BSBI2013Scottish NewsletterNo 35



Arabis alpina

BSBI SCOTTISH NEWSLETTER

Number 35

Spring 2013

CONTENTS

Editorial	2
Chairman's Report 2012	
Scottish Annual Meeting 2012	5
Tristan da Cunha	7
Draft Minutes of 2012 Scottish AGM	9
BSBI Committee for Scotland	
Abstract of Exhibits	
Paul Jarvis — an Appreciation	
Botany at Boarding School	
Carex paniculata at Lumphanan Peel	
Gains and Losses in W Lothian	
Additions to the Flora of Angus	29
Watery Experiences in Fife	
Kirkcudbrightshire Recording Week	
Ochil Hills Field Meeting	
Dollar Glen	
Scottish Field Meetings 2013	
Plantlife Scotland Events 2013	
Photographic Competition	
BSBI Membership in Scotland	
BSBI Educational Field Meetings	46
Mopping up TPP	
Richard Pankhurst 8.6.40—26.3.13	
Looking Forward	

Editorial

I have left it to the contributors as to whether or not they have used the nomenclature from the *New Flora of the British Isles*, Third Edition (Stace 2010), or stuck with the older version. The new name for Alpine Foxtail (*Alopecurus magellanicus*) did, however, catch my eye and I looked it up 'as a check'. Although clearly given in the text as a take-over, it is actually missing from the Index. A very minor omission, considering the tremendous work Clive Stace must have put into the changes and he is to be congratulated and thanked for bringing the up-date all together.

Those of us who are currently engaged in writing a Flora find that the cutting and pasting to achieve the new order, based on the new molecular system of classification based on DNA sequences, to be very much more time consuming than the nomenclature changes. (see page 51!).

Most of the authors have taken the trouble to send contributions in the In-House style used in our Newsletter. Thank you.

My expert proof reader, John Hawell, has retired, left Lanarkshire and gone to live in Skye. However, I am delighted and relieved that he has readily agreed to continue the good work.

On thinking of the cover illustration for this year's issue, my thoughts drifted to the isle and a vision of *Arabis alpina* (Alpine Rock-cress) came to mind. In 1998 I was taken to see it by Catriona Murray along with Stephen Bungard – a great treat. Daughter Elspeth Lindsay who has done the recent drawings for us said that it would not make a very impressive illustration, but we both agreed that the plant was an impressive part of the Scottish flora.

Once again Jackie Muscott has organised the photocopying and despatch and Gwynn Ellis has provided the address labels. My daughter Lorna kindly acts as recipient for the submissions, which I like to receive by the end of February.

Lorna.macpherson@ntlworld.com

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

Chairman's Report at the MARTIN ROBINSON BSBI Annual Meeting, Battleby, 3rd November 2012

The Scottish Committee held three meetings over the past year. The organisation of this conference and of the field meeting programme are the most visible concrete things, but the BSBI was represented at various meetings and events and submissions and comments were made to other bodies. The Acting Scottish Officer was supported in a lot of the work that he did. The Committee worked hard on behalf of the membership over the past year.

We are grateful to SNH for its continuing support. They are funding the Scottish Officer, without whom we would really be struggling, and in return we are taking some of their workload off them, particularly the Site Condition Monitoring. They also offered us Battleby for this conference and subsidised the teas and coffees.

It is an exciting time for the Society and the recording and monitoring targets are ambitious. In order to do everything we want to do we need more people out there with the skills and motivation to participate. It's a challenge in Scotland, but we look to the membership to think how they might contribute and, if they can, step forward. It's too much for the committee itself and so at the Committee Meeting this afternoon we are planning to set up a sub-group to take this forward. You won't need to be on the committee to contribute, so please think about whether you would like to contribute your own skills and experience to this, and if you would, let one of us know. As an example we want to increase the programme of educational meetings, which have been very successful so far, but we need leaders. <u>Training of Trainers</u> is organised in England, and now Jim McIntosh aims to do something similar here.

Among the issues we've been involved with over the year, apart from the major publicity and training issue already touched on, I'd like to mention

1) Tree diseases, especially *Phytophthera*. We've tried to draw attention to this with an article in BSBI News giving links to detailed sites, but the whole business of tree health is now exploding around us and making national head-lines. The issue has stepped up several gears and probably outgrown us, but we should all be alert to future developments and contribute where and when we can.

2) Data access. The view widely shared in Scotland that plants are best protected if people know where they are, has, we believe, been influential in the debate about whether our records should be available at full resolution on the NBN. Angus's VC Recorder meeting at Kindrogan in April provided a clear consensus that they should, and this is now the BSBI's position. Angus and myself attended founder meetings of a new Scottish Biodiversity Information Forum, set up by SNH in response to a government petition by BRISC, which aims to facilitate the flow of data to those that need it.

The committee helped formulate Angus Hannah's response to the government consultation on the Scottish Biodiversity Review, adding our voice to Plantlife Scotland's excellent, detailed response. Our link to PLINKS is very important to us, giving us a voice, as we can't afford the membership fee we would have to pay to Scottish Environment LINK.

The Recording Conference in Edinburgh in September attracted a lot of praise. Being a national event our committee wasn't directly involved in its organisation, though our Publicity Officer, Ruth McGuire, had some input, and Jim McIntosh played a huge part.

VCR News. Barbara Hogarth resigned from VC 90 (Angus) during the year, in order to free herself up to pursue her own lines of enquiry. Some of the fruits are on display today. Robin Payne, Theo Loizou and Mark Tulley have taken over, each with slightly different roles.

Edna Stewart VC 86 (Stirling) wishes to retire. Ruth McGuire has come forward to take over, with continuing help from Philip Sansum whilst he is still available.

Helen Crossley has been taken on as joint recorder in VC 109 (Caithness), helping Ken Butler, who has very recently been awarded Plantlife Outstanding Field Conservation Volunteer for his work relating to the Munsary Nature Reserve.

Help is still needed in VC 108 (West Sutherland).

The status of VCR Emeritus has been awarded to Douglas MacKean, David McCosh, Morven Murray, Ros Smith and Margaret Barron for outstanding contributions in relation to recording in their VCs.

BSBI / BSS Scottish Annual Meeting

JANE MACKINTOSH & JIM MCINTOSH

The 2012 meeting was held on November 3rd at the Scottish Natural Heritage conference centre at Battleby, near Perth. In the past, when our meeting has been held outside Edinburgh, the attendance has fallen. However, this proved to be the exception with a tremendous turnout of one hundred and thirty members and friends attending what turned out to be a great meeting.

In his welcome address, Ian Bainbridge, Head of Science at SNH, spoke about the need for high quality environmental data to help government in its decision making process. He stated that up to 90% of the biodiversity data that SNH uses comes from the voluntary sector. Ian thanked everyone for their participation in recording. He spoke about recording in the future and how there will be a great need to record population trends and monitor changing habitats.

The Chair of the Scottish Committee of the BSBI, Martin Robinson, warmly thanked Ian and SNH for their invitation to host the meeting at Battleby and for their generous hospitality. He introduced and chaired the morning sessions.

Ian Bonner, BSBI President, described recent important structural changes within the organisation and how the management of the BSBI is going to cope with its new and expanding staff complement. Membership of the organisation as a whole has been growing too and is now approaching 3000. He reported that Scottish Officer, Jim McIntosh, is back in post after his year on Tristan da Cunha and will be responsible for all the country officers in future.

Barbra Harvie, BSS Secretary, talked about the importance of the Scottish Geodiversity Charter. Barbra was keen to raise awareness of how geodiversity links our biodiversity, landscape, people and our culture. It underpins our ecosystems and influences landscapes which then determine plant distributions. Barbra also reminded us that this is a two way street and that plants affect our geodiversity through the effect of their roots on the soil.

Iain MacDonald, vascular plant specialist at SNH, introduced us to the re-

view of the Scottish Biodiversity Strategy, published for consultation under the name 2020 Challenge for Scotland's Biodiversity. This is Scotland's response to the European Union's Biodiversity Strategy for 2020 and the Aichi Targets set by the UN Convention on Biological Diversity.

The new BSBI Distribution Database was demonstrated by Tom Humphrey, the BSBI Database Officer. The database is a central store for all the BSBI's records of plants and charophytes, containing 33 million biological records, with very powerful search and mapping functions. He encouraged all BSBI recorders to register to use it and to explore their data. The mapping functions are freely available for use by all without login.

Angus Hannah, BSBI Scottish Officer during Jim McIntosh's absence, gave a fascinating and amusing account of his year, illustrated by some of the places he visited and the plants he recorded.

Eric Meek talked about aspects of Orcadian botany and compared the plant specialities of Orkney and Shetland.

Sandy Coppins spoke passionately about the Atlantic Hazel Woods in the west of Scotland. Sandy was very keen to challenge the commonly held but misplaced view that multi-stemmed hazel must be old coppice and exwoodland understory. Sandy's talk was extremely enlightening and showed us that hazel is in fact a light-demanding and naturally multi-stemmed shrub. As well as supporting a small characteristic vascular plant flora, including Hay-scented Buckler-fern (*Dryopteris aemula*), hazel is crucial to a diverse epiphytic flora of lichens, bryophytes and fungi, including Hazel gloves (*Hypocreopsis rhododendri*) and Glue fungus (*Hymenochaete corrugate*). A veritable, if diminutive, temperate rainforest!

Margaret Bradshaw argued enthusiastically that *Alchemilla* species are sadly neglected in Scotland. She has spent a lot of her time running *Alchemilla* ID weekends in a bid to curb this neglect – included two in Scotland in recent years. She illustrated and described the key differences between the three main groups of British *Alchemillas*.

Jim McIntosh, BSBI Scottish Officer, gave an account of his adventures while studying the plants on Tristan da Cunha, the world's most remote inhabited island (report as follows).

Tristan da Cunha

Jim McIntosh, BSBI Scottish Officer was this year's main speaker at the Scottish Annual Meeting. Jim regaled us of his adventures on Tristan da Cunha whilst undertaking a survey of the flora of Tristan during his sabbatical year off. He spoke about the challenges that he was presented with on an almost daily basis. These challenges began with getting there - a major feat in itself.

Jim used Google Earth to demonstrate how remote Tristan is - some 2,500km west of Cape Town. There is no airport and it generally takes at least six days aboard a fishing boat to get there – if you are lucky. Often Atlantic storms result in much longer voyages and in his case it took nine, plus a further five days before luggage and cargo could be unloaded.

The Tristan da Cunha archipelago consists of four volcanic islands just off the mid-Atlantic ridge; Tristan, Nightingale, Inaccessible and Gough Island. Tristan, the only inhabited island, is a 7,000ft high volcanic cone, dissected by deep radial valleys called gulches. A high plateau, known as 'the base', surrounds the cone at about 3,000ft. In turn, this is surrounded by a very steep escarpment. Below this are small areas of coastal plain, on which lies the only settlement. Its official name is 'Edinburgh-of-the-Seven Seas'.

The climate is moist, mild and oceanic, with no frost at settlement level, but snow on the peak for 6 months of the year. The latitude of 37½ degrees south is close to the infamous Roaring Forties. Consequently wind is a major feature and storms can be sudden and violent. Sun block and hats are required as the sun is strong at this latitude, which is on a par with southern Spain in the northern hemisphere, and UV levels are high due to the thin ozone layer.

The island was settled in 1816 by the United Kingdom – to prevent the French using it as a base to free Napoleon from his prison on Saint Helena. There are only a handful of surnames but the most common is Glass, and those with that name are all related to the founding family of Corporal William Glass, a Scotsman. The 261 inhabitants are proud to be British, speak English, use Sterling, drive on the left, have a UK postcode, a London dialling code, watch British TV and sing the national anthem whenever occasion demands! There is a hospital, police station, fish factory, two cafes, pub, shop, swimming pool, golf course and school with 32 kids.

For purposes of the flora survey, the island was divided into 120 one kilometre squares. Jim and his colleague managed to visit 100 of them despite the extraordinarily difficult and mountainous terrain and the need for a machete to hack through the dense vegetation. GPS was used to identify locations and record routes and the DAFOR (Dominant; Abundant; Frequent; Occasional; Rare) scale was used to assess the cover of each species in each 1km square. Some 400 specimens were taken in 125 collections, together with 70 samples for future DNA analysis.

Vegetation on the high plateau consists mostly of the native Island Tree (*Phylica arborea*) and the cycad-like Bogfern, (*Blechnum palmiforme*). The lower part of the cone is largely covered with non-natives such as Yorkshire-fog (*Holcus lanatus*), known locally as 'Farm grass', Common Bent (*Agrostis capillaris*) and Sheep's Sorrel (*Rumex acetosa*). Higher up there are Alpine-like cushion plants. Some species, such as Island Berry (*Empetrum rubrum*) show remarkably different growth-forms in different situations, forming cushions or carpets at altitude, but with a more bushy habit lower down. The flora comprises 70 native species, of which about one third are endemic (plants which evolved on Tristan da Cunha and occur nowhere else), and some 140 non-native species.

Jim then showed slides of selected species, each with photographs and a distribution map. Some notable natives were: the attractive spleenwort *Asplenium obtusatum* (rather similar to our *A. marinum*); the well-named Bootlace Fern (*Radiovittaria ruiziana*); the rare locally called 'Scurvy grass' (*Cardamine glacialis*) and the beautiful Gooseberry-leaved Pelargonium (*Pelargonium grossularioides*). Endemics include the rare rush *Rostkovia tristanensis* and the sedge *Carex insularis* (neither of which has a common name). Two UK natives are also native on Tristan: Tunbridge Filmy-fern (*Hymenophyllum tunbrigense*) which grows on the 'trunks' of Bogfern, and Sea Bindweed (*Calystegia soldanella*) which occurs on the island's black volcanic sandy beaches. A new discovery was *Elaphoglossum spatulatum*, a fern previously unknown on Tristan, which also grows in Africa. One of the most invasive aliens is the New Zealand Christmas Tree (*Metrosideros excelsa*) which is spreading rapidly and which Jim recommended for control.

Jim concluded with a short zoological diversion, to show us fauna such as

the Southern Painted Lady Butterfly (subtly different from our familiar northern variety), Rockhopper Penguin, Yellow-billed Albatross, Sooty Albatross, the endemic Tristan Thrush or 'Starchy' and Sub-Antarctic Fur Seals. So ended a very interesting talk about a singularly intriguing place which most of us will only ever dream of visiting.

Based on a summary by Ro Scott of an identical talk given to Inverness Botany Group in January 2013.

Draft Minutes of BSBI Scotland AGM 3rd November 2012 at Battleby.

1. Welcome

Chair, Martin Robinson welcomed members to the meeting.

2. Apologies

George Ballantyne, Theo Loizou, Ro Scott.

3. Minute of the 2011 AGM

This was approved as a true record, proposed by Liz Lavery, and seconded by Rod Corner.

4. Business arising – none.

5. Chairman's Report – see page 3.

6. The Scottish Newsletter

Peter Macpherson reported that issue No. 34 was duly distributed earlier in the year. He sincerely thanked Jackie Muscott for arranging the photocopying and distribution. Gwynn Ellis kindly supplied the address labels. John Hawell, now retired and moving from E. Kilbride to Skye, has agreed to continue his role as proof reader, which he carries out meticulously. When Peter receives contributions from BSBI members from further afield, when asking them, for instance, to top up their subs. in order to continue receiving the newsletter, the newsletter is invariably praised. Peter pointed out that this is entirely dependent on the contributions Scottish members make to the publication and he asked members to continue sending in their articles using his daughter's email address, and by the end of February.

7. Field Meetings 2012 and 2013

Mark Watson displayed the very full programme which had taken place during 2012. He thanked all the leaders for their ground work prior to the meeting and their leadership on the day.

Mark displayed the draft programme for 2013 for which the dates are set. Some of the locations are yet to be confirmed. The programme includes 2 island weeks, one on Islay and the other involving a boat, on Lewis. As numbers will be limited, early contact with leaders by those interested is advisable.

The programme includes 3 educational meetings.

Mark retires as field meetings secretary after 6 years. He warmly thanked all the members who have acted as leaders and those who have made suggestions during his tenure.

8. Scottish Committee Nominations

DD reported that there had been no nominations in response to the vacancies advertised in BSBI publications. 3 vacancies have arisen because of the retiral or resignation of Committee Members, Chris Baker, Jane Jones and Mark Watson. The Committee for Scotland nominated Faith Anstey, with particular interest in outreach, Sandy Edwards, Angus Hannah, and Robin Payne to stand for Committee. These nominations were approved on behalf of the members by Ian Strachan and Gordon Rothero. Richard Pankhurst remains a co-opted member of the Committee.

9. AOCB

Dot Dahl said how important it is to engage with young people in our work and the fact that the younger generation is very digitally orientated. She asked if any members are in a position to initiate a means by which members of the public can easily digitally input their plant records, similarly to the system available for bird and butterfly recording using Birdtrack.

The meeting was formally closed at 12.40 p.m.

BSBI Committee for Scotland 2012-13

Chair- Martin Robinson; Vice-chair- Robin Payne; Hon. Secy.- Dot Dahl; Hon. Treas.- Luke Gaskell; Exhib. Meet. Secy.- Liz Lavery; Field Meet. Secy.- Angus Hannah; Public. Secy.- Ruth McGuire.

Committee members: Faith Anstey, Sandy Edwards, Chris Miles, Richard Pankhurst (Co-opted) and Robin Payne.

Attending: Jim McIntosh (Scottish Officer), Jenny Farrar (Botanical Society of Scotland), Deborah Long (Plantlife Scotland), Iain Macdonald (Scottish Natural Heritage) and Lindsay Mackinlay (National Trust for Scotland).

BSBI Committee for Scotland Call for Nominations for 2013

At the AGM on 2nd November 2013, Chris Miles will retire and is ineligible for re-election. There is also one vacant position. Nominations for the Committee, signed by two members of the Society normally resident in, or recorders for, a vice county in Scotland, and with the written consent of the candidate, who must also qualify as above, should reach the under noted at Easter Ballindalloch, Comrie, Crieff, PH6 2LY by 30th September, 2013.

Dot Dahl (Hon. Sec.) dotdahl.t21@btinternet.com

Scottish Annual Meeting 2012 – Exhibit Abstracts

Compiled by MC Robinson in approximate Vice-county Order

Two new Cumbrian aliens (VC 69)

Two aliens are exhibited, both new to Westmorland and Cumbria. *Hottonia* palustris (Water Violet), found earlier this year flourishing in a field pond near Arnside. This represents a modest extension of its range in northwest England from the Lancashire Fylde coast. A single plant of Sorbus vilmorinii appeared in a field hedge by my garden in south Westmorland a few years ago. As with the *Hottonia* its origin is obscure. Presumably bird-sown but I know of no other tree in the vicinity. It is a handsome small tree with many leaflets and berries which start deep red but become pale pink with age. According to the Sorbus Handbook there are only three other British records of plants escaped from cultivation.

Some Salix hybrids found recently in Dumfriesshire (VC 72)

Over the past few years I have been collecting hybrid willow taxa across the Vice-county. In the past relatively few have been recorded. At least one appears to be recorded in the VC for the first time. It appears that hybridization is common. As expected common species involved in the hybridiza-

Geoffrey Halliday

Chris Miles

tion found so far are *S. caprea*, *S. cinerea*, *S. phylicifolia* and *S. myrsinifolia. S. myrsinifolia* and *S. phylicifolia* in particular appear commonly involved in hybridisation in the upper and middle sections of burns and rivers. Specimens exhibited:

Salix x laurina (S. cinerea x S. phylicifolia), Salix x multinervis (S. cinerea x S. aurita), Salix x tetrapla (S. myrsinifolia x S. phylicifolia), Salix x latifolia (S. caprea x S. myrsinifolia), Salix x strepida (S. cinerea x S. myrsinifolia), Salix x rubra (S. purpurea x S. viminalis).

Urban botany – Alison Rutherford & Dave Lang a new approach to recording (VC 75)

There is a feeling in some vice-counties that relatively little of the botanical recording to date, including that represented by the most recent Atlas date class, has been focused on those counties' more urban areas. It may be that many believe that urban recording might only involve aliens and garden However the 2012 urban field meeting in VC 75 (Ayrshire) escapes. showed that this is not in fact the case, and that there are many fascinating native wild plants to be found, often very close to our doorsteps. We hope that we can begin to foster an appreciation of the value of urban botanical recording, as well as hopefully to inspire more of it to be done. There is much of interest to be found in such places if people can be encouraged to look for it and furthermore, for those of us with less free time or perhaps less capacity than we may once have had for romping off into the wild, recording plants in and around the places where they live can be a rewarding experience, as well as a valuable one in the wider terms of comprehensively mapping the distribution of our flora.

The Plantain Family: A dull plant group? (VC 77) Peter Macpherson

Examples from Lanarkshire show the very wide range of size of the more common species.

Abnormalities seen included the "Carmen Miranda" form (Cragg-Barber 2005) and Rose Plantain (*Plantago major rosularis*) (Gerard's Herbal 1633). Two are coastal plants (*Plantago coronopus & P. maritima*) which have now been found either on roadsides or in an area frequented by lorries.

Three grasses new to Peebleshire (VC 78)

Avena sativa showing introgression with *Avena fatua*: This is apparently a very uncommon occurrence, but its rarity may be more a result of under recording and lack of suitable habitat for the introgressed plants rather than biological incompatibility.

Bromus diandrus: This is a neophyte first recorded in the wild in Fife in 1835. It can be an aggressive weed of cereal crops particularly when minimum cultivation is used. It appears to be spreading in the Scottish Borders and Northumberland.

Calamagrostis stricta: Described by the BSBI grasses handbook as a rare grass of wetlands, this new site found by Rod Corner is some 45 km. NW of its stronghold in Selkirkshire (VC 79). It will be interesting to discover whether this is a single isolated outlier colony or part of a more wide-spread population.

Selkirks (VC 79)

Another colony of the rare putative hybrid grass *Calamagrostis* x gracilescens (C. stricta x C. canescens) was found near Shaws Under Loch during an excursion by The Wildlife Information Centre of the Lothians and Borders. This grass is now known from 5 monads in the vice-county which must hold the largest population in the British Isles. *Betula pubescens* ssp. *tortuosa* is a new county record. This small leaved shrub with resin glands on the young stems amongst the abundant ssp. *pubescens* caught the eye. Is it being over-looked?

Roxburghs (VC 80)

Acaena ovalifolia is a new county record and locally abundant at one site, Silene uniflora (S. maritima) is a surprising introduction, presumably from a wildflower mix from waste ground at Town Yetholm by Roger Manning, and Galium mollugo subsp. erectum (now Galium album in Stace 3) from a probable continental wildflower mix meadow is also new and the distinguishing features between it and ssp. mollugo are presented.

Rod Corner

Rod Corner

Luke Gaskell

Berwickshire BSBI Site Register update 2012 Michael Braithwaite (VC 81)

As part of the ongoing Berwickshire resurvey 2007-2013, the 2011 fieldwork has been used to update the relevant hectads in the Berwickshire BSBI Site Register. A further update is planned using the 2012 fieldwork with a fully revised edition of the Site Register when the resurvey is complete. It is suggested that such annual updates are a useful and achievable way to share the results of ongoing county surveys.

The Wildflowers of a Berwickshire BardMichael Braithwaite(George Henderson of Chirnside, 1800-1864).Michael Braithwaite

This is a full-colour 80 page book by Michael Braithwaite that has been published by the Berwickshire Naturalists' Club. It has poetry and prose by doctor/poet/botanist George Henderson with illustrations and comment. It gives a graphic personal account of the 'Lowland Clearances' of the Agricultural Revolution and their effect on the wildflowers of Berwickshire. A few copies will be available for £6; orders for delivery by post £7.

Some finds and re-finds in Midlothian (VC 83) Barbara EH Sumner

This display of photographs and pressed plant specimens includes native and introduced taxa. Some are new, possibly new or almost new to VC 83, and others are scarce or rare plants re-found. The newcomers are *Conyza sumatrensis* and *Verbascum speciosum*, and possibly also *Juncus ranarius*. Almost new are *Anacamptis pyramidalis*, *Cynoglottis barrelieri* and *Senecio inaequidens*. Scarce or rare plants re-found are *Arenaria balearica*, *Catapodium rigidum*, *Circaea x intermedia*, *Galium parisiense*, *Gymnadenia densiflora*, *Lathraea clandestina*, *Platanthera chlorantha*, *Potentilla tabernaemontani*, *Pyrola minor* and *Trachystemon orientalis*.

Also shown — is a Jubilee Surprise! [intrigued?—see page 22]

Rare Midlothian Plants (VC 83)

Two second records for Scotland are included and the False Alkanet (*Cynoglottis barrlieri*) is a third. *Symphytum* 'Hidcotense' with white flowers and reddish buds comes into the second category as does *Cotoneaster conspicuus*. Other Cotoneaster species shown are *C. sternianus*, *C. franchetii* and *C. juranus*, the latter originally mistaken for *cambricus*! but

Douglas McKean

Figworts in Fife (VC 85)

Scrophularia auriculata (Water Figwort) is a new record for VC 85, found at West Wemyss by the coastal path. This prompted a look at the occurrence of other Figworts in Fife. *S. nodosa* is very common, *S. umbrosa* (Green Figwort) is found by some burns in NE Fife but is rare elsewhere and *S. vernalis* (Yellow Figwort) is local, found in just a few woods. There have been name changes and a bit of confusion historically, probably because *S. umbrosa* grows by water and *S. auriculata* does not! George Ballantyne has researched this and written an historical account of these Figworts.

Some finds in VC 87 (West Perth) in 2012 Liz Lavery, Jane Jones & Paul Stanley

Alpine Foxtail (Alopecurus ovatus [borealis/magellanicus]), was re-found in two beautiful montane flushes on the northwest slope of Ben Buck by a BSBI Field Meeting on 11 August 2012. This rare alpine grass had originally been discovered by Rod Corner in 1992, although there is one anonymous record from 1970. Roy Sexton took us straight to the flushes from a map he had constructed from a description of the location by John Mitchell, who visited the site in 1998. We counted 110 flowering heads in the lower flush at 608m in short vegetation dominated by mosses, Caltha palustris (Marsh-marigold) and Ranunculus hederaceus (Ivy-leaved Crowfoot) and tall Juncus effusus (Soft Rush), and there were 21 flowers in the upper flush at 635m with Sedum villosum (Hairy Stonecrop) nearby. Maps and photographs showing the location of Alchemilla wichurae at 750m on Ben Ledi monitored by Jane and Arthur Jones on 11 August 2012, NVC U15. Other species on cliffs were Polystichum lonchitis (Holly-fern), Oxyria digyna (Mountain Sorrel), Sedum rosea (Roseroot), Cystopteris fragilis (Brittle Bladder-fern), Draba incana (Hoary Whitlowgrass), Epilobium anagallidifolium (Alpine Willowherb) and Saxifraga aizoides (Yellow Saxifrage). A mystery sedge found growing precariously in the road gutter of a bridge on the Langside Moor road to Comrie was identified by Mike Porter after collection of mature fruit as Carex muricata subsp. pairae.

Hybrid Lupins in Mid-Perthshire (VC 88)

Alistair Godfrey

Sandy Edwards

The triple hybrid Lupinus x regalis (L. arboreus x L. polyphyllus) x L. nootkatensis) is listed in the BSBI Vice-County Census Catalogue for VC 88 Mid-Perthshire and VC 95 Moray and the hybrid L. x pseudopolyphyllus (L. polyphyllus x L. nootkatensis) is also listed for these two vice-counties. The New Flora of the British Isles (Stace, 2010) relates that the triple hybrid "probably occurs on river-shingle with the parents in Moray and M Perth, but it is difficult to identify; it is intermediate and fertile." There is a similar entry for the other hybrid. I was asked by Clive Stace what I knew about the triple hybrid, and had to report that I did not hold the record and that neither Suspecting where the triple hybrid might grow, I did the BSBI database. found lupins on a shingle island of the River Tay at Murthly and compared this to a population by the River Tay on the Thistle Brig SSSI at Stanley. Both populations measured about 90m x 10m; and in mid-June 2012 plants with different morphological features were noted, collected, photographed and compared. Examining the results verified the presence of the triple hybrid at Murthly.

Botanical highlights of West Ross (VC 105) in 2012 Duncan Donald

Carex maritima and *Ophioglossum azoricum* have been recorded for the first time; nearly 1400 plants of *Alchemilla glaucescens* – thought recently to have been on the verge of extinction near Ullapool – were counted during the BSBI workshop there; *Catabrosa aquatica* was refound at one of its 3 sites, where not seen since 1973. On the down-side, doubt was cast on the 1969 record of *Melampyrum sylvaticum* near Loch Broom; and *Cotula alpina* is beginning to spread from its epicentre at Polbain.

Off the ground in Easter Ross (VC 106):Brian BallingerVascular epiphytes on treesBrian Ballinger

Vascular epiphytes growing on trees more than 1 m above the ground were noted in the course of routine recording visits. 61 examples were found involving 14 epiphytic species on 13 tree species. Nearly half of the epiphytic specimens were *Polypodium vulgare* (29) which could be regarded as an obligate epiphyte in these woodland habitats. The other species are better classed as accidental epiphytes and the commonest were *Oxalis acetosella* and *Luzula sylvatica*. The trees most frequently involved were *Alnus glutinosa, Betula pubescens* and *Quercus spp.* Frosts may be a factor accounting for the relatively low prevalence of the phenomenon here.

Plants on walls in Easter Ross towns and villagesBrian Bal-linger

Twelve small towns and villages were visited on three occasions in 2011 and vascular plants on walls noted. 65 species were identified. The most frequently found were: *Taraxacum* spp., *Festuca rubra, Chamerion angustifolium, Cymbalaria muralis, Epilobium montanum, Asplenium trichomanes, Asplenium (Phyllitis) scolopendrium, Dryopteris* spp., *Urtica dioica* and *Asplenium ruta-muraria*. The species list is considerably shorter than that from some English surveys. Town walls are of some importance for some locally relatively scarce species, especially ferns.

West Sutherland: 2012 (VC 108)

'Square-bashing' and serendipity have been equally productive this year. The Hybrid Deergrass (Trichophorum x foersteri) was recorded by Eric Meek in two places and by us in two others (new to the vice-county?); we have yet to see its rarer parent T. cespitosum. Wild Onion (Allium vineale) was found on a dry bank at Scourie, where it looks well-established. It is at least 100km outside its known range but seems unlikely to have been deliberately introduced. American Skunk-cabbage (Lysichiton americanus) has escaped from cultivation in Kinlochbervie, where it is quietly taking over a ditch. Two locally scarce species were discovered in Assynt on sites with reduced grazing pressure: Shady Horsetail (Equisetum pratense) in a small exclosure at Knockan (new hectad record) and Bugle (Ajuga reptans) on wooded islands in Loch Awe (confirmation of old record). Finally, Northern Rock-cress (Arabidopsis petraea), usually montane, was found at low altitude (20m asl) on gravel banks beside the River Dionard (update of old records).

If You Go To St Kilda: *Taraxacum pankhurstianum*

If you go to St Kilda in the spring you will certainly have a chance to see Britain's newest dandelion, *Taraxacum pankhurstianum* Richards & Feguson-Smyth, (2012). It is also possible and probable that *Taraxacum faeroense* (Dahlst.) Dahlst. (1925a) could be found. Its existence on the island of Hirta or elsewhere in the archipelago has yet to be confirmed. These two species can easily be confused. As an aid to identification, the

Pat and Ian Evans

Claudia Ferguson-Smyth

Chemical Inero species in the 142 of Scotland Datoard Hogardi

The story begins in July 2008 with the discovery of Alchemilla glaucescens

characters of both species are illustrated and compared.

If You Go Down To The Sea: *Taraxacum limbatum*

Taraxacum limbatum Dahlst., the Bordered Dandelion, was first identified in Britain on the Isle of Tiree (VC 103) in the spring of 2010. It was growing just above the strand line on an east facing beach. In 2011, another plant was found on a west facing beach and most recently in 2012 it was seen in calcareous grassland not far from the sea. *T. limbatum* is a lovely native dandelion with very distinctive characters which makes it easy to identify. It is hoped that by reviewing and illustrating the characters and by comparing it to its nearest look-a-like, *Taraxacum luteum*, C.C. Haw. A.J. Richards (1984) more records of this rare dandelion will be forthcoming.

The Genus Agrostis

Seventeen herbarium sheets bearing *Agrostis* specimens, mounted to display and emphasise the diagnostic features separating the species, are shown, together with an explanatory handout. *Agrostis capillaris*, *A. stolonifera*, (including var. *stolonifera* and var. *palustris*), *A. gigantea*, *A. vinealis*, *A. canina*, *A. castellana*, *A. scabra* and *A. lachnantha* are featured, all except the last known to occur in Scotland. The exhibit was originally prepared for display in East Anglia so a supplementary note gives guidance on its Scottish relevance.

Alchemilla species in Scotland and their identification.

An outline of the classification of the *A. vulgaris* agg. followed by a mention of two Identification Keys - one a pictorial key translated from the Norwegian by Barbara Hogarth and modified by MEB, annotated silhouettes of leaves and an ID Pack. Photographs of *Alchemilla* spp. including the rarer *A. glaucescens, A. glomerulans* and *A. wichurae* and the Scottish distribution as in the New Atlas and more recent finds.

Alchemilla micro-species in the NE of Scotland Barbara Hogarth

Margaret Bradshaw

Arthur Copping

Claudia Ferguson-Smyth

in the defile scoured out by the Moulzie Burn, Glen Clova. This was followed by a survey of the Moulzie Burn in May 2009 (for which there is a brief report outlining the results). In June 2010 a population of more than 50 plants of *Alchemilla acutiloba* was found along a 14 m stretch of roadside embankment and ditch in Glen Isla by Bridge of Forter. The rockiness of the embankment appears to have protected the plants from the destructive effects of modern verge maintenance. In spite of searching suitable habitats no further populations of *Alchemilla glaucescens* have been found. *Alchemilla acutiloba* has now been recorded at three more localities in Angus. This exhibit demonstrates work underway to describe *Alchemilla* micro-species with the view to a publication in the near future. The aim is to provide clear, detailed accounts and illustrations which will assist with identification. During the search for typical specimens it became clear that other micro-species with distinctive characteristics are present in north-east Scotland. These are currently being described.

The BSS Alpine Field Meeting – The Last 40 Years John Holland (BSS Alpine Secretary)

The annual alpine field meeting has been an excursion organised by the BSS (BSE) for many years. Although species recording has formed an important part of the field meeting the main emphasis has always been on enjoying the magnificent landscape, flora and wildlife of the Scottish mountains with a bit of informal learning in the company of like-minded people. Over the last 40 years the excursions have covered much of Highland Scotland and beyond, from St. Kilda in the West to Glen Clova in the East, from the Moffat Hills in the South to Glen Affric in the North. Unsurprisingly, many of the field excursions have been to the mountains of Perthshire which are within easy reach of the Central Belt, particularly to the Breadalbane Hills (VC 88), many of which are designated as Special Areas of Conservation or Sites of Special Scientific Interest for their alpine flora. The popularity of the alpine meeting has varied greatly from year to year with as few as three people attending one meeting to Ben Lomond (1998) to well over twenty attending an excursion to Meall nan Tarmachan (2003). A comprehensive list of Scottish alpine plants (and fungi) has been amassed over the years, including many rarities. Hopefully this long standing annual excursion will continue for many years to come. Where to next?

Harebell (*Campanula rotundifolia* L.): Julia Wilson¹, Annika Telford¹, Western British populations are unique Jess Shepherd^{1,2,3},

Chris Jeffree³ & Stephen Cavers¹

The Harebell (*Campanula rotundifolia* L.) is widespread in the British Isles. Its chromosome number (cytotype) varies across its range and shows strong spatial structuring, correlating with oceanicity of climate. Diploids (2n) are absent and while tetraploids (4n) are the predominant type, hexaploids (6n) occur in some western locations. Studies of nuclear and chloroplast DNA confirm the distinctiveness of the 4n and 6n cytotypes which have recently been given sub-species status (subsp. *rotundifolia* - 4n, and subsp. *montana* - 6n). Conservation and restoration policy should recognise these differences and the particular rarity of the hexaploid and review the suitability of the origins of seed in grassland restoration mixes – matching site to cytotype. ¹CEH, ²RBGE, ³University of Edinburgh

A peculiar feature of Scots pine in Finnish Lapland: John Grace, three-needled fascicles Toshie Mizunuma & Sigrid Dengel

During a survey of the variation in Scots pine (*Pinus sylvestris* L.) at the tree -line in Finnish Lapland we found examples of fascicles with three or even four needles per fascicle. These abnormal fascicles comprised as much as 1% of the sample at one particular site. The trees themselves were otherwise normal, although they do retain their leaves for up to 8 years, longer than Scots pine in Scotland. The Scandanavian forest scientists we have consulted were surprised at our finding, and had not seen this phenomenon before. The case may be similar to that of the 'four-leaved clover' in which the four-leaved condition is believed to be under genetic control. Alternatively, it may be a developmental condition caused by stress factors such as rapid freezing and thawing which are common in this harsh environment. School of GeoSciences, University of Edinburgh, Edinburgh EH9 3JN.

Traits of Mountain Willows: Salices arbuscula, ×luiensis, et cetera

Leslie Tucker

Hooker's *Flora Scotica* (1821) indicated *Salix arbuscula* "(Little Tree Willow)" as inhabiting "Highlands of Scotland", particularly "vallies of ... Clova" and "Banks of the Nith". BSBI maps still show widespread old records, but recent fragmentary DNA bar-coding exercises imply that most populations beyond the Lawers-Lui ranges are infested with other species' hybrids. Inferably, suitably situated 'little trees' are repeatedly remisrecorded as S. arbuscula, without adequate confirmation. Hooker noted: "My specimens become black in drying. Wahlenberg says his remain green ... and leaves much more serrated" Morphology is still contentious. Our 'pure' populations match Wahlenberg's type; blackening (pace Poland !) indicates S. myrsinifolia (nigricans) or S. repens hybridity. Glandular-serrations do point strongly to S. arbuscula, but not exclusively so; environmental stunting can make some hybrids also look similar, especially those of Ss. cinerea & myrsinifolia. Since discovering S. \times luiensis (= S. arbuscula \times S. aurita). I have been comparing cuttings ex loco classico with others collected further afield: some appear equivalent. Potted and pressed 'vouchers' of such from Perth, Angus and Aberdeen are exhibited for appraisal. Supposing 'lost' S. arbuscula colonies always have S. aurita nearby, perhaps S. × luiensis should be sought there too, as a still-lingering cryptic relic (culprit ?) of competitive miscegenation. Evidence that this occurs spontaneously in horto is presented.

Viola rupestris (Teesdale Violet)

Mike Porter and Jeremy Roberts

The 'Standard Texts', even the most recent, give a confusing and frequently erroneous picture of the Teesdale Violet and its separation from congeners. Yet it is a distinctive and well-characterised species within its few known habitats. This exhibit provides clear pointers to its ready identification. Are there populations still awaiting discovery?

Posters and displays

BSBI Publicity/Information	Louise Marsh & Ruth McGuire
BSS Publicity/Information	Barbra Harvie
BSBI Distribution Base	Tom Humphrey
FSC and RBGE courses	Heather McHaffie
BSBI Identification Table	Douglas McKean
National Trust for Scotland	Lindsay Mackinlay
Ochils Landscape Partnership	Liz Lavery

Plantlife

SNH

Scotland has introduced ground-breaking legislation to control threats posed by non-native species. Implementing that legislation is an entirely new code of practice on non-native species. With a few named exceptions, it is now illegal to plant or cause to grow in the wild any plants which have been brought to Scotland with the aid of man. That includes species which have been long established in our countryside. Only a few species have proved to be invasive, but vigilance is important to protect against high risk species.

Books – Atlantic Hazel Woods

A Jubilee Surprise

The pressed and mounted sprig of Sweet William was in the posy of flowers arranged to decorate the launch which ferried the Queen, the Duke of Edinburgh and the Royal Family across the River Thames to watch the Queen's Diamond Jubilee River Pageant, on 3rd June, 2012. The launch used as a ferry for the London event was the Royal Barge, borrowed from the Royal Yacht Britannia, which is nowadays moored and on public view at Leith, Edinburgh.

By chance, the next day we took our visitors on a tour of the Royal Yacht Britannia and were surprised and delighted to coincide with the return of the launch to its normal mooring position beside the larger vessel. After the launch had been lifted by crane from lorry to mooring basin, one of the crane operators handed out flowers from the posy as souvenirs to members of the public.

I was lucky enough to be in the right place at the right time.

Paul Jarvis, FRS, FRSE (23/05/1935 – 05/02/2013)

Paul Gordon Jarvis was a member of BSBI from 1958. A botany graduate of Oriel College, Oxford, his postgraduate studies at Sheffield centred on the growth and regeneration of Sessile Oak (*Quercus petraea*).

Two NATO scholarships took him to Sweden, where he developed his par-

Iain Macdonald

Barbara E H Sumner

Sandy Coppins

ticular interest in plant water relations. This took him to CSIRO in Australia, and then, in 1966, to Aberdeen University. It was here that I was in the fortunate position to have him as a tutor. He was a superb teacher, always interested, keen to see one reach one's full potential. There was never a moment to lose! I remember early field trips where Paul and his wife Margaret were there, with babes in arms, as keen as mustard to pass on their enthusiasm for all things botanical. I was hooked and chose one of Paul's topics for my thesis! What a challenge, but immensely gratifying! He had me shinning up poles in a forest and risking innumerable stings in a patch of nettles for several weeks! He was rigorous, but invariably positive, in his criticism.

In 1975, Paul went to Edinburgh University where he became Professor of Forestry and Natural Resources. He was renowned for his studies in various aspects of forest physiology. His MAESTRO model of forest function has been in use for many years.

Paul was involved in several important international projects and helped to found the journal, *Plant, Cell and Environment*. He reviewed several other international journals, and served many bodies, including Research Council Boards, the Countryside Commission for Scotland and the John Muir Trust.

On retirement, moving to Aberfeldy, he was actively involved in restoring native woodland to the denuded Scottish hills, becoming a director of the Edinburgh Centre for Carbon Management.

Paul will be remembered fondly by many here and around the world.

Dot Dahl with biographical information from Mencuccini M, 2013. *Paul Jarvis, FRS, FRSE: plant ecologist who showed the link between forests and the atmosphere*. iForest. http://www.sisef.it/iforest/pdf/?id=ifor0102-006

Botany at Boarding School

PETER MACPHERSON

I recently read the following, written by James Hilton, author of *Lost Hori*zon and *Goodbye*, *Mr. Chips.* "I spent an hour a week in 'Botany', which was an excuse for wandering through Epping Forest in charge of a master who, in turn, regarded the hour as an excuse for a pleasant smoke in the open air. The result is that Botany to me today stands for just a few words like 'calyx', 'stigma' and 'capillary attraction', plus the many lovely hours amidst the trees and bracken. I do not complain''.

This reminded me of my own experience at Keil School in Dumbarton. Natural History was a subject taken by classes 1 & 2 (senior school). It consisted of collecting plant specimens on a Sunday afternoon in the summer term, either in the school grounds or on the permitted walk outwith the grounds on that day. In the evening each pupil presented his collection to the senior pupil who was reckoned to be most knowledgeable on the subject (the masters being ignorant), and had the 'names' entered into a booklet, one of which I still possess.

Once a year we had a botany ramble, say train to Helensburgh, walk east over to Arden on Loch Lomond side, down to Balloch and train back to Dumbarton. Specimens collected were pooled and all pupils credited with the names. As the eventual mark counted towards the overall class place at the end of the year, I considered that this was unfair to those of us who made an effort to collect at the weekends, and so never collected during these walks!

For some strange reason a few taxa counted as two, e.g. Star-of-Bethlehem, possibly on account of their attractiveness.

Referring to my booklet, I see that my total for the year was initially 175 (including two for Star-of-Bethlehem) and four which the senior pupil had stated 'unknown', but Fuscia and Goldilocks were scored out by the senior, and with minus one 'for neatness', I was left with 172.

The present recorder for VC 99 may be interested to learn that I was credited with the following:- Aniseed, Multi-coloured Scorpion, Cooking Valerian, Dog's Parsley and Wood Crowfoot.

In my last year at school I had the identification task!

Carex paniculata at Lumphanan Peel,DAVID WELCHAberdeenshireDAVID WELCH

The Peel of Lumphanan (NJ576036) is a roughly circular artefact comprising a central motte surrounded by a drained moat 15-20 m wide.

I first became interested in its flora on reading a note about uncommon Aberdeenshire plants (Braid, 1974). The writer reported considerable "tidying up" in the former moat and that a section had been burned; he had earlier believed that this area was dominated by Tufted Hair-grass (*Deschampsia cespitosa*) but in 1973 he had found Greater Tussock-sedge (*Carex paniculata*) "very much in evidence".

When I visited the Peel in following summers I saw that mowing was very thorough, with just some steep banks and ditch edges escaping. In summer 1977 I reckoned some stools of *Carex* were surviving in strimmed-down state, and went back in November 1977 to map their positions, aided by Peter Marren. Our aim was to appeal to the site managers, the Ancient Monuments Division of the Scottish Development Department, to relax the mowing in just a section of the moat. This we believed would give visitors a better impression of the former state of this minor fortress than the lawn then existing.

We mapped just nine tussocks of *Carex* in the November visit, aided somewhat from the cessation of strimming at the end of summer, but doubtless missing some tussocks. We then approached Prof Charles Gimingham, who was the VC 92 recorder at that time, urging that he write to the SDD asking for part of the moat to be left uncut. This Charles duly did, and two or three summers later I was pleased to find that cutting had stopped in two sections of the moat, on the NE and SE sides of the motte, around the positions of our 1977 tussocks. And these tussocks had started to grow tall developing into typical *Carex paniculata* stools.

In the 1990s there was a further relaxing of the mowing, and I was satisfied that Historic Scotland, the successor managers to the SDD, had adopted "Greener" policies. But regrettably I did not count the stools, or attempt to assess whether new colonisation or recovery was occurring.

Then late in 2012 I made another visit, and was very pleasantly surprised by the increase of *Carex* and the almost total abandonment of mowing in the moat. The *Carex* stools occupied about a quarter of the total area of the moat, having spread around the positions at which we had seen tussocks in 1977 (Fig. 1— see page 51). Most of the rest of the moat was dominated by tussocky *Deschampsia cespitosa*, and a few wetter sections held Meadowsweet (*Filipendula ulmaria*). I made a rough count of the obvious stools: just over 200 in the SE length of the moat and two groups of c. 45 and 10 in the NE length, this latter a little further west than the former. Most of the stools were around 80 cm tall, with the largest reaching 120 cm and 100 cm in the SE and NE lengths respectively.

The recent *Carex* handbook (Jermy et al. 2007) says stools can reach 1. 5 m height, so the Lumphanan colony has some years yet to attain its maximum impact, but it has certainly already surpassed our original expectations of providing an attractive background to the tall motte it surrounds.

References

Braid, H.W. (1974). Uncommon Aberdeenshire plants. Trans. Bot. Soc. Edinb. 42: 231. Jermy, A.C., Simpson, D.A., Foley, M.J.Y. & Porter, M.S. (2007). Sedges of the British Isles. BSBI Handbook No. 1 ed. 3, BSBI London.

Gains and Losses in W Lothian (VC 84) J MUSCOTT

It is of course impossible to cover every corner of even such a small vicecounty as VC 84, but I am always pleasantly surprised to find a new plant or a new site for an old one. There were several such discoveries in 2012, but sadly there appear to have been some losses too.

In spring, trips with the Edinburgh Natural History Society (ENHS) produced several new records (it always helps to have several keen eyes on the job). At Lochcote Reservoir the party turned up a large patch of Adder's-tongue (*Ophioglossum vulgatum*) growing amongst the Goldilocks Buttercups (*Ranunculus auricomus*) discovered last year. It's not new to the VC since a single spike was discovered elsewhere in the same hectad in 1995, but it's interesting to note that there's an old record for 'Lochcote' dating from 1901 (but not mentioned in 'Martin' 1934).

Another trip with ENHS confirmed the continued presence of a good population of Moonwort (*Botrychium lunaria*) at Easter Inch Moss and produced a new VC record – Grass Pea (*Lathyrus nissolia*) beside a path leading to the Moss. Similarly botanists on a Fungus Foray to Dalmeny crawled over short turf at Hound Point to rediscover Moonwort and turn

up a small patch of Field Madder (*Sherardia arvensis*) elsewhere on the estate - a new plant in NT17, and only the second record for the VC.

Later in the year I spent a good deal of time recording along the Union Canal for the local Record Centre. This gave me the opportunity to note some of the changes since the canal was re-opened and re-connected to the Forth-Clyde Canal. The dredging and increased movement has had a big effect on the Duckweeds, three of which, Common (*Lemna minor*), Ivy-leaved (*L. trisulca*) and Fat (*L. gibba*) used to be widespread, completely covering the canal in places. Ivy-leaved Duckweed is now rare while Fat Duckweed seems to have disappeared altogether (last record 2000).

Unfortunately Fat Duckweed is (or was) one of the rarities of the VC, and indeed of the Lothians as a whole.

Changes in management seem to have affected another rarity, Tufted Loosetrife (*Lysimachia thyrsiflora*). There has been a lot of cutting back of vegetation, particularly of the Reed Canary Grass (*Glyceria maxima*) which lines the canal. This seems to have been good for some species, Water Plantain (*Alisma plantago-aquatica*) for example, but disastrous for the Loosetrife which used to grow in small patches amidst the Canary Grass. Last summer I could only find a single plant (at Broxburn - not at any of the previous sites).

On the positive side a new plant has appeared. Water Dock (*Rumex hy-drolapathum*) has spread over the Avon aqueduct from VC 86 and is now established in several places. While under the aqueduct a small patch of another rarity Mountain Melic (*Melica nutans*) continues to survive.

Some other interesting plants have turned up beside the canal. Douglas McKean confirmed the identity of Lesser Burdock (*Arctium minus sp. pubens*) at Philpstoun Bing, while near Greendykes Bing a single plant of *Coincya monensis* (which I had assumed to be extinct) turned up – not at its original site by the bing, but on the opposite side of the canal.

A somewhat less desirable plant Conolly's Knotweed (*Fallopia* x *bohemica*) turned up in woods beside the canal, a second record for the VC and the first for NT07. On the edge of another wood a small colony of Chinese Ragwort (*Sinacalia tangutica*) was growing, not the first record for the hectad: that was due to Olga Stewart who discovered it on 'waste

ground near Linlithgow' in 1962 (both gone I fear).

Craigton Quarry pond now sports a single plant of Wood Small-reed (*Calamagrostis epigejos*) which continues its spread from the original site at Bo'ness.

A couple of trips to Dundas Castle grounds added Greater Pond-sedge (*Carex riparia*) to the VC list, and Lemon-scented Fern (*Oreopteris limbosperma*) and Dark Mullein (*Verbascum nigrum*) to the hectad. It also confirmed the continued presence of Skullcap (*Scutellaria galericulata*) and Musk (*Mimulus moschatus*), both rare.

Some autumnal walks on paths through Fauldhouse Moor produced a number of new records for NS97 including White Water Lily (*Nymphaea alba*) in a pond and Hairy St John's-Wort (*Hypericum hirsutum*) on the edge of a plantation. False Fox-sedge (*Carex otrubae*) was a bit of a surprise so far from the sea, but the best find (by Catherine White) was a small colony of Maiden Pink (*Dianthus deltoids*) by a path. The only other record appears in 'Martin' 1934 for Niddry Castle – nowhere near this area. So it was an exciting end to the botanical year.

Reference

Martin, IH (1927). *The Field-Club Flora of the Lothians, Edinburgh*: William Blackwood & Sons, 2nd Edition, 1934.

Some additions to the Flora of Angus PAUL GREEN

I worked as part of a team on a project for Forestry Commission Scotland 'Native Woodland Survey of Scotland' (<u>www.forestry.gov.uk/nwss</u>) for four years surveying native woodlands over the whole of Scotland. As my leaving present to myself, as the job came to an end, I bought 'The Flowering Plants and Ferns of Angus' (Hogarth 2012). Quite appropriate as Angus was my favourite county I worked in. I was only surveying the low lying ground from Edzell to Forfar and across to the coast at Arbroath north to the county border.

My time in Angus was spent from November 2011 through to April 2012, not the best months for plant recording. Despite that, I was pleased with what I did find. My favourite species seen was *Scrophularia scopolii* (Italian Figwort) (not listed below as listed in Hogarth). I rang my brother

while in the birch wood in Kinnaird Park Estate, Brechin (NO63095808) and said 'I have a very green looking hairy figwort, which was not like the *S. nodosa* (Common Figwort) in the wood, it has hairless and brown tinged foliage'. His reply was not much help. As there were a good 100 plants in the wood I took one home to grow on in my garden. By late May it was in full flower and I soon identified it. It is an extremely rare alien in Britain.

Below is a list of species I recorded, they are not listed in Hogarth. All are non-native; some are very rare garden escapes, with the exception of *Stellaria pallida* which I take to be native as it was growing on bare sand of a rabbit warren. It is a very easily over-looked chickweed because of its early flowering season.

Arum italicum subsp. *italicum* (Italian Lords-and-Ladies) - several patches on bank of burn, Geordie's Burn (NO62384023), 20 Feb. 2012.

Clinopodium grandiflorum (Greater Calamint) - two clumps under trees on side of path along disused railway, St Vigeans (NO636433), 19 March 2012. Named when flowered in June 2012 in my garden. A very rare garden escape in Britain.

Cortaderia richardii (Early Pampas-grass) - one clump self-sown in clearfell wood, Huntly Wood (NO63126285), 16 November 2011; one clump self-sown in birch wood, Addicate Wood (NO63856319), 16 November 2011; clump self-sown in wood, March Bank Wood (NO68716232), 8 January 2012; single clump in forest, Red Roofs (NO555522), 19 April 2012. A popular garden grass which has the potential of becoming a pest in the future.

Crocus tommasinianus (Early Crocus) - one on river bank, Kirkton (NO420466), 23 January 2012. Likely washed downstream from nearby gardens.

Helleborus foetidus (Stinking Hellebore) - single plant on bank of disused railway, Colliston (NO61984571), 19 Feb. 2012. Escaped from nearby gardens.

Helleborus orientalis (Lenten-rose) - two clumps under trees, Brechin (NO60505932), 20 November 2011. Most likely dumped at sometime.

Iris foetidissima (Stinking Iris) - clump under trees on south bank of disused railway, Dubton (NO703607), 7 January 2012; clump under a willow, Dumbarrow (NO55654679), 22 January 2012.

Lagarosiphon major (Curly Waterweed) - abundant in pond, Bankhead (NO481470), 1 Feb. 2012.

Lemna minuta (Least Duckweed) - covering small pool in wood, March Bank Wood (NO69956225), 19 November 2011; pond in wood, Grange (NO44784465), 24 January 2012; lots in small ponds in wood, Douglas Wood (NO490416), 16 March 2012; pond in wood, Guynd (NO561419), 29 March 2012; lots on mud of drying pond, Gora Burn (NO59614105), 31 March 2012. An easily over-looked species. Likely to be more common in Scotland than the BSBI maps would suggest.

Pulmonaria rubra (Red Lungwort) - clump on road verge, Dunninald (NO704543), 1 April 2012. A rare garden escape.

Stellaria pallida (Lesser Chickweed) - several on open sand by rabbit holes, Woodfield (NO727605), 4 December 2011.

Symphytum x *hidcotense* (Hidcote Comfrey) - Patch 2m round in wood, Bellaway Wood (NO56004974), 16 Feb. 2012, NO56004974. Had been dumped with rubble at some time in the past. Named from material grown on in my garden.

Reference

Hogarth, Barbara G. (2012) *The Flowering Plants and Ferns of Angus*. Privately published by author.

Watery Experiences in Fife, especially during summer 2012

GH BALLANTYNE

It all began at the end of March, yes, early April showers, heralding the start of a very wet summer - but also the beginning of series of encounters with waterside plants, either new to Fife or to my 'home territory' of the Kirkcaldy district. Most however were planted introductions.

The recently appointed joint VC 85 Recorder, Sandy Edwards, was keen to fulfil his traverse of the recently completed Fife Coastal Path; the closure of the Burntisland Aluminium Company's seaside works in the early 2000s meant that the path could be rerouted following the demolition of the factory buildings and their replacement by housing. So on his initial visit Sandy was walking along a part never before open to the public and he duly came across a channel and pool fringed with a collection of unusual plants - he soon recognised Great Water Dock (*Rumex hydrola-pathum*), the dead stems of which were intermingled with species not nearly so readily identifiable and realising that its sole other Fife site was far off at Tentsmuir in NE Fife, he reported the find to me.

I was delighted with the news for I'd looked for this particular docken in

my home patch for a long time. Bill Hay offered to take me to Burntisland, choosing 19th July as a suitable date when everything should be in flower, which turned out to be the case: as well as the tall robust docken, there were smaller specimens (including hybrids perhaps?), and several other clumps of plants. Carefully avoiding the soggy pools forming at the edge of the main pond, caused by the previous downpours, we listed them and ended with a number new to Kirkcaldy area, including Gypsywort (Lycopus europaeus), Purple Loosestrife (Lythrum salicaria), Carex riparia (and, oddly for a waterside habitat, C. pendula) as well as stands of Iris pseudacorus, Stachys palustris and Phragmites. Owing to difficulty of access I'd never come across the site before and was puzzled as to their provenance - as a few were obvious intros (e.g. the sedges) I guessed that all were. I could only surmise that the owners of the site, the Aluminium Company, had planted them to beautify the surroundings of its office that had been in the vicinity of the pool, possibly in the 1970/80s. All colonies looked to be well established. We decided that another, later, visit was called for, especially for possible hybrid docks but then, although we confirmed R. crispus and R. obtusifolius, we could not be positive concerning either's cross with R. hvdrolapathum - the fact that crispus was the seaside variety (var. littoreus) and that both it and water dock have triple tubercles on the fruits did not help!

Soon after the first Burntisland experience, I was in our local Beveridge Park, a favourite venue for an afternoon 'constitutional' when the weather is poor, and decided to have another look at a small water-body that had been created a few years earlier, next to the existing much larger boating pond. I'd noted on previous trips that there were large numbers of introduced water plants, many native to Fife but most scarce although few were actually waterweeds. Owing to the network of decking crisscrossing the pond, they were quite accessible and turned out to be mostly different to the Burntisland site, including large stands of Greater Spearwort (Ranunculus lingua), vying for colour dominance with Yellow Flag (Iris pseudacorus) and complemented by Water Mint (Mentha aquatic), flanked by spikes of Bogbean (Menvanthes trifoliate). No actual pondweeds (Potamogeton spp.) were visible, being replaced by strands of water starwort, (*Callitriche* spp.) among floating duckweed - apparently all the Common variety (Lemna minor). I collected some in the hope that Least Duckweed (L. minuta) might have at last reached VC 85, but in vain. Then, looking at eye level rather than downwards, I checked the numerous stands of tall stems, differentiating Purple Loosestrife (Lythrum salicaria), and a clubrush, probably all *Schoenoplectus lacustris*. But an unknown similar looking plant persisted in catching my attention, so I gathered a spike and, on reaching home, now rather wet for inevitably the rain had come on, soon realised it belonged to Galingale (*Cyperus longus*). As this has apparently hardly been recorded in Scotland, far less Fife, my soaking had indeed been worthwhile. Although some may exclaim "but it was planted!" a consideration is that "once established, it can spread by vigorous rhizome growth" (Jermy & Simpson, 2007, p. 159), so it is probably here to stay in Kirkcaldy. The same authority indicates that in Sotland the only site is in VC 84 but there is no record in *The plant life of Edinburgh and the Lothians* (2002).

In conclusion, it may be pertinent to mention other water plants introduced to VC 85: the two water lilies, Yellow (*Nuphar lutea*) and White (*Nymphaea alba*) occur naturally although the latter may now be extinct as a native. Both are planted, especially in new water bodies, and I realised this was the case when I came cross a series of recently excavated pools some years ago. However, in addition to the two lilies the yellow's loo-kalike, Fringed Water-lily (*Nymphoides peltata*) was accompanying them in abundance along with a comparatively unusual water starwort, *C. hermaphroditica*, probably native. More introductions spotted during the last few years include Flowering Rush (*Butomus umbellatus*), and Sweet Flag (*Acorus calamus*). Lesser Reedmace (*Typha angustifolia*) has been known at a particular loch for well over a century while its sibling, *T. latifolia*, has caused problems in the comparatively short time since it first appeared.

A much more welcome, and quite unexpected, arrival was Milk-parsley (*Peucedanum palustre*), about 10-12 years ago; it is reported to be spreading well.

Summer 2012 may have been a wash-out but it had its moments for me!

References

Jermy, AC, Simpson, DA, Foley, MJY & Porter, MS (2007). Sedges of the British Isles (BSBI Handbook No. 1, ed.3). BSBI., London, Smith, PM, Dixon, ROD & Cochrane, MP (2002). Plant Life of Edinburgh and the Lothians, Edinburgh University Press.

Kirkcudbrightshire (VC 73)DAVID HAWKERScottish Recording Week 30th June – 6th JulyDAVID HAWKER

A group of 12 botanists, one non-botanist, and Hilary our cook, from as far afield as London, Bristol, Lincolnshire, Ayr and Perth , gathered at Orroland

Lodge, a luxurious Victorian hunting lodge set in its own wooded grounds, overlooking the Solway Firth and the Lake District. After an excellent evening meal, the programme for the week was set out. The party would split into three groups each day before heading out. The VC is neatly divided geographically into two halves and the programme covered only that half to the east, between the Water of Ken - River Dee and the boundary with VC 72 Dumfries.

The first day was taken up with a survey of the nearby 1900 ha MOD Training Range which has a wide variety of species scarce in the county. The objective was to record the presence of all species occurring over parts of the Range which had not previously been studied in detail, so as to identify the site's conservation interest for the Integrated Land-management Plan. Before starting we had to undergo a Health and Safety briefing by the Camp Commandant; whether he was pleased with a 9 am start on a non-working Sunday was not obvious. The groups recorded some of the specialities of the area – Glaucium flavum (Yellow Horned-poppy), Echium vulgare (Viper's Bugloss) at one of only two extant county sites, Eryngium maritimum (Sea Holly), Allium carinatum (Keeled Garlic), A. paradoxum (Few-flowered Garlic), and Apium graveolens (Wild Celery), Asplenium ceterarch (Rustyback Fern), Cirsium heterophyllum (Melancholy Thistle), Vulpia bromoides (Squirreltail Fescue), the last four all new to this site, and good populations of both Spergula arvensis (Corn Spurrey) and Scleranthus annuus (Annual Knawel). One member was to arrive later that day and couldn't join us on the Range, but instead surveyed the coastline below Orroland Lodge, producing a new record for the Nationally Scarce Carex punctata (Dotted sedge). That evening the large living room and the adjoining dining room provided ample space for id work, both before and after dinner, as they did for the rest of the week. In all, that day provided 358 species, with 47 new to the MOD area.

The following day also had a military aspect, as one group surveyed the old and now defunct Munitions Factory at Dalbeattie, apparently the first time this area has been surveyed systematically. In all, 236 species were recorded, the highlights being a large population of *Limosella aquatica* (Mudwort), *Senecio erucifolius* (Hoary Ragwort) new to the VC, several plants of a *Juncus* suspected of being either *J. dudleyi* or *J. compressus* (sent to referee), and unexpectedly for such a lowland site here, *Empetrum nigrum* (Crowberry), *Rhynchospsora alba* (White Beak-sedge), both *Eriophorum* spp. (Cottongrass), Other groups went to the coastal sites of the Almorness

Pensinsula and Powillimount where there are some calcareous outcrops in what is an otherwise geologically acid county. The Almorness group discovered Centunculus minimus (Chaffweed) a species rarely seen in the county, Cakile maritima (Sea Rocket), Blymus rufus (Saltmarsh Flat-sedge), both Zostera (Eelgrass) spp., Allium scorodoprasum (Sand Leek), Hypericum elodes (Marsh St John's-wort). Anagallis tenella (Bog Pimpernel) and a very wide range of sedges reflecting the varied habitats of the site - Carex arenaraia (Sand Sedge), C. distans (Distant Sedge), C. disticha (Brown Sedge), C. otrubae (False Fox-sedge), C. vesicaria (Bladder Sedge) and C. pallescens (Pale Sedge) amongst the 15 species seen. The Powillimount group covered only a short coastal section of the tetrad due to the range of unusual species along the 50 metre wide coastal strip, such as Juncus subnodulosus (Bluntflowered Rush), both Blymus (Flat-sedge) spp., Limonium vulgare (Common Sea-lavender) and L. humile (Lax-flowered Sea-lavender). Centarium littorale (Seaside Centaury) apparently still spreading along the county coastline, Schoenus nigricans (Black Bog-rush); and then inland with Conium maculatum (Hemlock), Urtica urens (Small Nettle) and Galium cruciata (Crosswort). This was however cut short by persistent rain and prompted a visit to the John Paul Jones (founder of the US Navy) Museum for coffee and tea.

Day three was unpleasantly wet, but we concentrated on three tetrads in the northern part of the county where there were old records of *Gentianella campestris* (Field Gentian), *Platanthera* spp. (Butterfly Orchids) and *Coeloglossum viride* (Frog Orchid). Unfortunately none of the three parties re-found any of these, but one group had a remarkable day recording *Melica nutans* (Mountain Melick), three previously unrecorded populations of *Meum athamanticum* (Spignel), *Eleocharis quinqueflora* (Few-flowered Spike-rush), *Gymnadenia borealis* (Heath Fragrant-orchid), *Polygonum boreale* (Northern Knotgrass), *Sorbus aria* (Common Whitebeam) and the hybrid *S. x thuringiana*, admittedly planted but the first county record of the latter. The highlights for the other groups were commoner species such as *Carex dioica* (Dioecious Sedge), *Linum catharticum* (Fairy Flax), *Parnassia palustris* (Grass of Parnassus), *Cardamine amara* (Large Bittercress), *Antennaria dioica* (Mountain Everlasting) and *Crepis paludosa* (Marsh Hawksbeard).

The sand dunes, saltmarsh and foreshore of the 7km long Southerness -Mersehead beach was the site for the following day, with all groups walking the whole length of the strip. The day was cool but gloriously sunny and dry which brought out massed hordes of mosquitoes in the dune slacks and saltmarsh for those crossing it early in the day. The objective here was to record populations of scarcer county species, following a survey by DH of a short section last year which showed unexpected populations of species found nowhere else in the county. Overall the group saw and recorded fine stands of Artemisia stelleriana (Hoary Mugwort), Euphorbia paralias (Sea Spurge), Eryngium maritimum (Sea Holly), Trifolium arvense (Hare's foot Clover), Phleum arenarium (Sand Cat's tail), Calvstegia soldanella (Sea Bindweed) at its only county site, *Coincya monensis* (Isle of Man Cabbage) - again the only county site, admittedly several kilometres long - with the Isle of Man visible in the distance, Catabrosa aquatica (Water Whorl-grass), Parapholis strigosa (Hard Grass), Ononis spinosa (Spiny Restharrow) after much collective debate, Polygonum oxyspermum (Ray's Knotgrass), and Vicurtisii (Wild Pansy). Others included *Eleocharis* ola tricolor ssp. uniglumis (Slender Spike-rush), Conium maculatum (Hemlock), Atriplex littoralis (Grass-leaved Orache), Papaver dubium (Long-headed Poppy) and Foeniculum vulgare (Fennel). Unfortunately a band of Bolboschoenus maritimus (Sea Club-rush) and Spartina anglica (Common Cordgrass) is developing offshore and sheltering the mobile foredunes, so that the sand and vegetation is stabilising and some of the species listed above are declining due to competition from more aggressive species such as Ammophila arenaria (Marram), Leymus arenarius (Lyme Grass) and Arrhenatherum elatius (False Oatgrass). A process and site to keep an eye on!

The next day saw us going widely separate ways along the north boundary of the county, some to the higher hills at around 500-600m and one to 150-200m where Henry Moore statues stand in open ground at Glenkiln. One party attempted to re-find the only recent record of Sedum villosum (Hairy Stonecrop), unsuccessfully as the once wet heath with flushes had been converted to acid grassland in the intervening years. However we saw Saxifraga stellaris (Starry Saxifrage) in several flushes and burn edges, Festuca vivipara (Viviparous Fescue), Ranunculus omiophyllus (Round-leaved Crowfoot) and Euphrasia scotica (an Eyebright), among the 58 species recorded in part of that tetrad. The second party were luckier and found *Huperzia selago* (Fir Clubmoss), Parnassia palustris (Grass of Parnassus), Oreopteris limbosperma (Lemon-scented Fern), Selaginella selaginoides (Lesser Clubmoss), Crepis capillaris (Smooth Hawksbeard) and C. paludosa (Marsh Hawksbeard) in what was a more varied set of habitats. The Glenkiln party recorded 205 species in one tetrad including Galium mollugo (Hedge Bedstraw), Gymnocarpium dryopteris (Oak Fern) on a steep burnside, Circaea lutetiana (Enchanter's-nightshade) and its hybrid C. x intermedia (Upland Enchanter's -nightshade), Verbena officinalis (Vervain), the beautiful tracery foliage of *Equisetum sylvaticum* (Wood Horsetail), the fragrant *Myrrhis odo*rata (Sweet Cicely) and a number of garden escapes and aliens. An adjoining tetrad produced *Equisetum x littorale*, *Vaccinium oxycoccus* (Cranberry) and Valeriana officinalis (Common Valerian) in an otherwise unexciting area. This group managed surprisingly to cover another adjoining tetrad, adding Briza media (Quaking Grass) in a small sedge mire along with Carex pulicaris (Flea Sedge) and C. hostiana (Tawny Sedge), Epilobium ciliatum (American Willowherb), Hydrocotyle vulgaris (Marsh Pennywort) and Utricularia minor (Lesser Bladderwort). On the way home one group stopped to admire and photograph the only colony of Ophrys apifera (Bee Orchid) in the VC, in all 32 flowering shoots this year, following none last vear and 96 the vear before when it was first discovered. This with good stands of Neotinea ovata (Common Twayblade), Dactylorhiza purpurella (Northern Marsh-orchid) and Tragopogon pratensis (Goatsbeard).

The last day was spent assessing grassland and farmland tetrads near Orroland where there were old records for *Platanthera* spp. (Butterfly orchids), Gentianella campestris (Field Gentian) and Carex limosa (Mud Sedge). Again three parties tackled various tetrads, but such was the range of species present that only parts of each could be covered in the time available. None of the old records were re-found - agricultural intensification may be to blame, but the grasslands and wetlands provided considerable variety. Another two previously unrecorded *Meum athamanticum* (Spignel) populations, totalling 70 plants, were found, while other species included Carex diandra (Lesser Tussock-sedge), Euphrasia arctica (an Eyebright), Genista tinctoria (Dyer's Greenweed), Lemna trisulca (Ivy-leaved Duckweed) which seems to be spreading through the southern half of the county, Ranunculus lingua (Greater Spearwort), Cicuta virosa (Cowbane), and in one particularly attractive wooded glen Gymnadenia dryopteris (Oak fern), Oreopteris limbosperma (Lemon-scented fern), Phegopteris connectilis (Beech fern), Polystichum aculeatum (Hard Shield-fern) and P. setiferum (Soft Shield-fern), Viburnum opulus (Guelder-rose) and the roses Rosa mollis (Soft Downyrose), R. sherardii (Sherard's Downy-rose) and Rosa rugosa (Japanese Rose).

As a reward for the hard work of the morning, the groups re-assembled in the early afternoon at Carlingwark Loch SSSI to search for the site's specialities – *Ranunculus lingua* (Greater Spearwort), *Stellaria palustris* (Marsh Stitchwort), *Cicuta virosa* (Cowbane) – all successfully found and admired. Later

in the afternoon we regrouped at Orroland and walked along the shore to see the local speciality, *Hierochloe odorata* (Holy Grass) and 5 small patches of the grass were found in the upper saltmarsh amid flushed stands of *Phragmites communis* (Common Reed) where these abutted the shore; although not flowering, the shiny bright green leaves immediately attracted attention. Numerous other coastal species were found, including a previously unknown site for *Carex punctata* (Dotted Sedge) and abundant *Carex extensa* (Long-bracted Sedge).

One of the group surveyed nearby settlements each day in the early morning, returning in time for breakfast, and added just under 2000 records of which there were 117 species not previously recorded for the VC, mostly garden escapes, casuals and aliens. In all approximately 7000 records are waiting to be added to the database. My thanks are due to everyone for their efforts and help with covering areas that I would have been hard pushed to survey in time for the end of this date class, and for the excellent company and expertise. Our thanks are again due to Hilary for the appetising food and drink throughout the week.

BSBI joint field meeting with PSNS (Perthshire Society of Natural Science) to Ben Buck, Ochil Hills on 11th August 2012

A small party of seven, including Angus Hannah, BSBI Scottish Officer while Jim McIntosh was in Tristan da Cunha, drove to Upper Glen Devon Reservoir and walked in past Backhills Farm along the new super highway made for the construction of Burnfoot Windfarm. The turbines were whirling slowly on a clear, cool summer's day as we climbed steadily towards them. On our way we stopped now and again to record but began recording more consistently once we got onto the open hill. Here we were joined by Davie Black from Plantlife who had walked up the steep way over Ben Cleuch from his home in Tillicoultry. Our first find of note was made by Linda Robinson, VCR for NW Yorks (VC 65) when she pointed out large patches of flowerless Carex bigelowii (Stiff Sedge) growing near a boundary fence leading to the summit of Ben Buck. This might have gone undetected without her expertise in identifying the vegetative parts of this sedge. Linda had driven from Yorkshire in the hope that we might find the long lost, perhaps mythical, Ochil Hills' site for Saxifraga hirculus (Marsh Saxifrage) for which she has recently found a new site in her own vice-county.

After lunch on the summit at 679 metres, we spread out to search for the

main goal of the day, two montane flushes on the northwest flank of the hill where Rod Corner had discovered Alopecurus magellanicus (Alpine Foxtail) in 1992. On eroding peat hags we found Rubus chamaemorus (Cloudberry), a rare plant on the tops of the grassy Ochils. Roy Sexton led us straight to the flushes using a map he had constructed from a description of the location by John Mitchell who visited the site in 1998. In the lower flush at 608m. NN8919901609, we counted 110 flowering heads of this beautiful, very rare alpine grass, growing in a wet flush with abundant mosses, a tiny form of Caltha palustris (Marsh-marigold) and Ranunculus hederaceus (Ivy-leaved Crowfoot). Several plants of Alpine foxtail were also growing in tall Juncus effusus (Soft Rush) at the base of the flush. In a smaller flush higher up the hill at 635m, NN8932101564, we counted 21 heads. The flushes had many interesting plants; two colonies of the beautiful pink flowers of Sedum villosum (Hairy Stonecrop), Saxifraga hypnoides (Mossy Saxifrage) and under a mossy bank the lovely white flowers of Saxifraga stellaris (Starry Saxifrage). Also present were Juncus articulatus (Jointed Rush), Juncus bulbosus (Bulbous Rush), Carex echinata (Star Sedge), Triglochin palustris (Marsh Arrowgrass) and *Epilobium palustre* (Marsh Willowherb). The montane flush community with Alpine Foxtail is very similar to where Marsh Saxifrage occurs in Northern England and it is very possible Marsh Saxifrage may still exist in a flush somewhere in this area of the Ochils. A total of 163 species were recorded during the day.

Liz Lavery (VCR for VC 87, West Perth and Clackmannanshire)

Educational field meeting Dollar Glen, 25th August 2012

Tillicoultry Glen is closed because of rock falls and the venue for this educational meeting was moved to Dollar Glen where 18 of us gathered in the main NTS Car Park. Angus Hannah joined us from Bute, Jane Jones joint VCR for West Perth (VC 87) and a number of other expert botanists came to help enthuse about the wonders of plants. We split into small groups and spent the morning walking through the woods on the east side of the Glen to Castle Campbell. After lunch we explored an upland grassy track above the castle. A number of wise people left to walk the quick route back down to the Car Park and missed the increasingly heavy downpour as the rest of us made our way down the path on the west side of the Glen. Katherine White acted as scribe and produced an excellent and very accurate list of records for the day.

Dollar Glen has been extremely well botanized in the past, the first expedi-

tions being by botanists from Edinburgh in the mid nineteenth century and is well known for its ferns and woodland grasses.

In April 2012 NTS rediscovered *Lathraea squamaria* (Toothwort) at two sites. There are also historical records for *Gagea lutea* (Yellow Star-of-Bethlehem) but despite searching in the spring this has not been seen for many years.

We recorded a total of 167 species during our walks. These included 13 species of fern. Polystichum aculeatum (Hard Shield-fern) was frequent in the wooded gorge and Cystopteris fragilis (Brittle Bladder-fern) on the outer Castle wall. We identified the grass *Brachypodium sylvaticum* (False-brome), frequent in the damp woodland, the tall arching Bromopsis ramosa (Hairybrome) and the lovely delicate flowering spikes of Melica uniflora (Wood Melick). On the western side of the gorge we saw tussocks of the rare woodland grass Festuca altissima (Wood Fescue) on cliff ledges in one of its few sites in West Perth and Clackmannanshire. The unusual Parietaria judaica (Pellitory-of-the-Wall), a member of the nettle family, growing on the inner walls of Castle Campbell, is very rare this far north in Scotland. We alerted Historic Scotland to a patch of the invasive Acaena novae-zelandiae (Pirripirri-bur) making its home in the Castle Courtyard. On the upper track leading to Glenquey sharp eyes spied the minute rarity Ornithopus perpusillus (Bird's-foot). A small clump of Lysichiton americanus (American Skunkcabbage), a potential invasive species along watercourses, was seen in the pond below the Castle.

Liz Lavery

Note

During recording in VC 87 (West Perth), a mystery sedge was found growing precariously in the road gutter of a bridge on the Langside Moor road to Comrie. This was identified by Mike Porter, after collection of mature fruit, as *Carex muricata* subsp. *pairae*.

Liz Lavery

Scottish Field Meetings 2013

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

May 11 & 12	Taraxacum Workshop, Kirkmich E Perthshire	hael, J Richard
16 25		
May 25	Dumbreck Marsh, Kilsyth	R McGuire & A Hannah
June 1	Roslin Glen, Midlothian	B Sumner & J McIntosh
June 8-15	Claggan, Islay	A Hannah
June 15	Strathbeg & Rattray, N Aberdee	enshire D Welch
June 22	Gailes Marsh, Irvine, Ayrshire	G Smart & D Lang
June 22	Meall Nan Subh, Perthshire (alp	bine) J Holland
June 28-30	Willow Workshop, Kindrogan	N Stewart & L Tucker
July 6 & 7	Loch Katrine, W Perthshire	J Jones & L Lavery
July 13-19	Pairc, Lewis, Outer Hebrides	P Smith
July 28	Bracklinn Falls, W Perthshire	L Lavery
		& J McIntosh
Aug 18	Findhorn Bay, Moray	I Green
Aug 26-27	Morvern, Westerness	I Strachan & I Bonner
Sept 21	Puck's Glen, Dunoon, Argyll	F McGavigan
		& M Gibby

PLANTLIFE SCOTLAND EVENTS 2013

Sat 9 - Sun 10 March, 1-4pm

John Hope Gateway at the Royal Botanic Garden, Edinburgh Drop-in event

As the spring flowers emerge, it's time to get wild about plants! Come along to explore the world of wildflowers, fungi, lichens and mosses through activities, folklore and craft. Free admission.

Sun 21 April, 10.30am-4.30pm

Holyrood Park, Edinburgh

Plantlife and BSBI workshop: Getting to know your families

Find out about the basics of identifying wild flower families, a first step in confidence in using wildflower keys. Led by Dr Faith Anstey. Fee $\pounds 10$ (students $\pounds 5$). For further information or to book a place, contact Ruth

McGuire at <u>bsbiscotland@gmail.com</u> or on 07585 609008.

Sat 27 April, 10.30am-4.30pm

National Museum of Rural Life, Wester Kittochside, East Kilbride Plantlife and BSBI workshop Getting to know your families. For details see 21 April event. Sun 28 April, 12–3pm Linn Park Local Nature Reserve, Glasgow Drop-in event

Come along to the launch of 'Wild About Plants' our new initiative to encourage people to explore their parks, gardens and wild spaces. There will be family activities, games and crafts with Plantlife and Glasgow Countryside Rangers and Conservation Team. Entrance to the park is adjacent to Linn Park golf course club house, Simhill Road, Glasgow G44 5TA.

Sat 11 – Sun 12 May

Hopetoun House, Edinburgh

The Scottish Birdfair 2013

Come and see our stand at this event for bird and wildlife enthusiasts now in its second year, on the lawns at Hopetoun House. Workshops, children's events, live music and local food and drink. <u>www.scottishbirdfair.org.uk</u>.

Sat 18 May, 11am-4pm

Mugdock Country Park, near Milngavie, Glasgow

Getting the most out of Wildflowers Count

A practical workshop, full of ideas and tips on what to look for, while enjoying a walk through the countryside, and contributing to our national plant survey.

Mon 27 May, 11am-3.30pm

Ben Nevis, Fort William

Important Plant Area - Guided Walk

This iconic mountain is an Important Plant Area, home to many rare alpine plants. Although we won't reach the top, we'll look at the wonderful array of species on the slopes of Scotland's highest peak. Led by local expert Ian Strachan.

Fri 31 May - Sun 2 June

Royal Highland Showground, Ingliston, Edinburgh Gardening Scotland 2013

Come and see us again at the biggest gardening show in Scotland, in the Living Garden zone. Show information at <u>www.gardeningscotland.com</u>.

Sat 8 June, 11am-4pm

Taliesin Woods, Castle DouglasGetting the most out of Wildflowers Count

A practical workshop, full of ideas and tips on what to look for, while enjoying a walk through the countryside, and contributing to our national plant survey.

Wed 12 June, 10am–4pm

Centre for Stewardship, Falkland, Fife **Learn how to identify wild flowers**

This event is for people who would like to find out how to use wildflower keys and build up their expertise on Scottish wild flowers. Led by Dr Heather McHaffie, Royal Botanic Garden Edinburgh.

Sat 22 June, 10am–5pm

Ben Lawers, Perthshire

Guided walk

A high-level walk with the National Trust for Scotland's ecologist Dan Watson, to see some of the arctic-alpine plants for which Ben Lawers is famous. We can expect to see such gems as Alpine Forget-me-not, Alpine Gentian and Alpine Saxifrage, among many others. The walk requires a reasonable level of fitness, with an ascent of about 800 metres. Please bring walking boots; warm, waterproof and windproof clothing; packed lunch and drink.

Sat 22 June, 11am-4pm

John Hope Gateway at the Royal Botanic Garden Edinburgh

Drop-in event

Join in the fun to record as much wildlife as possible in a 24 hour event starting at 6pm on Friday 21 June. Plantlife will be there on Saturday 22 June, with interactive activities for families and ways to get involved in wildflower surveys. Free admission.

28 June – 28 July

Wild North Festival at Lochinver, Thurso and Castletown

Come and see the **Patchwork Meadow**, a giant patchwork exhibited at Lochinver (Assynt), Caithness Horizons in Thurso, and Castlehill Heritage Centre in Castletown. For more details about the project and the Wild North Festival, go to **www.plantlife.org.uk** and follow the links to the Patchwork Meadow.

Sun 14 July, 2-4pm

North Berwick Law, East Lothian

Important Plant Area - Guided walk

Enjoy this Important Plant Area with its species-rich grassland, basalt outcrops and panoramic views. There will be a chance to see a variety of plants that are uncommon in the area and learn some history of the Law. Led by Countryside Ranger Sam Ranscombe.

Sat 20 July, 11am–2pm

Tentsmuir, near St Andrews, Fife

Guided walk

Led by local botanical recorder Sandy Edwards. Find out more about the ecology of the Tentsmuir dune system and dune succession, and about the management of the site. The walk will focus on the dunes, but time permitting there are a variety of other habitats to explore including woodland, marsh and pools. Bring a packed lunch.

Sun 28 July, 11am–4pm

Wooplaw Community Woodland, near Lauder, Scottish Borders Getting the most out of Wildflowers Count

A practical workshop, full of ideas and tips on what to look for, while enjoying a walk through the countryside, and contributing to our national plant survey.

Sun 28 July

Forsinard Flows, Sutherland

Drop-in event

Celebrate **International Bog Day** with Plantlife, RSPB and the Bumblebee Conservation Trust at the Forsinard Flows Visitor Centre. Free admission to find out about all things peaty.

Wed 7 August, 10am-4pm

Benmore Botanic Garden, Argyll

Learn how to identify ferns in the woodlands of this enchanting botanic garden and visit the recently restored Victorian Fernery. Led by Dr Heather McHaffie. Free admission.

Sat 17 August, 2-4pm

Traprain Law, East Lothian Important Plant Area - Guided walk

Explore the different habitats on Traprain Law which is home to an array of wildflowers, nationally scarce lichens and a unique assemblage of mosses and liverworts. Hear tales from the past and walk through the maiden stone. Led by Countryside Ranger Laura Douglas.

Sat 24 August, 10am-2pm

Aberdour, Fife

Seashore walk

Find out more about seaweeds and seashore ecology. The walk will take in three different locations around Silversands Bay, where a good range of seaweeds can be seen. Led by Professor Martin Wilkinson of the Centre for Marine Biodiversity & Biotechnology, Heriot-Watt University.

Sat 12 - Sun 13 October, 1–4pm

John Hope Gateway at the Royal Botanic Garden Edinburgh

Drop-in event

Celebrate National Fungus Day with Plantlife Scotland. Come along to discover the mysterious world of fungi and lichens through activities, folklore and craft. Free admission.

Sat 19 October, 1–3.30pm

Haddo House, near Tarves, Aberdeenshire

Guided fungi walk

The estate lawns at Haddo House are internationally important for species of waxcap and coral fungi. Come along to see this dramatic display of colour and learn more about fungi identification and ecology. Free admission.

Sat 02 November, 10am–4pm

Centre for Stewardship, Falkland, Fife

Lichens in craft

The workshop combines ecology and craft. A chance to explore the Falkland estate, learn about lichens and then use Scottish lichens and fungi to create our own natural dyes. Taught by lichenologist Sally Eaton and craftswoman Sheila Bates.

How to book

All walks and workshops must be booked in advance. For more details or to book a place, please email <u>scotland@plantlife.org.uk</u> or phone (01786) 478509. Walks and training days are open to all and free of charge (unless otherwise noted), but donations to Plantlife are welcome. If you have any special requirements, please mention these when booking. Children under 16 should be accompanied by an adult. Shows: admission charges apply.

Photographic Competition

The photographic competition which was introduced for the 2011 meeting was run again at the 2012 meeting. There was excellent quality in the entries demonstrating that wild plants and fungi make fascinating subjects for the photographer.

The photographs were displayed throughout the day and delegates had the opportunity to view them and vote for their favourites. The winners were announced towards the end of the meeting. The three categories for 2012 were: **urban gems, magical mosses and fantastic fungi and mountain high – valley low**. There were just two winners this year, Roy Sexton won the magical mosses and fantastic fungi and the mountain high – valley low categories with the stunning Fly agaric (*Amanita muscaria*) and Alpine

Foxtail (*Alopecurus magellanicus*). The final category (urban gems) was won by George Ballantyne with the wild and whimsical 'Letting nature take its course' (the hawkweed is *Hieracium scotostictum*). The winning photographs are on the Scottish pages of the BSBI website and due to be published in the colour section of BSBI News (Issue No. 123).

The competition will be held again in 2013. This year's categories are:-

- Clamber the cliffs
- Fabulous ferns and
- If you go down to the woods today.

Details of the competition are available on the Scottish pages of the website or by contacting Ruth McGuire (Volunteer Publicity Officer) at <u>bsbiscotland@gmail.com</u>.

BSBI Membership in Scotland

We have a desperately small membership in Scotland of less than 300 – of which 50 or so are Vice-county Recorders. We need to grow the membership in order to support existing recorders with their field work, and ultimately we need to grow the membership to develop the next generation of recorders. If you have friends or colleagues who are, or might be, interested in BSBI membership, then please do encourage them to join. Personal recommendations are one of the most effective ways to recruit new members. Please get in touch if you would like some BSBI membership leaflets to hand out or perhaps display in your workplace. Alternatively potential new members can now join and pay on the BSBI website. (www.bsbi.org.uk/subscriptions.html)

BSBI Educational Field Meetings

We have been trying to expand the BSBI field meeting offer in recent years – particularly with the addition of meetings targeted at beginners or those who have never been on a BSBI field meeting before. This year, for example, we are advertising 14 Scottish field meetings in the BSBI Yearbook. Of these five are particularly aimed at beginners. In addition Faith Anstey lead two beginners' workshops on learning plant families in April – one in Holyrood Park and one at NTS Kittochside.

All these field meetings are advertised in the BSBI Scotland webpages and in the Plantlife Scotland newsletter and are open to **everyone** – whether

member or not. We are keen to encourage more people to develop their interest in botany and ultimately join the BSBI and share our passion for plants. So please encourage any friends or colleagues you think might be interested in improving their botanical skills to sign up and come along. Or, better still, bring them yourself!

Local Botany Groups

We attempt to spread this expanded BSBI field meeting programme reasonably evenly across the country. Despite this some years there may not be many (or any) BSBI field meetings in any particular area. So we would encourage you to get in touch with groups that specifically organise local botanical field meetings. Such as:

Ayrshire Flower Finders Group – lead by Gill Smart: <u>gsmart@swt.org.uk</u> Argyll Group - lead by Carl Farmer: <u>carl@vc98.co.uk</u>

Inverness Botany Group (IBG): www.invernessbotanygroup.com

Moray Botany Group – lead by Ian Green: <u>igreen67@aol.co.uk</u>

Perthshire Society of Natural Sciences (PSNS): <u>www.psns.tsohost.co.uk/</u> <u>botanical/botanical.htm</u>

Their field meetings are generally very informal and enjoyable. Many have a particular focus such as recording a site or refinding some long lost population. Last summer, for example, the Moray Botany Group found *Epipactis helleborine* (Broad-leaved Helleborine) on the wooded banks of the River Findhorn - the first record in Moray since 1934. Some meetings are in programmes that are advertised well in advance. Others are arranged at short notice by phone or e-mail when weather forecasts are known. Sometimes short summer evening meetings are arranged. If your local group isn't listed above then please drop me a line with details.

A number of other organisations arrange field meetings of interest to botanists. They include:

Local Recording Centres, such as The Wildlife Information Centre (TWIC) and North East Biological Records Centre (NESBReC).

Volunteers needed for TPP 'Mopping-up' in Scotland!

Last year was the final full year of the Threatened Plant Project (TPP). Thank you to *everyone* who contributed TPP reports from Scotland over the past five years. Of the 792 Scottish selected sites some 430 were surveyed – a tremendous achievement. The data is being digitised by Jane Squirrell,

the forms are being scanned by RBGE student volunteers and data analysis and report writing has begun. However there is a window of opportunity in 2013 to do some 'mopping-up' of TPP sites that were selected but remain unsurveyed.

We recently sent recorders a list of these unsurveyed selected sites for the first four years (2008-11 inclusive). The 2012 selected site list is still available on the BSBI website along with all the TPP guidance and recording forms at <u>www.bsbi.org.uk/tpp.html</u>. We would be pleased to receive completed TPP forms for *any* of the unsurveyed sites – but especially for those listed below (in order of priority):

It would also be great to get more returns for *Alchemilla wichurae*. However Purple Milk-vetch (*Astragalus danicus*), Round-fruited Rush (*Blysmus compressus*), Nothern Hawk's-beard (*Crepis mollis*) and Heath Cudweed (*Gnaphalium sylvaticum*) are lower priority as these have already been analysed. Nevertheless, completed TPP forms would still be very welcome.

It is really important that forms are completed even where (or *especially* where) the target population **wasn't** found. For these it would be very useful to receive a reason, or where you are unsure, informed speculation on why the population wasn't found.

No sites were selected for a number of TPP species that are rare in Scotland - mainly because there were no reasonably recent or detailed records to ask VCRs to follow up on. It would be fascinating to have completed forms for any species in this category where they are thought to occur natively (or as archeophytes) in Scotland. They include: - Dodder (*Cuscuta epithymum*), Sea Barley (*Hordeum marinum*), Smooth Cat's-ear (*Hypochaeris glabra*), Small Water-pepper (*Persicaria minor*), Corn Buttercup (*Ranunculus arvensis*), Sand Catchfly (*Silene conica*) and Spreading Hedge-parsley (*Torilis arvensis*).

This is not *just* a project for VCRs and we would be very pleased if members would like to help with this mopping-up exercise. If you would like to offer your services **please** contact your local VCR directly (contact details on the BSBI website or the Yearbook). Or if you can spare more time to help over a bigger area (e.g. several vice-counties), get in touch with Eric Meek (erandammeek@gmail.com) who is co-ordinating volunteer effort and liaising with Recorders. Send him a note of your availability and any particular geographical or other preferences.

Species	Common Name	Number of selected sites surveyed in B.I. (2008-2011)	No. of unsurveyed selected sites in Scotland
Sibbaldia procumbens	Least Cinquefoil	17	33
Polystichum lon- chitis	Holly-fern	26	27
Pseudorchis albida	Small-white Orchid	32	41
Baldellia ranunculoides	Lesser Water- plantain	52	9

Jim Mcintosh, BSBI Scottish Officer, RBGE 20a Inverleith Row, Edinburgh EH3 5LR Tel: 0131 2482894 Mob: 0791 7152580 Email: j.mcintosh@bsbi.org.uk

Richard Pankhurst 8 June 1940 – 26 March 2013

We were very sad to hear of the death of Richard Pankhurst, who died peacefully at the Royal Infirmary Edinburgh on 26 March after a battle with cancer. Richard was a very great stalwart of this Society and will be greatly missed. He was the Recorder for VC 110 (Outer Hebrides) for many years and also served two terms on the Scottish Committee, one of them as Chairman, but above all he will be remembered for the unrivalled depth of his knowledge and his willingness to share it. His rigour in identifying microspecies was an inspiration to many and his development of the multiaccess Pankey was a testament to his desire to use his computer skills to promote them and to help people to identify them. He loved botanising in the company of others and was an entertaining companion who greatly enhanced any excursion.

A full obituary will appear in the 2014 BSBI Yearbook. MCR

Looking Forwards

MARTIN ROBINSON

Last year I wrote that there couldn't be a more interesting time to be involved with the BSBI as the chairman of its Scottish Committee. This has proved to be true 'with knobs on'. The conversion of the society into a Company Limited by Guarantee is not just a procedural detail. It is a catalyst for fundamental change in what we can achieve. What we are seeing is the BSBI evolving from a 'club' into a professional body, better equipped to meet the exciting challenges that seem to be increasing by the day. To call it a club is not to belittle the achievements of the past, which are enshrined in the ground-breaking 1960 *Atlas of the British Flora* and its millennium successor, celebrated at the very successful Edinburgh conference last September. But now we are not only working towards a third atlas, in 2020, but also a whole range of other projects aimed at a more finely-tuned monitoring of plants in their habitats, at a time when the countryside is under more pressure than ever, the money available from traditional sources is shrinking and the climate is changing.

Apart from our small, highly-stretched and excellent staff we are basically amateurs doing a professional job, and it's a job that requires skills. No-one has all the skills, and in fact the great thing about BSBI membership is that it's a life-long learning process, in which you can engage at any level and really enjoy yourself. Last year the society set us the challenge of raising our public profile and engaging more people to become involved, build their skills and so to help us carry out all this work. We have risen to the challenge in Scotland by forming the Outreach Group, which is pioneering methods of making botany accessible and fun, based on methods that our committee member Faith Anstey has developed and, importantly, working with Plantlife Scotland for our common interest. The two plant families workshops organised for April will build on the success of the training days already run for several years by Jim McIntosh, but will take a slightly different approach. We will also have a presence at the Scottish Bird Fair in May and hope to see some of you there.

The Annual Meeting at Battleby was a great success, with a good number of exhibits and a wide range of talks in lovely surroundings, and we were all gratified to see it so well supported. This year we return to the Royal Botanic Garden in Edinburgh and look forward to yet another successful day there. In the meantime if anyone can come up with a suitable venue in the west of Scotland we'll look into it for the future.



Figure 1. Carex paniculata in SE moat at Lumphanan Peel.

Re the new classification based on DNA sequences, even as a youngster I looked forward to the time when one would be able to put a leaf into a machine like those of the bus conductors and get out a ticket giving the plant identification.

 $\mathbf{P}\mathbf{M}$