues of the Newsletter scanned into the BSBI Scottish website. As editor, I have no objections to this being done.

As was the case last year, in addition to giving the postal addresses, e-mail addresses have been included for the Secretary of the BSBI Committee for Scotland and the Scottish Officer. On this occasion e-mail addresses have also been given for a considerable number of other individuals. Postal addresses for other Office Bearers, Committee Members and contributors will, of course, be found in the Year Book.

I normally thank the majority of contributors who have submitted material in our in-house style and again do so most sincerely. This has also been meant as a hint and on this occasion I chide those who have not done so. It means extra work for the one individual.

Appreciation is due once again to John Hawell for his meticulous proof reading and to Jackie Muscott for arranging the photocopying and despatch of the Newsletter. Elspeth Lindsay did the hawkweed leaf drawings for page 23 and the composite photograph for the cover was kindly produced by Dennis Bradley.

Address labels are kindly supplied by Gwynn Ellis, BSBI Membership Secretary. Members and organisations who have not paid their annual subscription by 1st May are taken off the mailing list and so for them no label is forthcoming and, therefore, at the time, no Newsletter. However, Jackie Muscott always checks the members lists and with the help of the Scottish Secretary we try to ensure or coax re-instatement.

Peter Macpherson
"Ben Alder"
15 Lubnaig Road
Glasgow
G43 2RY

Chairman's Report at the BSBI Scottish Annual Meeting of 4 Nov 2006

RICHARD PANKHURST

The membership of the Scottish Committee changes as Stephen Bungard steps down. Lindsay Mackinlay is nominated to join us and will give a link with the National Trust for Scotland. Jeff Waddell has likewise given us a contact with Forestry Commission Scotland. The second nomination is for Jane Jones who has been helping as voluntary administrative assistant to Jim McIntosh.

The consultation this year has brought us into "Making a difference in Scottish Biodiversity", also known as the "Species Framework" project, hence our involvement in surveys of *Melampyrum sylvaticum* (Small Cow-wheat) and *Platanthera bifolia* (Lesser Butterfly-orchid). During the year Jim organised five Site Condition Monitoring surveys by BSBI members, as opposed to the 20 that took place last year.

There have been eight Scottish field meetings this year, as opposed to five in 2005. Two included beginners' days and another two were specially intended for beginners. We also took part in the plant identification courses organised by BRISC. Jim McIntosh has received positive feedback regarding both of these.

Highlights of the year included the VCR conference at Kindrogan FSC, which was attended by 25 VCRs, and the Recorders Conference in Shrewsbury, which had sessions on re-introductions, hybrids and the Atlas Update project. An excellent job had also been done by Michael Braithwaite and Bob Ellis on extracting and interpreting data for the Local Change publication this year, from which important trends have been identified through changes in plant distributions.

The VCR for Skye (VC 104) Catriona Murray has now retired after 40 years of service. The Society is most grateful. This recordership has now been taken over by Stephen Bungard. Neale Taylor (VC 87, W. Perthshire) has resigned due to work and family commitments. The Chair thanked him for his service and efforts to computerise his records. In addition Alison Rutherford (VC 99, Dunbartonshire) and Margaret Barron (VC 96, Easternness) have given notice that they would like to resign, so there are now opportunities for new VCRs. Inquiries should be made to Jim McIntosh.

The chair noted that the Scottish Officer was very valuable to the Society, but that the resignation of our Development Officer earlier this year had been a disappointment. The projects for computerisation of record data are excellent, as it

gives us so much more power to organise and analyse data. Members were commended to visit the new website, with its Scottish pages created by Jane Squirrell.

BSBI/BSS Scottish Annual Meeting, 2006

BARBARA SUMNER

This year the annual meeting was held on 4th November and followed a new format, designed with much energy and enthusiasm by Jim McIntosh, the BSBI Scottish Officer. The programme started earlier in the day and included more oral presentations than in previous years. The venue was the Royal Botanic Garden Edinburgh (RBGE) and doors opened at 9.00 a.m. There were 88 names on the Delegate List, but these were increased to 130 on the day. It was good to see so many people. We were welcomed and registered by Jane Jones, who had been busy with administration in advance of the meeting. Many thanks to Jane for her efficiency.

Exhibitors quickly set up their displays in the Conference Room and hurried along to the Lecture Theatre where everyone was gathering for the start of the presentations at 10.00 a.m. Richard Pankhurst, Chairman of the BSBI Committee for Scotland, opened the meeting and introduced the speakers. They were rich in Richards! Richard Gornall, President of the BSBI, reported on the background and current progress with the plan to form a Plant Unit. The idea is to have a core of paid staff to man the Unit, under the direction of the volunteer membership and answerable to the Executive. The Plant Unit will be responsible for BSBI biogeographical and taxonomic studies and will promote the re-engagement of the academic community. Richard Abbott, President of the BSS, reported on past events and outlined plans for the future, including the BSS Community Woodlands Project, starting in 2007, and the symposium entitled: *The History, Evolution and Future of Arctic and Alpine Flora*, to be held in St. Andrews from 25th – 27th June, 2007. Deborah Long gave an update on projects being organised by Plantlife, including the annual Common Plants Survey and the Flora Guardians Project. The latter project includes conservation activities, surveying and monitoring. Chris Preston reported on the BSBI Hybrids Project. This project aims to record all hybrids, including those introduced as cultivated plants. Records will also be sought from all the major herbaria. Excess records from the Atlas 2000 project will be included. New records of hybrids should be posted or e-mailed to Alex Lockton, or entered into MapMate, before the end of 2006. After that Clive Stace and others will work to produce a book.

By this time we were ready for coffee, which was dispensed in the RBGE staff restaurant by volunteers from the BSS. Thanks are due to Heather McHaffie, Barbara Harvie, Liz Kungu, Roger West and others for carrying out this vital task.

After coffee Jim McIntosh reported on his eventful year as BSBI Scottish Officer. He has organised computerisation projects and workshops for Vice-county Recorders, Site Condition Monitoring for SNH and, with Dorothy Dahl, educational field meetings for anyone interested. He and Jane Squirrell have launched the Scottish pages on the BSBI website. Jim was given praise and thanks by the audience. He also gave a report on *Carex maritima* (Curved Sedge) on behalf of David Pearman, who couldn't be present. *C. maritima* has been lost from some sites (mainly eastern sites), but new populations have been found elsewhere, e.g. on Harris. The overall trend has been a slight decline. Jim, on behalf of David, appealed to everyone to keep looking for this species. Lynne Farrell, assisted by Liz Lavery, is co-ordinating the Lesser Butterfly-orchid (*Platanthera bifolia*) Project, funded by SNH, BSBI and Plantlife. The public is being asked to record locations of this orchid. So far some of the records received have been for the Lesser and some for the Greater Butterfly-orchid (*P. chlorantha*), but all the records are welcome. After Lynne's presentation BSBI members attended the BSBI AGM and then everyone headed for lunch.

Some conference delegates had brought packed lunches but others took advantage of the excellent self-service restaurant at RBGE, run by Ted Gatier. Ted produced a variety of hot and cold dishes to suit all tastes and even provided fish and chips freshly cooked to order! We were immensely impressed. Compliments to Ted!

After lunch there was a short period of time for viewing the Exhibition in the Conference Room. An even shorter period of time remained for browsing among the tempting book display set out by Summerfield Books in the Board Room. It would have been possible to extend the browsing time by missing some of the afternoon presentations, but that would have been a shame. However, although browsing is slow, buying is quick, so Summerfield Books were rewarded for their effort in coming to our meeting.

First in the afternoon programme was an Open Forum, during which we discussed various issues raised by conference delegates. This discussion session was followed by four presentations from exhibitors on the topics covered in their displays. Tea followed, served by BSS members, and then we returned to the Lecture Theatre to hear our guest speaker, Professor Richard Bateman, give a fascinating lecture entitled: *How many orchid species (and genera) are native to the British Isles?* Traditionally, taxonomists have relied on morphological characters to separate species and determine species relationships. More recently, evidence from DNA profiling has suggested that some orchid species may not

deserve species status at all, e.g. *Epipactis youngiana*, which is now thought to be a form of *E. helleborine*. Other species may have been placed in separate genera on morphological criteria, but their DNA suggests they should be in the same genus. For instance, Man Orchid was in a separate genus (*Aceras*) but should now be regarded as a species of *Orchis*, on DNA evidence. Further species, which are at present grouped in the same genus, may need to be separated. The speaker said that British orchids can be summed up under four headings: *Emperor's New Clothes species* (not good species), *Cinderella species* (species which have received too little recognition), *Robinson Crusoe species* (small, isolated, genetically distinct species) and *Bleriot species* (species which hop across the Channel from the continent by means of airborne seeds). He told us that orchid taxonomy is a battleground and that some authorities are still reluctant to use DNA evidence. The best hope for the future is to use both morphological and DNA information. At present we do not know how many orchid species (and genera) are native to the British Isles. The speaker was happy to answer questions and then Richard Pryce (past President of the BSBI) expressed our appreciation for a masterly analysis of a complicated subject.

After the lecture we went a few yards along the road to the Botanic House Hotel where we had a delicious meal, efficiently served. Thanks to Douglas McKean for making the dinner arrangements and for helping in other ways throughout the day and beforehand. After dinner we had an entertaining slide show, co-ordinated by Stephen Bungard. We record appreciation to him and to the presenters.

Our thanks to Jim McIntosh for a jam-packed, interesting and enjoyable day.

The BSBI is grateful for permission from the author, Barbara Sumner, to adapt this report which was first published in BSS News No. 88, March 2007.

Draft Minutes of the BSBI Scottish AGM held in The Royal Botanic Garden Edinburgh at 11:45 am on Saturday, 4 November 2006

Welcome

The Chairman, Richard Pankhurst, welcomed all to the BSBI Scottish AGM.

Apologies

Apologies were received from Ian Green, Jeff Waddell, David McCosh, Alan Forrest and David Pearman.

Minutes of AGM 5 November 2005

The minutes from the 2005 AGM (published in the *Scottish Newsletter* 2006 No 28) were approved as a true record of the meeting; proposed by Stephen Bungard and seconded by Lynne Farrell.

Business arising

None that was not covered elsewhere on the agenda.

Chairman's report

The Chairman delivered his report on the activities of the Scottish Committee and the work of the BSBI in Scotland. For a full account see the article on page 3 "Chairman's report at the BSBI Scottish Annual Meeting of 4 Nov 2006".

BSBI Scottish Newsletter report

Peter Macpherson thanked Jackie Muscott for her assistance with the membership list and noted that Kindrogan FSC was no longer a member and that Perth museum's subscription had also just lapsed. Contributions for the next Newsletter were also requested, preferably by the end of February.

Field Meetings 2006 and 2007

Stephen Bungard reported that there had been eight meetings this year from Shetland to Kirkcudbrightshire. Education had been a feature of this year's itinerary, and will appear as a feature in the 2007 field meetings programme. A list of notable species found on these meetings is now available.

Next year six meetings are planned from Durness to the River Tweed, with one island meeting on Great Cumbrae. Stephen thanked all the organisers and meeting leaders. Meetings will take place in the first part of the season, although potential new meetings could be added for July/September (Ian Strachan has now offered one in August in his VC).

Stephen Bungard has stepped down as Field Meetings Secretary. The Chair thanked him for his services. Mark Watson is proposed as his successor.

Election of Committee members

Stephen Bungard has stood down. The Committee nominated Mark Watson, Jane Jones and Lindsay Mackinlay as Committee members. All three were elected en bloc; proposed by Ian Evans and seconded by Lynne Farrell.

high incidence of annuals and casuals among the rare and scarce species: these variable or sporadic populations cannot be adequately monitored by a simple repeat survey, more regular coverage is needed.

Plant record from Dumfries VC 72

RWM Corner

Salix x obtusifolia (Eared x Downy willow) from the Moffat Hills. Not recorded south of the Highlands although a collection made in 1907 by ES Marshall may be this hybrid.

Plant records from Selkirkshire VC 79

RWM Corner

New vice-county records for the roadside halophytes *Atriplex littoralis* (Grass-leaved Orache) were made by LW Gaskell and *Cochlearia danica* (Danish Scurvy-grass) and *Sagina maritima* (Sea Pearlwort) by ME Braithwaite. *Geranium endressii* (French Crane's-bill) was new. A second vice-county record was made for *Carex spicata* (Spiked sedge) and *Symphytum officinale* (Common Comfrey) was exhibited to show that it is extant in the west of the county and has not been hybridised out of existence with *S. asperum* (Russian Comfrey) to give the abundant *S. x uplandicum* which appears to have occurred in the eastern Borders.

Plant records from Roxburgh VC 80

RWM Corner

New vice-county records were made for the planted *Acer cappadocicum* (Cappadocian Maple) with LW Gaskell adding *Chenopodium glaucum* (Oak-leaved Goosefoot) and *Ammi majus* (Bullwort). Jon Mercer recorded a large area of *Rhododendron luteum* (Yellow Azalea) in woodland and a puzzling *Lonicera* (Honeysuckle) with *L. morrowii* as one parent. A second record for *Poa palustris* (Swamp Meadow-grass) was made from a pond margin by the River Tweed and for *Elodea nuttallii* (Nuttall's Waterweed) which is spreading on the Tweed.

The *Melampyrum sylvaticum* Recovery Project: how ecological research can inform botanical conservation.

Sarah Dalrymple

Melampyrum sylvaticum is rare in the UK, restricted to a handful of small, isolated populations. Its Biodiversity Action Plan identified that we have insufficient knowledge of the species and a PhD project was set up to meet BAP needs by identifying the species' conservation requirements using field monitoring and

experiments. The results indicate that habitat availability is not the current cause of *M. sylvaticum*'s limited distribution, rather various factors such as genetic inbreeding reduce individual fitness and increase extinction rate while the lack of seed dispersal prevents colonisation and immigration of suitable habitat. Due to the experimental nature of a recent introduction programme, *M. sylvaticum* may yet turn out to be a model species for testing the effects of seed translocation on the genetic diversity and demographic health of rare plants and also, whether such interventions can enhance the resilience of a species in the face of climate change. Continued involvement by BSBI members is greatly appreciated and it is hoped that further surveys may uncover new records for the species.

Searching for Saltmarsh Sedge – can you help?

Mary Dean

Carex salina Wahlenb. (Saltmarsh Sedge) was discovered on one saltmarsh in western Scotland (VC 105) in 2004. Because it is likely to be rare in the British Isles it is important to establish its distribution. Geographical Information Systems (GIS) software was used to map the distribution of Scottish saltmarshes and eighteen accessible marshes from two areas, one around the recognised location, were surveyed in 2006. The method used was to walk along the lower marsh and any tidal creeks (tide and condition of terrain permitting), and record species present using a checklist. No new sites for *C. salina* were found. This ongoing project aims to survey as many Scottish saltmarshes as possible. Can you help? Access our research webpage from <http://www.edgehill.ac.uk/ngas> for the method used, checklist (downloadable), and a list of saltmarshes already surveyed. Please let us know if you find *C. salina* and where you surveyed so that we can update our list.

West Sutherland, 2006

Pat and Ian Evans

We are, once again, grateful to others for much of the excitement generated in 2006. Gordon Rothero found a narrow-leaved spearwort beside a corrie lochan on Ben Hope in 2004. It flowered this year and has been confirmed by Dr Richard Gornall as the rare hybrid *Ranunculus x levenensis* (*R. flammula* x *reptans*), in a site far from any previous ones. Gordon also recorded new sites for Arctic Mouse-ear (*Cerastium arcticum*) and Alpine Saxifrage (*Saxifraga nivalis*) on the steep south-western slopes of Conival.

A small saltmarsh on the western side of Loch Eriboll gave us the first record of Purple Glasswort (*Salicornia ramosissima*) on the north coast, with Common

Glasswort (*S. europaea*) (both determined by Dr Keith Ferguson). A puzzling vetch photographed by Penny Lee in a remote area south of Cape Wrath proved to be a very compact form of Bitter-vetch (*Lathyrus linifolius*). Alan Showler found Annual Wall-rocket (*Diplotaxis muralis*) on the steps of the Youth Hostel at Achmelvich, the first recent record from the west coast north of the Clyde. Our contribution is an elegant form of Prickly Sow-thistle (*Sonchus asper*) with deeply pinnatifid leaves, from Lochinver.

Wildflowers of Coll and Tiree

Claudia Ferguson-Smyth

The thirty-four A3 plant portraits in the exhibition on display at the BSBI meeting on November 4th were taken by Claudia Ferguson-Smyth for a forthcoming guide to the wildflowers of Coll and Tiree. This project, instigated in 2002 by a resident of Coll, Emma Grant, has attracted funding from Scottish Natural Heritage and the Heritage Lottery Fund. The steering committee includes Lynne Farrell as its botanical advisor.

The project's objective is to produce a photographic identification guide to 180 species of the island's wildflowers, with an emphasis on information acquired locally. The committee is indebted to the work of previous botanists, especially Pearman and Preston's valuable official flora of the islands. All the photographs were taken on the islands in 2004-5 with either a D200 or D70 Nikon digital camera.

Some recent Cumbrian records

Geoffrey Halliday

Specimens were exhibited of nine taxa new to Cumbria and the vice-counties of Cumberland and/or Westmorland. The most significant were *Euphrasia arctica* subsp. *arctica*, *Rorippa islandica*, *Potamogeton natans* x *P. polygonifolius*, *Carex acuta* x *C. nigra* and the alien *Nonea lutea*.

Some *Junci* from Bute VC 100

Angus Hannah

As a contribution to the Hybrids Project, the status of two hybrid rushes on Bute was investigated.

Juncus x *surrejanus* (*J. acutiflorus* x *J. articulatus*) was found to occur very commonly, being more abundant at many sites than either parent. This hybrid could be identified by its paucity of capsules, and the small size of those which did develop. In autumn its pale fawn inflorescences contrasted with the chestnut of *J. acutiflorus* and the darker shade of *J. articulatus*.

Juncus x *kern-reichgeltii* (*J. effusus* x *J. conglomeratus*) was found to be rare,

with only a single site so far located, though the parents grow together frequently. This hybrid is distinguished by the nature of the stem ridging, the high, narrow and well-spaced ridges of *J. conglomeratus* being interspersed with shallow, close-set furrows typical of *J. effusus*. Capsules are poorly developed, but the form of the inflorescence is not a reliable guide.

Specimens of both hybrids and their parents were exhibited.

Coastal flora of Angus – a vanishing resource?

Barbara Hogarth

The coast suffers from encroachment of arable farmland, housing, 'coastal protection' and golf courses. Examples of current concerns - Sea Pea (*Lathyrus japonicus*) has shown a drastic decline from two populations to a single vulnerable population. Close to a premier golf course, well-used paths run through the core population and coastal protection restricts potential areas for colonisation.

Further north, steep rocky species-rich slopes are threatened by escapee Soay sheep. We have expressed our dismay to SNH – current action is a fence above a gully to prevent sheep reaching arable land!

As BSBI members we gather records, we monitor plant populations, we inform SNH of our concerns but where do we go from here to ensure that those who manage or develop an area are aware of what we consider to be botanical treasures?

Strange Plants in a Galashiels Garden

Margaret Little

Strange plants appeared in my garden under a bird seed feeder; the mixture had included hemp and you all know what that is – cannabis! Family and friends thought it hilarious that I was growing illegal plants.

The leaves looked exactly like pictures of cannabis but I kept the two tallest plants to be quite sure. They grew for many weeks; when flowers appeared they were bright yellow, 1½" diameter and of the *Asteraceae* family. Whatever had happened? Then I remembered piles of Niger seeds (*Guigotia abyssinnica*) under another feeder.

At the time I had thought these tiny black seeds, native of East Africa could never germinate in a cold damp garden in Galashiels. At first I thought it was a second record for Scotland but was deflated to learn the herbarium had many specimens from as far north as Morayshire, mostly from about 1910, the latest in 2002.

No doubt the very hot summer helped.

Two fern exhibits

Heather McHaffie

There is a large population of *Dryopteris x sarvelae* near Claonaig in Kintyre. Permission was sought to collect some plants to cultivate at the different Botanic Gardens and one was shown as an exhibit together with the parents. This is the hybrid between *Dryopteris carthusiana* and *D. expansa* and might be expected to be found more towards the west coast where *D. expansa* descends to sea level. There are, however few records. The large clonal colony at Claonaig has vigorous fronds up to 80 cm tall with a growth habit somewhere between a crown and a creeping rhizome with inclined fronds. The bases of the stipes are densely covered with uniformly-coloured medium brown scales.

Also shown was a plant of *Cystopteris diaphana* to compare with one of *C. fragilis*. Attention was drawn to the position of the veins which end in the pointed parts of the pinnules with *C. fragilis*, but more frequently in between these points in *C. diaphana*.

As this species has been found in Cornwall it was suggested that it might be present in the west of Scotland. It would probably be wintergreen and be growing on more acid rocks.

Fumaria & *Equisetum* Hybrid Workshops 2007

Heather McHaffie

Fumaria: a workshop will be held at the Royal Botanic Garden Edinburgh starting at 10.00 am on Thursday 21st June 2007. The six Scottish species will be examined with especial reference to *Fumaria purpurea*. In the afternoon there will be an opportunity to see some of these species in the field.

Equisetum Hybrids: another workshop will be held at the Royal Botanic Garden Edinburgh on Saturday 4th August 2007 also starting at 10.00 am. More time will be spent on the commoner hybrids but most should be available. In the afternoon there could be an opportunity to see some of these species in the field. Please bring a packed lunch; tea and coffee will be provided and there is no charge. To book phone: 0131 248 2876 or email: h.mchaffie@rbge.ac.uk

Knopper Galls on Pedunculate Oak

P Macpherson

The exhibit is the first example that I have seen of acorns being affected by Knopper Galls. The 2006 specimen is from Burnside, by Glasgow—NS/61765969 (VC 77). I was intrigued by the name ‘Knopper’, a word not given in either my standard English dictionary or my *Dictionary of British Natural History*. However, I understand that it is a German word for a knobby helmet worn in the seventeenth century (though I have also been told that it was a name for an early German hand-held weapon).

As most will know, the Knopper Gall Wasp (*Andricus quercuscalicis*) crossed into southern England in the 1950s and was first reported from Scotland in 1995. It has an obligate sexual generation on Turkey Oak (*Quercus cerris*) in springtime and an agamic generation in autumn on Pedunculate Oak (*Q. robur*) [Tate & Tate (2004). *Glasgow Naturalist* 24; 131-132].

In 1995 an oak specimen from the same locality was identified for me as *Q. cerris* x *Q. robur*. Might both gall wasp stages occur on the one hybrid tree?

Little *Prunella* can grow quite tall

P Macpherson & EK Lindsay

For some years we have been interested in the height differences among *Prunella vulgaris* (Selfheal) plants, depending on the habitat.

Standard works refer to Selfheal as a short creeping perennial, prostrate or up to about 8" high.

Specimen A is an example of the prostrate form usually seen at road/track sides, lawns or short grassland. It is from Shawbridge, Glasgow (NS/5661).

Specimen B is the tallest that we have seen so far. As would be expected, it is from fairly deep woodland, the site being by the Garrion Burn, Clyde Valley (NS/7951). Its height measurement is 21".

Photos on Revegetation and Non-revegetation in Norway and Scotland

Raymond Parks

The exhibition comprised nine panels, which included photos and brief captions on soil and revegetation and in three cases, non-revegetation. The panels were mainly of areas near glaciers in Norway:

- 1 Engabreen, calving into its lake 30 metres above sea-level.
- 2 Fonndalsbreen, extending. Recent climate changes have brought increased precipitation to some areas, and this glacier has re-occupied the basin from which it had retreated thirty years earlier.
- 3 Lyngsdal, an accessible valley where the progression of colonising vegetation in the wake of glacial retreat is an open picture-book.
- 4 A contrast in revegetation potential between S. Svartisen and Okstindan. The former on hard rock lacking in nutrients, supports little plant life, whereas the latter on rocks which weather to give beginnings of soil structure and nutrition supports plants such as *Diapensia lapponica* and *Cassiope hypnoides*.

Two further panels showing non-revegetation place the blame squarely on intensive sheep-grazing in Scotland. Once the sheep have eliminated the deciduous-woodland element from the plant community, soil renewal processes are

impaired, and untended land degenerates so far that woodland cannot colonise even when grazing pressure is removed.

The final panel showed a meteorite impact site in Sweden, about 2000 years old. The surrounding Scots Pine forest has with time returned to its original state, but strikingly not in the crater. Presumably the soil there has been poisoned by iron and minerals from the meteorite.

Rock Sapphire (*Crithmum maritimum* L.) on Coll

David Pearman

C. maritimum is a Mediterranean-Atlantic species, found on the continent from Turkey round to about Calais. It reaches Suffolk on the east coast of Britain and Kintyre on the west, with outliers on Colonsay, Ardnamurchan, Uig on Lewis, and an old record from Strathy Point in Sutherland. Last year Barbara Hogarth exhibited an extraordinary record for this, from the Angus coast, about 500km north of the Suffolk sites.

On a visit to Coll this autumn, one healthy plant of this species was found in a little rocky cove on the north-west coast, in the splash zone, and quite accessible to stock. There were no associates. This new site is just under 20km due west of those on the cliffs on Ardnamurchan and I assume the seeds can be carried by water. The poster display included a distribution map showing both new and existing *Crithmum* sites.

As far as I can tell, all these Scottish outliers have only very small populations, but I do not know how long-lived a colony might be. Presumably it is vulnerable to storms, and being beyond the core range, re-recruitment is uncertain.

Results of the 2006 survey on Curved Sedge (*Carex maritima*)

David Pearman

Much work has been done over the past two years by BSBI Recorders to investigate the decline of *Carex maritima* noted in the *New Atlas of the Flora of the British and Irish Flora* (Preston *et al*, 2002). By the end of 2005, and only considering post-1970 records, 19 hectads were found still to have *Carex maritima* populations; but it had apparently gone in 12 hectads and was not searched for in 16. After the second year of searching by VC Recorders new records were found in 10 hectads in the north of Scotland. Some were completely new whilst others renewed old records – including one 1842 record at Tarbert Ness.

The poster included distribution maps showing their location and speculated on why half of all sites should have gone. Was it due to erosion, development, agriculture or accretion in dune systems? It concluded that further work is required, particularly in Orkney, where many sites still needed updating, and pos-

sibly in the Outer Hebrides, where new sites were being found. However the work for these two years has been really helpful, and if I had to write the Atlas account again, I would not be so pessimistic!

Glynhir, Carmarthenshire, 2006

Richard & Kath Pryce

The poster showed a selection of photographs of the 2006 annual recording meeting held at Glynhir Mansion, Carmarthenshire, South Wales. In addition to ‘regulars’ such as Arthur Chater, Graeme Kay and John Killick, a particular welcome was given to Alan Silverside from Paisley, who was attending for his second year.

At Tywyn Burrows, a hybrid sedge, *Carex x luteola* (*C. distans* x *C. viridula* subsp. *viridula*), after subsequent confirmation, proved to be the first Welsh record and the third British record. Later, at the same site, *Anagallis minima* (Chaffweed) was discovered in abundance, the first record in the east of the VC since HH Knight’s of 1910. A visit to Laugharne Burrows to monitor *Liparis loeselii* (Fen Orchid) failed to find any plants and the species is feared extinct despite recent remedial habitat management work. A few plants of *Anagallis minima* were also found here at a new location within the dune system. Another highlight was Geoffrey Kitchener’s attendance, for which he had taken a day out from his annual family holiday. He identified and confirmed many hectad records of *Epilobium* (willowherb) hybrids, adding some important new records for the BSBI Hybrids Project. A full report of the meeting appears in *BSBI News* 105.

A warm invitation is extended to all in Scotland who wish to visit Wales during the last week of June for this year’s, the 25th, annual Carmarthenshire meeting.

South Harris, 3-7 July 2006

Paul Smith & Richard Pankhurst

Nineteen people attended for various parts of the field meeting, and covered a number of tetrads as part of the recent initiative to undertake tetrad recording in the Outer Hebrides. The meeting concentrated on the sandy and machair habitats, and visited a number of localities, but there were also some excursions onto the moorland and a number of interesting finds from there. Pictures of typical and interesting species were exhibited.

Plants that missed the Atlas, but not by being too late

Alison Rutherford

Two VC 75 species failed to reach the Atlas because an excursion plant-list got lost between my writing it and Allan Stirling’s Ayrshire ledger. In a wood near

the centre of Largs was a huge sheet of *Helichrysum petiolare*, which would have been a Scottish first. Between kerb-chinks nearby were seedling *Spiraea japonica* new for VC 75. In VC 99 an *Aspidistra* was discovered in a little wood in Helensburgh, dumped with rubbish and well rooted down. For some reason it was not entered in the alien binders or field card, and was remembered too late – maybe best as it had fine spots, probably therefore not *elator*, but it would have been a UK first.

Assessment of introgressive hybridisation between *Rumex aquaticus* and *R. obtusifolius* in Scotland J Squirrell, K Watson, T Jacobs and PM Hollingsworth

Hybridisation can be a cause for conservation concern when anthropogenic activities, either via the introduction of alien species or by habitat modification, results in species coming into contact that are normally naturally isolated from one another. This is especially problematic for some rare species and/or small populations, and introgressive hybridisation can lead to genetic assimilation and extinction/extirpation.

In the UK, *Rumex aquaticus* (the Scottish Dock), is known only from Loch Lomondside, where it grows at the edge of drains, shallow ditches and swamps. At these sites it co-occurs with *R. obtusifolius* (the Broad-leaved Dock), and plants with intermediate morphologies are present. Recent surveys have noted that many *R. aquaticus* populations have disappeared or only appear to exist as hybrid populations, and this has led to management controls (spraying) to remove *R. obtusifolius* from these sites. To assess the threat to *R. aquaticus* posed by hybridisation (and hence whether the use of herbicide spraying on the nature reserve is necessary), we have used AFLPs and the low copy nuclear gene Glyceraldehyde 3-phosphate dehydrogenase (G3pdh) to investigate the extent of introgressive hybridisation within these populations.

Other exhibits were:

Botanical Society of Scotland	Pat Cochrane
SNH Leaflets & Publications	Lynne Farrell
Cairngorms: Observations of some of the Nationally Rare and Nationally Scarce Plants 2006	Thea Loizou

Scottish Field Meetings 2007

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

May 20	St Cyrus, Kincardineshire	I Green & J Mc Intosh
June 16	Dunnyduff Wood, Banff	I Green & J McIntosh
June 29-Jy 2	Isle of Cumbrae	A Hannah
July 6-8	Durness, West Sutherland	P Evans
July 14-15	Gordon Area & R Tweed Berwickshire	M Braithwaite
July 27-30	Mid-Perthshire	A Godfrey & J McIntosh
Aug 25-26	Arisaig, Westerness	I Strachan

Conservation Measures for Wild Basil in VC 91

DAVID WELCH

The Wild Basil (*Clinopodium vulgare*) is very local in northern Scotland, apparently restricted to warmer districts and calcareous soils. In Aberdeenshire and Kincardineshire the few colonies recently known occur close to the River Dee. It was here that the Aberdeen polymath, Dr David Skene, reported the plant in 1768. “ad ripas Dee, Banchory-Ternan”, and Trail gave further information (anon, 1923): “dry rough banks along the Dee valley in Maryculter and Peterculter parishes”.

At present the only colonies of Wild Basil known on Deeside are near Banchory, two small ones upstream on the Dee’s north bank at Inchmarlo, and one large colony downstream on the trackbed of a former railway at Crathes. This section of the railway is being restored, possibly threatening this attractive species. The Inchmarlo colonies are also quite vulnerable, being subject either to excessive mowing from the fishing ghyllies or invasion from broom and gorse in the absence of mowing.

I therefore drew the attention of the Royal Deeside Railway Company’s enthusiasts to the Crathes colony, and attempted to protect it. I also tried to establish

plants in what I believe is the species' natural habitat on the nearby banks of the Dee.

The railway enthusiasts were keen to erect a small enclosure so that they and any contracting staff would know with certainty the plant's location. This was built in April 2004 and rabbit-proofed, though with no expectancy of permanent exclusion. The trackbed had become a well-used footpath, while trees had grown up in the rest of the way-leave, checking the ground vegetation. The Wild Basil grew mostly in more-open positions between the footpath and the dense way-leave trees and also at the foot of the shallow south escarpment there, where the line abuts farmland. So the enclosure extended 5m from the edge of the path to the escarpment foot, and ran 17m by the path to include the bulk of the colony. Selective tree felling was carried out along the railway in 2004 and 2005 to prevent tree-root damage and give future passengers better views, and this together with the protection from rabbit grazing allowed the Wild Basil to flower vigorously in both these summers.

For the trial introduction, I collected seed from the fruiting inflorescences in summer 2003. I sowed this indoors, and then transferred the soil block bearing the young seedlings in November 2003 to a steep section of south-facing river-bank. Subsequent growth and impacts on the seedlings are detailed in the table below.

The heavy grazing by sheep in both springs clearly gave no chance for the Wild Basil seedlings to flower, and the subsequent scraping by rabbits in the 10 x 10 cm area where the seedlings were established meant that I could not judge if the species was biennial or triennial in this district.

I conclude that in addition to its narrow climatic and soil requirements the plant has habitat requirements not widely available, being grazing vulnerable yet shade intolerant and needing open ground for its seeds to establish. So perhaps the restored railway will provide these conditions at least as well as "natural" situations in the present highly managed environment.

Reference

anon. (1923). James William Helenius Trail: a Memorial Volume. Aberdeen University Press, Aberdeen.

Date and Events	Seedling Number	Seedling Size	Notes
Nov 03; planted by river	20	1-2 cm tall	
Jan 04	20	1-2 cm tall	6 sdlgs growing
Apr 04	18	1-2 cm tall	all sdlgs growing
May 04	16	2-5 cm tall	
May-Jun 04; sheep grzd 6 weeks			
June 04	16	2-3 cm tall	9 sdlgs lacked stem top
Sep 04	16	2-6 cm tall	
Dec 04	14	2-5 cm tall	occupied 80 cm ²
May 05	17	3-10 cm tall	
May-Jun 05; sheep grzd 5 weeks			
June 05	17	2-6 cm tall	only 2 sdlgs not grzd.
Aug 05	7	3-10 cm tall	died-back stems visible
Oct 05	4	3-6 cm tall	more die-back
Dec 05	0		
Jan-Apr 06; rabbit scrape			
Apr 06	1	1 cm tall	
May 06	0		
Aug 06	0		judged extinct

sdlgs = seedlings; grzd = grazed

***Hieracium rionii*
in a Glasgow Garden**

P MACPHERSON & DJ McCOSH

In 1991 a pointed, blotched-leaved hawkweed appeared spontaneously in the gravel plunge bed of PM's Glasgow garden (VC 76; 26/572607) and has persisted as a spreading weed. As there have been no similar plants in neighbouring gardens, it is assumed that seed arrived accidentally as a stowaway with a bought plant.

It was diagnosed initially as possibly *Hieracium pollichiae* and the record appeared as such in *The Changing Flora of Glasgow* (Dickson *et al* 2000).

Further specimens were seen by DJMcC in 2002 who then had them confirmed by PD Sell as, in fact, *H. rionii*, a plant of southern France and previously known in Britain only as a weed in the Cambridge University Botanic Garden and in a garden in Derbyshire (with some suspicion of Wisley as the original source). The record in the above Flora is, therefore, incorrect.

However, in 2004 DJMcC noted differences among plants with regard to overall size and leaf size and mottling. This raised the possibility that two species were actually present, and it was decided to conduct an experiment.

Achenes from the five plants with the largest leaves (Fig. 1) were potted up and the original specimens pressed. The same was then done for the five smallest plants (Fig. 2). The pots were taken into the conservatory so that there would be no contamination.

In 2005 rosette leaves appeared in all pots and flowering occurred in 2006. Specimens were then taken and compared with the 2004 parents. There was no consistency—large leaved plants giving rise to a range of leaf size and mottling, as did the original small leaved specimens. This proved conclusively that only one species is involved—*Hieracium rionii*.

Specimens have been deposited in BM, E and herb. PM. In addition, having an interest in the genus, Allan Stirling had asked for plants to grow. With his other herbarium material, specimens from his garden are now in the Royal Botanic Garden Edinburgh (E).

Reference

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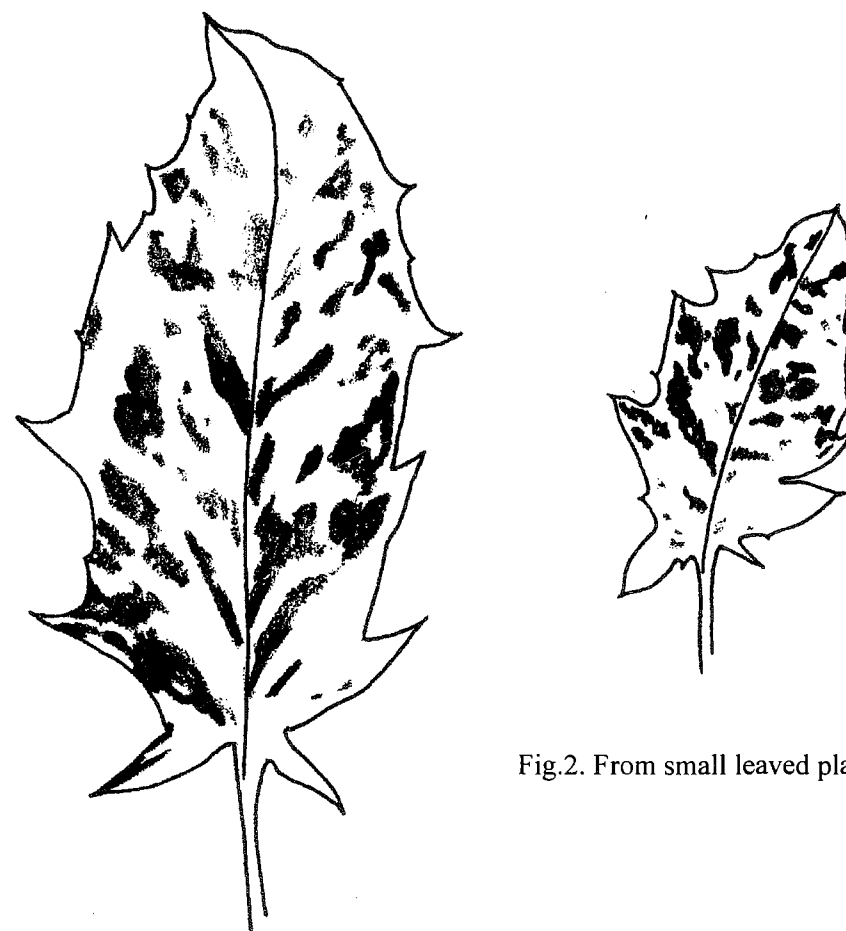


Fig.1. From large leaved plant

Fig.2. From small leaved plant

**A New Mainland Location For
Spiranthes romanzoffiana (Irish Lady's-tresses)**

IAN TEESDALE

On 6th August 2006 a small, recently-formed group of amateur botanists from Kintyre were examining the flora in and around a lochan in the Kintyre peninsula. The Vice-county Recorder Pat Batty and BSBI Scottish Officer Jim McIntosh were with us – the occasion was indeed an outing under Jim's tutelage, with the aim of helping us to improve our plant identification skills. One of our party called us over to look at a small white-flowered plant she did not

recognise; and to our great surprise we found ourselves looking at a flowering spike of *Spiranthes romanzoffiana* (Irish Lady's-tresses). The same group member then found another spike a number of yards distant; and a day or two later another member found a third spike, on the opposite side of the lochan. No more spikes have been found, in spite of several careful searches; and two or three days after the initial discovery the first plant was grazed off. Photographs, GPS references, measurements and other details of each plant have been lodged with the VCR.

Whether or not these plants represent a new record for VC 101 depends on whether or not a record from Kilberry, in Knapdale, evidently dating from about 1960, is accepted as valid. The authors of the 1979 *Flora of Kintyre* (Cunningham & Kenneth) describe it as dubious, but I see that the compilers of the *New Atlas of the British and Irish Flora* give it credence. There is however no post – 1970 record of this species in VC 101, and no previous record at all for it from the Kintyre peninsula.

That, of course, immediately raises two questions: how did these plants get here? and how long have they been here? Neither can be answered with any certainty, but some speculation is perhaps permissible. The recent discovery of a small colony in Wigtownshire (VC 74), referred to by Alan Silverside in the Number 28 issue of this *Newsletter* seems relevant to the first of these questions. VCs 74 & 101 are each a similar distance from those parts of Northern Ireland where this orchid is evidently most plentiful; and it is reported (Horsman 2005) that plants from the Lough Neagh area do occasionally set seed. Given that the seed is described in that article as 'dust-like' and that the prevailing winds in our area are westerly, it is tempting to assume that both the newly-found Scottish mainland colonies derive from wind-blown Irish seed.

As for the second question, the place where the Kintyre plants were found was certainly known as a good botanical locality by the authors of *The Flora of Kintyre*, since it is given as the site of a number of other interesting plants. The *Flora* also provides ample evidence of Archie Kenneth's particular interest in and knowledge of the Scottish Orchidaceae. It is to my mind inconceivable therefore that the present Kintyre colony of *Spiranthes romanzoffiana* was in existence during his time as an active botanist. That time in fact takes us up to at least 1985, since that is the publication date of his Additions to 'The Flora of Kintyre', in which the discovery of such a colony would undoubtedly have been recorded. His co-author presumably predeceased him, so botanising in the Kintyre peninsula during most of the last twenty years would appear to have been sporadic rather than systematic. That suggests that our colony could have be-

come established at some stage during the last two decades, but probably not before that.

We were able to see, and photograph, next season's bud appearing at the base of each of our three plants, which gives promise of each reappearing, either as a vegetative or a flowering plant, next season. All have been discreetly marked, so we hope we shall be able to relocate them in 2007, and find any others that may have been dormant or vegetative only this year. However, orchids are unpredictable at the best of times, and we lack experience in fieldwork of this sort. So none of us will be holding our breath!

Our group would like to thank Richard Gulliver for his help and encouragement following the discovery of these plants.

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Interrupted Clubmoss (*Lycopodium annotinum*) JOHN R HAWELL and associates on a Lanarkshire Bing & PETER MACPHERSON

Keith Watson was contracted by the University of Glasgow to undertake botanical surveys of bings in central Scotland during 1993. Copies of his records relating to Lanarkshire were forwarded to PM, the BSBI Recorder for VC 77. One find of particular note was Interrupted Clubmoss on the bing north of Shotts, a new record for the vice-county.

With the aim of checking its present status for a forthcoming 'Flora of Lanarkshire', the authors visited the Shotts bing on 20 July 2006. We were armed with KW's six figure grid reference - and with the aid of a global positioning system, had little trouble in re-locating his site for Interrupted Clubmoss, where it is not just present but is positively thriving @ NS 87593.61630 at an altitude of 780

feet, which is at the lower end of, but well within the normal altitudinal range for this species. The Interrupted Clubmoss covers an area, almost exclusively, of the equivalent of about four square metres – then about two metres away there is another patch covering an area, almost exclusively, of about the equivalent of one square metre.

The site in question is an old coal bing situated in the Central Lowlands of Scotland. The Interrupted Clubmoss is established at the exposed north edge of this bing. There is an old vehicle track contouring around the bing at this point, currently serving as a route for scramble motorcycles. The clubmoss grows in a rocky situation at the edge of the afore-mentioned track. The rocks in question are broken, consistent with the mining operation, and vary in size up to about half a metre across. These rocks appear to have separated out from the finer material comprising the most part of the bing and rolled down the slope until coming to rest at the edge of the old vehicle track.

Associated plants in this rocky habitat included Common Wintergreen (*Pyrola minor*), Moonwort (*Botrychium lunaria*), Heather (*Calluna vulgaris*), and Woolly Fringe Moss (*Rhacomitrium lanuginosum*). A shrubby willow about 3 feet high partially covers the largest patch of Interrupted Clubmoss.

On 13 October 2006 JRH re-visited the site to photograph the Interrupted Clubmoss (cover illustration). It appeared very dusty - assumed at first to be dust from the motorcycle activity, but soon realised to be prodigious quantities of spores being released by the ripe sporangia of the clubmoss, especially when touched.

The presence of Fir Clubmoss (*Huperzia selago*) had been reported also by KW in 1993 and we now record that there are four species of clubmoss growing on the bing. At one place all four species converge within a very local area of 1m², surely a rare occurrence in Britain? The two others are Stag's-horn Clubmoss (*Lycopodium clavatum*) and Alpine Clubmoss (*Diphasiastrum alpinum*).

The presence of these last mentioned three clubmosses (Fir, Stag's-horn and Alpine) has been reported from a bing in West Lothian (VC 84) (Muscott 2006). However, as far as we know, the bing north of Shotts is the only site where four are present and certainly it is most unlikely that any other has them in such close proximity.

The four species of clubmoss on Shotts bing represent half the British total. The

others being: Marsh Clubmoss (*Lycopodiella inundata*), Issler's Clubmoss (*Diphasiastrum complanatum*), Lesser Clubmoss (*Selaginella selaginoides*) and Kraus's Clubmoss (*Selaginella kraussiana*). All eight species occur in Scotland and all are native with a circumpolar distribution except for Kraus's Clubmoss, a native of central and south Africa, introduced to cultivation in Britain in 1878 and now established in several locations throughout Britain and Ireland, including the Botanic Gardens, Glasgow (Macpherson 2002).

Interrupted Clubmoss, in our context, is of interest because the Shotts bing location represents the most southerly known Scottish population for this species. The next known site is some forty miles away to the north, beyond which it becomes more frequent and widespread. There were three pre-1970 records from southern Scotland. In addition, there is a single current record from south of the border (in the Lake District) and three pre-1970 records (Yorkshire and Snowdonia); it has never been recorded from Ireland (Preston *et al* 2002).

Interrupted Clubmoss usually grows on acidic peaty soils, often overlying boulders, or in hollows where snow accumulates. The Shotts location would appear to be a mixture of these two options; it is certainly rocky, and situated where it is, it probably is subject to snow accumulation, but almost certainly not annually.

In view of the prodigious quantities of spores being released by Interrupted Clubmoss during the visit on 13 October 2006 one might well speculate that it has, or will spread more widely on the site and to suitable habitats on adjacent bings, and beyond.

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Holy Grass (*Hierochloa odorata*) in the Hebrides RWM CORNER

A week in the Outer Hebrides at the end of May is probably a little too early to see the machair at its best and as the hills of South Uist seemed hard work and not terribly inviting botanically, I wondered how I might profitably botanise

without monopolising a family holiday. I had my copy of Pankhurst & Mullen's (1991) *Flora of the Outer Hebrides* and browsing through it on arrival, *Hierochloe odorata* caught my eye. Two records for this Red Data Book grass were given. One from Askernish on the western side of South Uist dating from 1983 made by Pitkin *et al* and the other from Nunton, on the western side of Benbecula by Miss MS Campbell in 1936 and "not seen there since". Knowing this rare early flowering grass well from Roxburgh and Selkirkshire and Iceland it seemed an ideal opportunity at the right time of year to see it in its Hebridean habitats and take up the challenge of refinding it at the latter site.

From the map both sites seemed quite accessible and I decided to look at the Askernish site first. I only had the hectad from the Atlas 2000 map to go on so wasn't very optimistic. I drove to the golf club house (marked CH on the map) and expecting to find a substantial building was surprised to see only a very small wooden shack with no signs of life. I followed the rough track which led due south below the sand dunes with a fence along the eastern side enclosing "improved" land. Where the fence made a right angled turn eastwards it enclosed marshland dominated by *Phragmites australis* (Common Reed) so I crossed an awkward fence and began the search. Although there was much *Carex diandra* (Lesser Tussock-sedge), there was no sign of *Hierochloe*.

When conditions became drier and I could clearly see a small loch in the distance, I was delighted to see the first panicles of the grass on the other (west) side of the fence which I had needlessly crossed. This was a relatively small colony with two groups of plants about 30m apart with only a small number occurring on the east side of the fence. Among the undistinguished associates were *Angelica sylvestris* (Wild Angelica), *Anthoxanthum odoratum* (Sweet Vernal-grass), *Carex nigra* (Common Sedge), *Filipendula ulmaria* (Meadow Sweet), *Luzula multiflora* (Heath Woodrush), *Molinia caerulea* (Purple Moorgrass) a few small stems of *Phragmites* (Common Reed) and *Senecio aquaticus* (Marsh Ragwort). Continuing on to the loch, conditions became wet with *Potentilla palustris* (Marsh Cinquefoil) and *Menyanthes trifoliata* (Bogbean) so I returned to an area of *Phragmites* to the west of the original *Hierochloe* colonies. Here there was a profusion of the grass mostly in discrete colonies. The vivid green shiny leaves with the golden-brown spikelets of the panicles stood out in contrast from the dead stems of *Phragmites*. One almost perfectly circular colony 60m in circumference was noteworthy although there was another larger colony to the west together with smaller dominant populations with many hundreds of panicles. Plants approached to within 5m from the edge of the track and only 25m away from a small cultivated area of dune on the seaward side.

The next day I had a quick look in the Nunton area of Benbecula in a marshy area to the east of the main coastal road (B892) without success but the next morning while driving north on the same road, a grass with green shiny leaves caught my eye in a marsh close to the east side of the road and binoculars showed it to be *Hierochloe*. Closer examination of the marsh showed widespread extensive colonies which avoided the wettest parts where tussocks of *Carex paniculata* (Greater Tussock-sedge) occurred.

On the return journey to my great surprise, I could see that *Hierochloe* also occurred on the opposite (west) side of the road in even greater quantity in the same *Phragmites* marsh habitat. There were thousands of panicles present over some 70 square metres of the marshy hollow which had a large rocky outcrop at the western end. What was more surprising was the striking appearance of the grass growing along the road verges for about 200m on the east side and 90m on the west which I had missed earlier. Small panicles were even present only 8 cms from the tarmac surface in places. It would appear that when this road was constructed many years ago, it was driven right through the centre of this very large population of *Hierochloe* and colonisation of the roadsides, which are raised above the level of the marshland, had taken place since.

It was heartening to see the large size and healthy state of these Hebridean populations. The Nunton site appears to have greater quantity of *Hierochloe* than Askernish although time did not allow a complete assessment of the total population there. The Nunton site must be one of the most accessible in the British Isles, once one arrives on Benbecula and unique with *Hierochloe* occurring as a roadside plant where it is obviously able to tolerate quite dry conditions. I wasn't surprised to learn later from Richard Pankhurst that he had found the grass in the Nunton area in the last few years but further to the east and well away from the road. These accessible roadside colonies by the B892 are almost certainly the same as observed by the redoubtable Miss MS "Maybud" Campbell in 1936. The grass probably occurs in other Outer Hebridean localities but a late Spring visit is necessary to give the best chance of locating it before the panicles wither and it becomes relatively inconspicuous and hidden by the growth of associated species, especially *Phragmites*.

There are possible future conservation issues for the two localities. Ratcliffe (1977) in *A Nature Conservation Review* gives the Askernish Coast as a Grade 1 Site of national importance. The grid reference given for the site is south of the *Hierochloe* locality and indeed there is no mention of the grass in the review. It would be unfortunate if a proposed 18 hole golf course was to cover the area al-

though it seems likely it will be situated to the north. In addition the small scale cultivation of the dunes quite close to the grass also needs to be watched. At Nunton the B892 is single track with passing places and a road widening scheme could wipe out a large proportion of the plants and affect the remaining populations. I would hope that the *Hierochloe* is taken into account if any such plans are considered. A short detailed report on the above sites has been given to Richard Pankhurst.

I wish to thank Jean, my wife, for her patience while these observations were made.

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With a Little Help from my Friends GEORGE BALLANTYNE (or The AUP)

Having realised in the spring of 2006 that I'd better do something about the Society's latest task, the Atlas Updating Project (AUP), I enlisted a few friends to cover their local squares and resolved to concentrate on the three local 10 x 10 kms around Kirkcaldy. The season was a bit late but in April I sorted out (I think) the various plums and cherries, including the realisation that the early flowering *Prunus* prominent in places like Glenrothes was *P. cerasifera*. Then a May stroll along a long disused railway track provided the first excitement. Some 40 years earlier I'd recorded Greater Chickweed (*Stellaria neglecta*) in the vicinity but later was unable to re-find it and decided it must have been luxuriant *S. media*. But there it was, with its distinctive fruit stalks and 10 stamens, in what I hadn't realised is one of its very few Scottish stations, not far from my home.

Then everything came to a halt. My M.E. (or Chronic Fatigue Syndrome) symptoms hit me hard almost overnight, with the result that for almost the whole of June, July and August all I could do was to sit in the garden, enjoy the good weather and wonder how my friends were doing in the field.

Fortunately they were getting on with things. Bill Hay and Liz Lavery in particular providing some surprises. In the course of doing the Cupar square Bill's

sharp eyes noticed a strange grass that turned out to be Mat-grass Fescue (*Vulpia unilateralis*), the second Scottish record since the 1880s; plus a plant for which the sole reference I can find is in Clement & Foster *Alien Plants of the B.I.* (1994), *Gypsophila viscosa*. Although not far from a garden, it was not seen in it, and does not appear to be a hortical species.

While accompanying the Perthshire SNS on Tentsmuir (not the NNR), he and Liz confirmed the presence of several notable plants, including Seaside Centaury (*Centaureum littorale*)— with *C. erythraea*, Smooth Catsear (*Hypochaeris glabra*), Blue Fleabane (*Erigeron acer*), Water Dock (*Rumex hydrolapathum*), Lesser Water-parsnip (*Berula erecta*) and others out of a total of 150 species. Another friend, Mary Benstead, who lives in the Newport/ Tayport area near Tentsmuir, added a different set of species for the square, among them Keeled Cornsalad (*Valerianella carinata*) which she first found there a number of years ago. Bill and Liz also went up Benarty (above Loch Leven's south side) and confirmed that Bog Sedge (*Carex limosa*) was still there, having first been found in its only Fife site in 1980 (it is also in the Cleish Hills in Kinross). They also ticked off quite a number for the square, as did Faith Anstey from her base in Lochore, notably Purple-loosestrife (*Lythrum salicaria*), rare and not native in VC 85.

During these three inactive months my one consolation was the confirmation in Kirkcaldy of two brambles new to Scotland (see the Report of the Exhibition Meeting elsewhere in this issue). Then at last I began to pick up and I was able to get out for short periods and find some flowers for myself, especially on waste ground. One site revealed that Crown Vetch (*Securigera varia*) was still present after 40 years, now accompanied by clumps of Lucerne (*Medicago sativa*). The latter was also adorning a 'landscaped' former pit bing in quantity along with rafts of Bush- Grass, or Wood Small-reed, (*Calamagrostis epigeios*) which is now spreading rapidly away from its long known stronghold in SW Fife. There were also a great many Russell Lupins (*Lupinus x regale*), obviously mass planted - should they count as a square record? The same question arises with regard to a series of small ponds created during the 1990s near Auchtertool, two of which were full of planted Fringed Water-lily (*Nymphoides peltata*) and some Yellow Water-lily (*Nuphar lutea*). There was also much Canadian Waterweed (*Elodea canadensis*) (imported?) and a water-starwort (*Callitriche hermaphrodita*) (native?). Which should be crossed off for the square - all or just the starwort?

During October I re-checked many well established Michaelmas Daisies, much the most frequent apparently being *Aster novi-belgii* (cf Stace, 1997, p.721). Around my home, I was astonished to find how much the tiny Yellow Sorrel

(*Oxalis exilis*) has invaded any garden that is not meticulously weeded, including mine; by contrast, the purple-leaved form of *O. corniculata* is just beginning to be seen away from greenhouses. On the subject of *Oxalis*, a few days before the Annual Meeting in early November, I came across an unknown extensive sward near Aberdour harbour and decided to take a small clump to Edinburgh - to be told it was Spotted Medick (*Medicago arabica*), the dark spots on the leaflets having thrown me! My historical records revealed it had been at Aberdour (and adjacent Donibristle/St Davids) as a ballast introduction for most of the 19th century, Jean Cook then found out that the site where it was growing was the former ballast bank, which had twice been disturbed in recent years. It would appear that dormant seed had come to the surface and found the 21st century to its liking. The meeting also produced two other surprises: Henry Noltie gave me a card for Rescue Brome (*Ceratochloa cathartica*) from Cambo garden in east Fife (the only previous VC 85 record being in 1904), while Barbara Hogarth brought an umbellifer she'd encountered while surveying a pond in Lochgelly. This proved to be a real find, no less than Milk-parsley (*Peucedanum palustre*) the first Scottish record and far away from its main East Anglian haunts - a quite unexpected climax to the season. The colony was sizeable and must have been present for some time, but how had it arrived? (An intriguing question to be answered: could some-one have planted it in the hope of attracting Swallow-tail Butterflies?)

So all in all 2006 turned out not to be the write-off it had threatened to become, chiefly due to the efforts of all the friends mentioned, to whom I am indebted. Although no records have yet been sent in for the AUP, a start has at least been made.

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Plant Records from Vegetation Surveys of the Outer Hebrides

RJ PANKHURST

I had been vaguely aware for some years that there might exist a substantial number of published plant records in vegetation surveys which were not incorporated into the vice-county database. Suddenly two large sets of data came to my attention. Firstly, Alex Lockton gave me a copy of the National Vegetation Classification (NVC) quadrat data which included over 9000 records for VC 110 made in the 1960's and 70's. These came with a health warning; the data quality

is variable and there is nobody that you can appeal to for more information. Secondly, while trying to find published sources for the NVC quadrats in the library at the Royal Botanic Garden Edinburgh, I came across the very extensive "Sand dune vegetation survey of Scotland" carried out by Tom Dargie for Scottish Natural Heritage (SNH, 1994-1998). The extraction of plant records from these two sources has produced about 15,000 records, representing an increase of 15% over those that we already had in the RECORDER 3 database for the Outer Hebrides! In what follows I shall explain how the records were extracted and comment on what they contained.

Vegetation surveys are a rather different exercise from the species surveys to which the BSBI members are accustomed. In the surveys studied here, much more time went into vegetation mapping than into species recording. A quadrat is a very detailed record of what grows in a small area, and the surveyors are not necessarily trying to record every species that occurs round about. NVC vegetation types mostly do not have a discontinuity between one type and the next, but intergrade continuously. In order to verify the identity of a patch of vegetation it's best to feed the quadrat data into a computer program, although keys and descriptions do exist. Apparently vegetation experts can name vegetation types in the field, just as BSBI recorders can name plants! The surveys that I have been examining all include detailed vegetation maps with GIS compatible data sets, which is a much more considerable achievement than just making a species list for an area. Just imagine mapping the vegetation types in our Floras, as well as the species! Bryophytes and charophytes are included in the quadrats as well, and not just vascular plants. There are few names below species level however, and caution with critical groups, so for example there is only *Euphrasia officinalis* agg. Data on collectors and dates are a little vague, and although the grid references are very detailed (8 or 10 figures) there is usually little locality information. The published reports have sections of the oddly titled "Target notes" which contain much information about the landscape and some additional records from outside the quadrats. The quadrat tables are published with the vegetation types grouped together and the species in order of frequency rather than systematically or alphabetically, which would make it hard work to extract the records by reading them one by one and typing them out. There are relatively many records for common species, which not all VCRs might think worthwhile, although I am personally happy to have them, as they all contribute to our general knowledge of the flora.

The NVC data comes with one record per species, including the species name, the grid reference, the collector, the date, the Domin number and a quadrat number. It is possible to sort the records by quadrat number in order to reconstruct

the quadrat tables. It turned out that the most prolific recorder in the dataset was Imogen Crawford, and it also turns out that the data corresponds exactly to the quadrat tables published in the series of reports she produced for the NCC. Knowing this I was able to assign the vegetation types to the quadrats as well, by matching the grid references for the quadrats in the published tables with the grid references in the data set. In this instance therefore I was able to note the NVC vegetation types in our database. In addition, all quadrat numbers were also copied into our database for reference purposes. There were also a number of records made by Andrew Malloch, Paul Adam and Messrs. Birse and Robertson, which I have been unable to find in published form, and for which I do not know the vegetation type. These incomplete records were added to the database nevertheless. The names of taxa needed to be converted to the BSBI taxon names, as used in Recorder 3 and Mapmate, and this was done by searching for all the different names, and looking up the code number only once for each taxon. The names of taxa that were not vascular plants were not included. The totals were as follows:

Crawford	6742	1988
Malloch	1570	1973
Birse & Robertson	151	1960s?
Adam	143	1972
Martin	30	1979

A VC Recorder is supposed to review all records critically, so some comments follow. For the NVC, Crawford was the most energetic recorder, and nearly all the records are obviously valid. A few records need checking, such as

Carex capillaris (Hair Sedge) for *Crepis capillaris* (Smooth Hawk's-beard)?
Galium odoratum (Woodruff)
Papaver rhoeas (Common Poppy) -very rare, usually *P. dubium* (Long-headed Poppy)
Persicaria lapathifolia (Pale Persicaria) never confirmed, ?*P. hydropiper* (Water-pepper)
Poa compressa (Flattened Meadow-grass)

There are refinds of old records that we have never seen:

Crambe maritima (Sea-kale)- (N.Uist)
Ononis repens (Common Restharrow)- (Vatersay)

And more records of uncommon plants:

Bromus lepidus (Slender Soft-brome)
Carex disticha (Brown Sedge)
Cerastium semidecandrum (Little Mouse-ear)

And the following need confirmation as new VC records:

Carex aquatilis (Water Sedge)
Cynoglossum officinale (Hound's-tongue)
Erigeron acer (Blue Fleabane)
Myosotis ramosissima (Early Forget-me-not)
Potentilla reptans (Creeping Cinquefoil)
Trisetum flavescens (Yellow Oat-grass)

The transfer of the records from the Dargie report presented a different problem. It was straightforward to scan the quadrat tables and then to convert them into spreadsheets with an optical character recognition (OCR) program. Converting these to our database was then a similar process to that described for the NVC data. The most tedious part of the process was proof-reading, since the OCR was not quite 100% accurate. Fortunately the tables had a species count on the bottom line which made it possible to check the tally for each quadrat in order to show up some of the errors. This source gave us 7612 records.

The most interesting records were:

Berula erecta (Lesser Water-parsnip) - rare, several new sites
Echium vulgare (Viper's-bugloss) - also rare, new sites
Leontodon hispidus (Rough Hawkbit) - recorded before, but never confirmed

It is likely that as well as finding plants that we had not known about, that the vegetation surveyors may have missed plants that we do know are there. As the first example of this; *Carex maritima* (Curved Sedge) is known to grow in about 20 sites in South Harris, but the surveys have reported only one of them, probably because the surveys had to be made late in the year, and on occasion, they were obliged to avoid the season when birds are nesting. See also the notes about Fuday, below.

In order to compare the results of vegetation surveys with species recording in respect of the species recorded, I chose the islands of Sandray (Barra) and Fuday (Barra) as examples. These are also of interest because they are on the old

NIREX shortlist for nuclear waste disposal sites. In the case of Sandray, our database has records for 220 species, of which the surveyors saw 57 (of which 8 were new). Also, to be fair, they were only surveying sand dune vegetation. On Fuday, we know of 192 species, of which the vegetation surveyor saw 72 (of which again, 8 were new). In the case of Fuday, the survey was in May, so that the large populations of the three locally and nationally scarce species that grow there, (*Anacamptis pyramidalis* (Pyramidal Orchid), *Gymnadenia conopsea* (Fragrant Orchid) and *Orobanche alba* (Thyme Broomrape), were missed. I think this shows that, as an assessment of plant diversity, neither vegetation mapping nor BSBI-style species recording by themselves are enough to give a complete picture.

Other Scottish VC Recorders might also like to check the NVC data and the survey publications for records for their vice-counties. It must be admitted that the techniques used above will not suit everyone, and that even with the use of computer technology it can be a good deal of work. It would have been better to have known about these records earlier, so that they could have been included in ATLAS 2000.

Literature

Crawford, I. (1989-1990) National sand dune vegetation survey site report, 1988. Nos. 53 to 59, 61 to 68.
Dargie, T. (1998) Sand dune vegetation survey of Scotland: Western Isles. Vol.2. Site reports.

BSBI Scottish Officer Report

JIM McINTOSH

Platanthera bifolia

Last summer we helped SNH with a single species survey of *Platanthera bifolia* (Lesser Butterfly-orchid), and invited people to submit detailed records, including population estimates using pre-printed forms, or via a dedicated page on the SNH website. Some 350 records were submitted and SNH are currently analysing the results and will report them shortly. Of course as members of the public were involved too, a number of the records were found to be *Platanthera chlorantha* (Greater Butterfly-orchid) on examination of photographs or subsequent follow-up visits. But even these records are valuable. An additional benefit of the project was just to get people in the field and recording – and making contact and contributing records to their local Vice-county Recorder. We would very much like people to continue recording populations of

Platanthera bifolia in 2007. SNH are particularly keen to have further records in Argyll and islands and the north-west Scottish mainland and further records of large populations (say >50) this year.

Species Action Framework

Platanthera bifolia is just one of the five vascular plant and charophyte species targeted for conservation action in SNH's recently launched *A Five Year Species Action Framework*. The full list is:

- *Melampyrum sylvaticum* (Small Cow-wheat),
- *Platanthera bifolia* (Lesser Butterfly-orchid),
- *Pyrola media* (Intermediate Wintergreen),
- *Salix lanata* (Woolly Willow) and
- *Tolypella nidifica* (Bird's nest Stonewort).

We have a much better understanding of the conservation issues for some of these species than others. There has already been a significant amount of work done on *Melampyrum sylvaticum* and *Salix lanata*, for example. For others, notably *Pyrola media* our understanding of its apparent decline, and the underlying factors involved is much poorer. But that is where you can help! If you encounter *Pyrola media*, or indeed *any* of these species during the forthcoming field season in Scotland, please make a detailed record. Or you might like to revisit and record known populations.

The detailed record should include, if possible, a population count, a GPS reference and a note of any threats or damage to the population. Photographs are also very useful. Send your records to the local Vice-county Recorder.

As a separate exercise we will be asking Recorders to collate details of all *Pyrola media* records as a desk exercise and add any additional field records they or others gather during the year.

Available to download from the SNH website or phone the SNH publications office on 01738 444177

Carex maritima

Over the past two years the BSBI has run a small project to understand why *Carex maritima* (Curved Sedge) populations have apparently declined so dramatically between the two Atlas recording periods. Botanists have tried to refine key populations along Scotland's eastern and far north coasts, including

on Orkney and Shetland, with variable success. A clearer picture is beginning to emerge, but further work to refine populations is still required especially in the Northern and Western Isles. If anyone is planning a holiday in any of these areas this summer, please get in touch with the vice-county recorder (via me if more convenient) and ask how you could help!

Atlas Updating Project

If you haven't already checked out the Maps Scheme pages on the BSBI website – do so - they are absolutely fascinating! They update and correct similar maps which appear in the Atlas, and have a new date class 2000-2009 with black dots. Records entered into the MapMate system are used to update these maps every fortnight. So it is right up to date. However there are only three years left in the current date class and we are asking Recorders to make a concerted effort to record in all those hectads without records in the current date class over the next three years. This is where you could help again! Get in touch with your recorder and ask how. If you are confident enough you may be invited to take on hectads by yourself, or you might prefer to help others with the fieldwork. For the latest project progress report see the BSBI website at www.bsbi.org.uk (The report is from the recent *Recorder* newsletter for Vice-county Recorders.)

Botanical Publications

SNH now publish all their Commissioned Reports on all aspects of Scotland's natural heritage on their website at www.snh.org.uk and these can be downloaded freely. They cover a wide variety of subjects and include titles of interest to Scottish botanists such as *Scottish trends in vascular plants* (2006), *Status review of the Arran endemic whitebeams, Sorbus arranensis and Sorbus pseudofennica* (2004) and *The ecology of Najas flexilis* (2004) as well as NVC habitat survey reports of particular sites.

Plantlife have just published their *Juniper in the British uplands* (2007) report along with a results supplement. It is based on the Juniper survey work carried out in Scotland, England, and Wales from 2005 to 2006. Again this publication is freely available to download from the Plantlife website at www.plantlife.org.uk

Scottish BSBI webpages

The Scottish BSBI webpages are now easier to find, with a new direct address www.bsbscotland.org.uk as well as the link on the main BSBI home page. If

you have not already seen them, log on and check them out! They include Scottish BSBI news, details of Scottish field and indoor meetings, exhibit abstracts from the Scottish Annual Meeting and a whole page about the work of the Scottish Officer, including his 2006 Annual Report. If you drill down deeply you will even find Scottish Committee and Scottish Officer Steering Group documents! All thanks to Jane Squirrell, the Scottish Webpage Manager.

If you would like to contribute an article to the news page, or a field meeting report with photographs, or any other article that would be relevant and of interest to BSBI members in Scotland please forward them to Jane Squirrell meantime (see below). She can be contacted at RBGE, 20A Inverleith Row, Edinburgh EH3 5LR or by e-mail j.squirrell@rbge.ac.uk, but do remember this medium is generally better suited to short articles and photographs.

Scottish Webpage Editor: Volunteer Vacancy

We are looking for a volunteer Webpage Editor. The post would entail acting as a receiving editor and news reporter to keep Jane Squirrell supplied with regular content updates and to provide Peter Macpherson, the *BSBI Scottish Newsletter* editor with material better suited to the printed page. The main part of the job would be acting as receiving editor, but a significant element could be seeking and reporting news stories of general interest to Scottish botanists from a variety of sources. Writing for the web requires a particular short punchy style and experience of writing or editing in this style would obviously be useful. The post is voluntary but expenses would be covered. If you are interested please get in touch with me, Jim McIntosh.

Change of Scottish Annual Meeting venue to Edinburgh – again!

The Scottish Annual Meeting was overdue to return to Glasgow in 2007. Unfortunately we have again been unable to secure suitable accommodation in Glasgow and will return to the Royal Botanic Garden in Edinburgh. We apologise to any members who are inconvenienced and hope to return to a venue in the west in 2008. The date remains Saturday 3 November 2007. We are planning to continue with the revised format which received very positive feedback, but with minor alterations to allow a little more time to see the exhibits and chat.

Jim McIntosh, BSBI Scottish Officer, c/o Royal Botanic Garden Edinburgh, Inverleith Row, Edinburgh, EH3 5LR; Tel: 0131 2482894 or 0791 7152580; j.mcintosh@rbge.ac.uk

Your LBAP needs you!

RO SCOTT

Most parts of Scotland are now covered by a Local Biodiversity Action Plan (LBAP). Each Plan has been drawn up by a partnership of organisations and interested individuals to reflect local priorities for species and habitat conservation, to contribute to the achievement of UK BAP targets, and to involve a wider range of people in conservation activities.

Most LBAP partnerships have a dedicated LBAP Officer, who is usually employed by the Local Authority but may be part-funded by SNH and a variety of other organisations. Many LBAPs have specific action plans for particular rare species, which may include vascular plants. Action plans for habitats will also affect the plants which live there. This is where the expertise of BSBI members, and particularly VC Recorders, comes in. LBAP Officers cannot be experts in every taxonomic group. Their work also requires a range of other skills such as working with communities and managing practical projects. Botanical expertise of the kind found within the BSBI can make a valuable contribution towards ensuring that plant species are correctly identified, their local status appropriately assessed, and sensible management recommendations made. Without this input there is the potential for mistakes to be made.

The UK BAP includes action plans for 43 vascular plants occurring in Scotland. (This list is currently under review and the number may have changed by the time you read this.) These range from quite widespread species such as Juniper (*Juniperus communis*), through to the extreme rarities such as Norwegian Mugwort (*Artemisia norvegica*). Several critical groups are also represented, with the inclusion of three *Euphrasias*; *E. campbelliae*, *E. heslop-harrisonii* and *E. rotundifolia* and three Shetland hawkweeds; *Hieracium attenuatifolium*, *H. northroense* and *H. zetlandicum*.

Some LBAPs include action plans for locally important species, in addition to those identified in the UK BAP. For example, the Dumfries and Galloway LBAP has action plans for Holy-grass (*Hierochloa odorata*), Globeflower (*Trollius europaeus*) and Black Alpine-sedge (*Carex atrata*).

If you would like to get involved with your LBAP, contact the LBAP Officer (see list below) or get details from Jim McIntosh. Further information on all of the Scottish LBAPs, and on the UK BAP priority habitats and species, can be found on the UK BAP website www.ukbap.org.uk

Ro Scott, Policy and Advice Officer: LBAPs and Species Partnerships SNH

Geographical Area	Name	Job title	Telephone	Email	Notes
Argyll & Bute	Ms Marina Curran-Colthart	Local Biodiversity Officer	01631 562125	marina.curran-colthart@argyll-bute.gov.uk	
	Ms Caroline Young	Community Liaison Officer	01369 705377	caroline.young2@argyll-bute.gov.uk	Based in SNH Office, Dunoon
Ayrshire (East)	Mr Douglas Gardiner	Recycling Officer	01563 554041	douglas.gardiner@east-ayrshire.gov.uk	
Ayrshire (North)	Mr Ian Hossack	Corporate & Democratic Support Officer	01294 324131		
Ayrshire (South)	Mr Kenn Gibb	Sustainable Development Manager	01292 616288	ken.gibb@south-ayrshire.gov.uk	
Borders	Dr Andy Tharme	Natural Heritage Officer	01835 826514	atharme@scotborders.gov.uk	
Cairngorms National Park (overlaps with Highland, Tayside and NE Scotland)	Mr Stephen Corcoran	Cairngorms Biodiversity Officer	01479 870528	stephencorcoran@cairngorms.co.uk	Jobshare (Mon-Weds)
	Mr Justin Prigmore	Cairngorms Biodiversity Officer	01479 870528	justinprigmore@cairngorms.co.uk	Jobshare (Thurs-Fri)
Clackmannanshire	Mr Guy Harewood	Biodiversity Co-ordinator	01259 452639	gharewood@clacks.gov.uk	
Dumfries & Galloway	Mr Peter Norman	Biodiversity Officer	01387 260172	peter.norman@dumgal.gov.uk	
East Dunbartonshire	VACANT	Biodiversity Officer	0141 578 8642		
East Lothian	Mr Stuart MacPherson	Biodiversity Officer	01620 827242	smacpheron@east-lothian.gov.uk	
Edinburgh City	Ms Susan Steele	Biodiversity Officer	0131 469 3920	susan.steel@edinburgh.gov.uk	Jobshare
	Ms Caroline Peacock	Biodiversity Officer	0131 469 3920	caroline.peacock@edinburgh.gov.uk	Jobshare
Falkirk	Ms Anna Perks	Biodiversity Officer	01324 504863	anna.perks@falkirk.gov.uk;	
Fife	Ms Julie Horsburgh	Biodiversity Co-ordinator	01592 413437	julie.horsburgh@fife.gov.uk	
Glasgow City	Mr Keith Watson	Biodiversity Officer	0141 287 5665	keith.watson@land.glasgow.gov.uk;	

Glasgow City	Ms Carol MacLean	Biodiversity Officer	0141 287 5665	carol.maclea@land.glasgow.gov.uk	
	Ms Catherine Scott	Biodiversity Officer	0141 287 7026	catherine.scott@land.glasgow.gov.uk	
Highland	Ms Janet Bromham	Biodiversity Officer	01463 702274	janet.bromham@highland.gov.uk	Jobshare (Weds-Fri)
	Mr Jonathan Willet	Biodiversity Officer	01463 702274	jonathan.willet@highland.gov.uk	Jobshare (Mon-Weds)
Midlothian	Mr Graeme Wilson	Biodiversity Projects Officer	0131 271 3021	graeme.wilson@midlothian.gov.uk	
NE Scotland (includes Aberdeenshire, Aberdeen City and Moray)	Ms Jennie Lamb	(Temporary) Local Biodiversity Co-ordinator	01224 498264	nelbap@macaulay.ac.uk	Based at Macaulay Institute
North Lanarkshire	Ms Laura White	Biodiversity Officer	01236 780636	whyteLa@northlan.gov.uk	
Orkney	Ms Nadine Russell	Biodiversity Officer	01856 873535	nadine.russell@orkney.gov.uk	
Renfrewshire/Inverclyde/East Renfrewshire	Ms Petrina Brown	Biodiversity Officer	0141 842 5281	petrina.brown@renfrewshire.gov.uk	
Shetland	Ms Nicky Davies	Biodiversity Officer	01595 690832	livingshetland@fwag.org.uk	
South Lanarkshire	Mr Scott Riddell	Biodiversity Officer	01355 276781	scott.riddell@southlanarkshire.gov.uk	
Stirling	VACANT	Biodiversity Officer	01786 442768		
Tayside (includes Angus, Dundee City, Perth & Kinross)	Ms Catherine Lloyd	Biodiversity Co-ordinator	01738 476481	cathlloyd@ukf.net	
West Dunbartonshire	Mr Graham Pollock	Head of Protective Services	01389 738284	graham.pollock@west-dunbarton.gov.uk	
West Lothian	Dr John Sheldon	Co-ordinating Officer	01506 775278	John.Sheldon@westlothian.gov.uk	
Western Isles/Comhairle nan Eilean Siar	Ms Anne MacLellan	Biodiversity Officer	01870 602425	amaclellan@cne-siar.gov.uk	

Notices & Requests

Web site address for the Scottish pages of the BSBI

Visit the Scottish web pages of the BSBI website at the following new web address

www.bsbiscotland.org.uk
Alternatively, GOOGLE: BSBI Scotland

Aquatic Plants

In order to gain experience for a small study on *Utricularia*, I should be grateful to receive live material (sent damp, between sheets of newspaper or kitchen towel in a sealable plastic bag). Flowering material would be very useful in relation to identification but I should also welcome vegetative material (live) in order to carry out a growing trial. Further, for general experience in aquatic and sub-aquatic plants of any genus, if anyone has any spare material preferably fresh, these would be gratefully received. Send usual recording details, (ASAP). Postage can be re-paid if required. Material would be welcome also from anyone in Europe who knows *U. bremii*.

Send to:

Michael Wilcox, 32 Shawbridge St, Clitheroe, BB7 1LZ
Michaelpw22@hotmail.com

Senecio viscosus

In order to carry out a study in relation to *Senecio viscosus*, the seeds (achenes) are required. However, achenes are sought from three areas/localities. Initially, collection will be of general *S. viscosus* from any population: 1-2 seed heads per plant, each separately labelled, though it can be 1-5 plants from a population and these would be from UK, (England, Wales, Scotland, Ireland).

Secondly, in a paper by Akeroyd *et al.*, (1978) dwarf variants from shingle were studied. The grid references are repeated here and it is hoped that anyone living there or visiting the area (or from shingle anywhere else) could collect from any of these populations. The areas are: Suffolk, between Thorpeness and Aldeburgh TM468 580; Suffolk, TM366 424; Sussex, Pagham Harbour, SZ875 954 and Surrey, Esher Station TQ147 658.

The third area is the most difficult. Achenes are sought from Europe. If anyone is going to Europe, or living there or with any contacts there, then I would be grateful for any material throughout the range.

Collecting is simple, I use a $\frac{1}{4}$ piece of A4 for each collection folded into the style of a little envelope and then the mature head with achenes is twirled into the envelope thus separating the seeds with their pappus from the receptacle, the packet is labelled appropriately.

The project depends on getting material from Europe so any suggestions are welcome.

Postage paid if required. Contact me if you need any further information.

Michael Wilcox, 32 Shawbridge St, Clitheroe, BB7 1LZ, Lancs, UK.