

## **2002-2003 NWDG COMMITTEE RESPONSIBILITIES AND CONTACT DETAILS**

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9SY

## **EDITORIAL**

This is the last Newsletter for me as editor. It's been a pleasure doing them over the past four years. Thanks to everyone who sent in articles, letters, news items, photos and illustrations.

It's good to leave the newsletter in the capable hands of Alison Averis. Please send your contributions to:

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Tel/Fax: 01620 860029      Email: abg.am.averis@virgin.net

Nick Marshall

### **Reminder - NWDG 2003 Field Excursion - Book Now**

**This year's excursion will be in East Cumbria, 5th - 8th June (note changed dates). See last newsletter (or NWDG website) for details.**

**You still have time to book: booking deadline is Monday 19<sup>th</sup> May. Booking forms were sent with the last newsletter, and can also be downloaded from the NWDG website.**

### **Other forthcoming events:**

- Introduction to Woodlands Lichens Workshop, Argyll, 11-13 September
- Field trip to Abruzzo, Italy - 17<sup>th</sup> -24<sup>th</sup> of September
- Bryophyte Workshop, Glen Affric, 9-11 October

### **IMPORTANT INFORMATION FOR MEMBERS**

Please note that we can no longer afford to send out the Newsletter and other mailings to lapsed members. If you wish to continue to receive NWDG publications and news you must ensure that you have paid your subscription for the current year. Why not make life easier for yourself and us and set up a standing order? In future, members who have not renewed by March will be alerted by a red sticker on the envelope containing the Spring Newsletter. Anyone who still has not paid by October of any year will be deleted from the mailing list until they do renew.

If you work for an organisation such as SNH, FC or SAC and your subscription is paid by that organisation, please will you ensure that the person who sends out the cheque is aware of the name and address of our new Membership Administrator. It is important that nothing more is sent to Debbie Cowen at Tayside Native Woods as that office has closed.

### **Membership cards**

From this year onwards, you will be sent a membership card when you subscribe to the NWDG. These have been printed for us on 100% post-consumer recycled card by Pointer Print of 22a Court Street, Haddington, East Lothian. If you do not receive one, please get in touch with our Membership Administrator, Jeanette Hall

# **NATIVE WOODLAND DISCUSSION GROUP NEWS**

## **NOTES FROM THE CHAIR**

**Carol Crawford**

### **Annual Excursion: East Cumbria**

Hopefully everyone has now been informed of the change of date to 12<sup>th</sup> – 15<sup>th</sup> June (from 5<sup>th</sup> – 8<sup>th</sup> June) because of the lack of accommodation on the earlier dates. If you haven't yet booked, please do so ASAP so that Iris can get ahead with booking transport etc. Hope to see lots of you there.

### **Committee Make-up**

There have been further changes to the committee. Sadly, Helen Gray had to resign owing to the demands of new business. We thank her for the contribution she made. The good news is that we have a new treasurer - Tim Hall of the Woodland Trust. By the time you read this he will have taken over the reins from Alison Averis so that she can ease herself into the role of newsletter editor. We thank Alison for her sterling (!) work as treasurer and are sure she will be equally effective in her new role.

Looking ahead, Nick Marshall has agreed to stay on as an ordinary committee member. As you'll have gathered, this is his final newsletter. The role of editor involves much more than editing: laying out the text and pictures, liaising with the printer, organising the mailing, and even doing some of the enveloping, are amongst the tasks Nick has carried out twice a year for the last 4 years. So a big thank-you to Nick for all his efforts.

It looks like the rest of the committee will be unchanged (from that inside the front cover). However we may be looking for a new workshop organiser come the AGM in

June, depending on where Juliet Robinson's work takes her. We are hoping to have a couple of new faces on the committee next year in case there are as many changes as last year! In any case it is always good to have fresh ideas and approaches. So if you would like to join us do get in touch with me or another committee member before the AGM.

### **Membership**

By early April 110 members had renewed (39 by standing order) and we were waiting for another 30 – 40 of last year's members to renew. If you are in the latter category please send in your subscription to Jeanette Hall ASAP, and, ideally, set up a standing order for next year.

### **September 17 – 24<sup>th</sup> 2003 trip to Abruzzo**

Richard Thomson and Lucio Di Cosmo's plans for this are now well advanced – see elsewhere in this newsletter. Hope to see some of you there. Lucio has now finished his time with Forest Research and returned home to Italy. Big thanks are due to him for sowing the seeds and doing much of the organising of our first overseas trip.

### **2004**

In 2004 the Native Woodlands Discussion Group will be 30 years old. The first meeting of the group was held in May 1974, in Inverness, and the first field visit was to Glen Affric. The group was initially set up as the Native Pinewoods Discussion Group and in 1978 the remit was widened to cover all native woodlands.

To mark the occasion we are planning an indoor meeting early in 2004 to review past achievements and look at future aims.

To the latter end a questionnaire will be sent to all members later in 2003: to review current activities and see whether members would like additional services provided. The committee are very keen that the early 2004 event should also be celebratory, with an evening social. We plan to invite as many of those who attended the first meetings as possible. A sub-group of the committee will take this event forward so if you have any ideas, or if your organization is able to offer a low cost venue, please contact myself, Ruth Anderson or Jeanette Hall.

Next year's field excursion (in May or June) will revisit our pinewood roots. Watch this space!

### **Woodland Bryophyte Booklets**

I have been able to spend a bit of time on the second booklet in the last few months, though the dry conditions have not been ideal for photographing bryophytes! So I've mostly been learning the new species (again with Ben Averis' help – thanks Ben!) and getting to grips with a more advanced desk-top publishing package (Pagemaker) than used last time (Publisher). Using Pagemaker will hopefully speed things up when the book gets to the printer – hopefully this autumn.

Meanwhile the 3<sup>rd</sup> edition of the first booklet continues to go well - 330 copies sold since November 2003. If I had more time to market it properly the rate of sales would increase. However since the First Edition of 100 was published 2 years ago over 1500 copies have been dispatched – who would have thought there would have been so much interest?

I've recently been given an old book: A Popular History of British Mosses by Robert M. Stark. Perhaps the answer to the last question lies in some of his poems, e.g.

“There to charm the curious eye,

A host of hidden treasures lie,  
A microscopic world which tells,  
That not alone in trees and flowers  
The spirit bright of beauty dwells,  
That not alone in lofty bowers  
The mighty hand of God is seen,  
But more triumphant still in things men  
count as mean.” •

## **TREASURER'S REPORT**

### **Alison Averis**

I am happy to report that 2002 was a good financial year for the Native Woodlands Discussion Group. The excess of income over expenditure in 2002 was £1025.25. As a result of increasing the subscription rate, pursuing lapsed members and recruiting new ones, the income from subscriptions in 2002 was almost double what it was in 2001. The cost of the Newsletter was much less in 2002 than in 2001 because the bills for three issues were paid in 2001 and there was only one issue in 2002. There will, however, be three issues in 2003. The field meeting and the workshops not only kept to their budgets but made a small profit. Carol's booklet 'Bryophytes of Native Woods' generated £1883.21 in donations for the second edition and income from the third edition. This money has been loaned back to Carol, with additional sponsorship to bring the total to £2700, to fund the printing of the third edition of the booklet. Carol is repaying this loan at the rate of 50 pence for every booklet sold. You will notice that we paid out in bank charges far more money than we received in interest on the account. Fortunately, our bank has now abolished charges on this type of account and so we will have free banking from now on.

When we raised the subscription rate in 2002, we intended that the new rates should stand for at least five years. This means that we cannot be complacent. However, neither do we want our

members' money to do nothing more than accumulate in our bank account. If any member has an idea for a small project or publication which would benefit native woodlands, their flora and fauna and the NWDG, please get in touch with a member of the Committee. We have already loaned a sum of money to Carol Crawford to fund

her booklet, and are keen to support other members, too.

We would also like to thank the members who have donated money to the NWDG this year. We are very grateful to all of you.

## SUMMARY OF ACCOUNTS 2001-2002

<b>Income</b>	<b>2002</b>	<b>2001</b>
Subscriptions	£2491.50	£1289.00
Field Meeting	£1847.00	-
Workshops	£770.00	£1423.00
Publications	£1883.21	-
Donations	£10.50	-
Transfer from old account	£51.28	£2267.39
Interest	£7.55	£17.57
<b>TOTAL</b>	<b>£7061.04</b>	<b>£4996.96</b>
 <b>Expenditure</b>		
Newsletter	£883.45	£2169.24
Field Meeting	£1505.49	-
Workshops	£474.96	£863.51
Publications	£2750.00	-
Sundry items	£346.53	£176.00
Telephone	£11.75	£11.75
Postage	-	£22.83
Bank charges	£63.61	£18.25
Transfer to new account	-	£2267.39
Outstanding Honoraria	-	£1258.85
<b>TOTAL</b>	<b>£6035.79</b>	<b>£6787.82</b>
<b>Income minus Expenditure</b>	<b>£1025.25</b>	<b>£-1790.86</b>
<b>Final Bank Balance</b>	<b>£3094.87</b>	<b>£2345.50</b>

Please note that the Accounts for 2002 have not yet been audited. Any changes will be presented at the AGM and published in the next Newsletter.

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**NWDG LOWER PLANTS  
SECTION  
Ben Averis**

Since the last newsletter we have had one Lower Plants Section field visit:

### Linn Dean: 19 January 2003

Linn Dean is a Scottish Wildlife Trust Reserve in the Lammermuir Hills, south-east of Edinburgh. It is a steep-sided stream valley with woodland, juniper scrub, bracken, grassland, flushes, cliffs and a spectacular waterfall: like a tiny bit of the Highlands in the Southern Uplands. Nine people came here on 19 January, including two 'big guys' from the Edinburgh Royal Botanic Garden who must be Britain's top performers on lichens (Brian Coppins) and mosses and liverworts (David Long), and two small children who managed very well on the steep terrain and enjoyed looking at all sorts of things, especially a large piece of white bubbly foam in the stream. (My 6 year-old daughter Elen said afterwards: "It was the best adventure I have ever had!")



Deep in the gorge Ben Averis and Brian Coppins take a break

David Long lives not far from here and knows the site very well, so he kindly showed us around a bit: not just mosses and liverworts (bryophytes) but also a juniper restoration area with young planted junipers growing very well (not a common sight). He's blitzed the place for bryophytes over the years - though on this day he added two species to the 190 or so on his site list - and found it to be one of the richest sites bryologically in the Lothians. Bryophytes like damp, humid conditions, so a deep ravine such as this has good habitats for these plants. David has also found Wilson's filmy fern (an

'honorary bryophyte') here: unusually far east for such a western species. The water level was too high for us to get to the filmy fern on this day but we saw many bryophytes including several common species and some which are not so common such as the western *Dicranodontium denudatum* (moss) and *Plagiochila spinulosa* (liverwort), the north-eastern liverwort *Barbilophozia hatcheri* and the calcicole liverwort *Scapania aspera*.

Brian found about 85 lichen species: mainly common ones, with nothing really rare. The lichen flora is not as notable as the bryophyte flora, and might be limited by acidity (of bark and rocks), heavy shade in the woodland, and past atmospheric pollution. Some of the more shaded trees and shrubs had very little in the way of lichens and bryophytes growing on them. However, lichens were very plentiful and varied on some of the older and better lit trees and shrubs.

Finally, among mosses on the woodland floor Carol Crawford found.....a spoon! I might not have seen fit to mention this (yes, we've all found such things before in the woods) except that this well made, nicely-proportioned dessert spoon was not at all rusted, dented or bent but was in perfect shape and really shiny with hardly a scratch. Like a mirror indeed. Like a teapot still warm or a fire still smouldering.....perhaps we were being watched!

The Lower Plants Section exists mainly to organize informal, friendly field outings and communicate information about woodland bryophytes, lichens or fungi. Membership is free to any NWDG member. Communication within the group is mainly by e-mail. I hope to send details of further visits around the e-group later this spring. For any information, queries or suggestions, please contact Ben Averis, 2 Traprain Cottages, Haddington, East

Lothian EH41 4PY; tel. 01620 860029; E-mail [abg.am.averis@virgin.net](mailto:abg.am.averis@virgin.net) •

## HAND LENSES

Since February several people have bought Eschenbach hand lenses from the supply purchased by NWDG. We still have a few of these lenses left for sale: £18.50 each at NWDG workshops, field-meetings and Lower Plant Section excursions, or £19.00 by post (send cheque payable to 'Native Woodlands Discussion Group' to Ben Averis, 2 Traprain Cottages, Haddington, East Lothian, EH41 4PY). The normal retail price is £23.48 including p&p. These lightweight x10 lenses are made entirely from plastic, with a built-in case. When folded into the case they are circular, 5 cm in diameter and 2.2 cm deep. Unfolded they are 8.8 cm long. The magnifying part of the lens is 3.3 cm in diameter, giving a large field of view and good lighting. Most importantly is that unlike conventional lenses they are waterproof and do not steam up in the rain!

## NWDG LOWER PLANTS WORKSHOPS

**Gordon Gray Stephens and Ben Averis**

### 1. Bryophyte Workshop, Glen Affric, 9-11 October 2003

This workshop for the identification (and appreciation!) of mosses and liverworts (bryophytes) will be in the superb pinewoods in Glen Affric in the northern Highlands: a big change from the previous bryophyte workshops in Argyll. Glen Affric has some of the best native pine woodland in Scotland, as well as birch woodland and some interesting boggy glades. There are several uncommon mosses and liverworts among the rich, varied and luxuriant bryophyte assemblages. The workshop will be suitable for beginners and for those with

more experience of woodland mosses and liverworts. The itinerary will be:

Thursday 9 October

Introduction to woodland bryophytes, in evening at Glen Affric Hotel.

Friday 10 October

Visit to western part of Glen Affric in morning and afternoon, followed by indoor identification/microscope session at Glen Affric Hotel in evening

Saturday 11 October

Visit to eastern part of Glen Affric in morning and afternoon, finishing around 3.30 p.m.

The workshop will be based at the Glen Affric Hotel, Cannich, Beauly, Inverness, IV4 7LW. Accommodation and food is provided here at a very reasonable cost - you will need to book this yourself: Telephone 01456 415214; Fax 01456 415254; E-mail: [info@glen-affric.co.uk](mailto:info@glen-affric.co.uk)

To book a place on this workshop, please fill in the booking form sent with this newsletter, or contact: Gordon Gray Stephens, Old Poltalloch, Kilmartin, Argyll PA31 8RQ; Tel: 01852 500366; E-mail: [whnw@snw.btinternet.com](mailto:whnw@snw.btinternet.com)

### 2. Introduction To Woodlands Lichens Workshop, Argyll, 11-13 September

The two-day workshop will be led by Scotland's leading lichenologists. It is aimed at both beginners and improvers. It will cover the identification of typical woodland species and also some rare species. Woodland management for lichens will also be discussed.

Evening sessions will be held in Ardroy Outdoor Education Centre, with optional joint meals and after-course drinks in Lochgoilhead.

On the Friday and Saturday we will visit native woodlands by kind permission of Forest Enterprise.

For more information about both workshops and a booking form, see the enclosed flyer. •

## **TRIP TO ITALY**

### **Richard Thompson**

The NWDG goes international this year with a trip to Abruzzo National Park. Mountains, endless tracts of native woodlands, bears, wolves and grappa. How could you resist? The trip has been arranged for the 17<sup>th</sup> -24<sup>th</sup> of September. The cost will be somewhere in the region of £300-£375 (including flights). Lucio Di Cosmo has arranged an interesting itinerary which should contain at least one issue close to your heart (if only the visit to the vineyard). We will be looking at the influence of national parks on woodland management and animal reintroductions not to mention wood pasture, archaeology, woodland flora and, weather and ailing limbs permitting, the tree line.

#### **ITINERARY**

Wednesday 17 September

Arrive at Sant'Eufemia a Maiella at 17:30  
After dinner: relaxing introduction to Italian flora and woods

Thursday 18 and Friday 19 September

Meeting foresters from the Maiella National Park: a short overview about the National Park Policy. The two days are intended as visits to different kinds of woods and area to show something about forest management and actions to protect flora and fauna, as well as "tourist management".

Saturday 20 September

Old "stone huts summer village" for pasture and old pastured wood in the Abruzzo national park.

Sunday 21 September

A long walk through recolonisation, beech woods, pastured land. Possibly including a walk to the tree line depending on the weather and how energetic we're feeling.  
Visit to the botanical garden.

Monday 22 September

A tour round various landuses: landscapes around the Abruzzo (with visit to a vineyard).

Tuesday 23 September

Meeting with Corpo Forestale Biologist about animal reintroductions.

Wednesday 24 September

Visit to Pescara  
Fly.

If you fancy the idea, let me know, and send a £75.00 deposit (cheque payable to NWDG) to Richard Thompson, Forest Research, Northern Research Station, Roslin, Midlothian, EH25 9SY The deadline will be the end of the NWDG meeting in Cumbria. •

# GROUP/PROJECT REPORTS

## **DARROCHWIDS - REGENERATING THE NATIVE WOODLANDS AND HABITATS OF THE NORTH-EAST**

**Liz Shortall**

The Scottish Forest Alliance (SFA), a novel collaboration between BP, Forest Enterprise, RSPB Scotland and the Woodland Trust Scotland, are supporting a large scale native woodland project in the north-east of Scotland.

Just south of Huntly, on the edges of the Clashindarroch Forest, three sites, totalling 500ha, have been identified to re-create a new native woodland. Centuries ago, this landscape served as the hunting grounds of the Dukes and Kings of Richmond and was extensively wooded with native trees such as oak, birch, ash, scots pine, rowan and hawthorn. As a result of land clearances for farming, intensive grazing and a host of other factors, the landscape and forests of the North East have transformed dramatically from wild woodlands into the rolling pre-dominantly agricultural hills of the present day.

Darrochwids is a project that attempts to recreate some of this past landscape, whilst making a significant contribution to the locality, providing inspiration and acting as a demonstration to others. In the long-term, it is envisaged that the sites will present an opportunity to create linkages into the existing forest landscape forming an extensive forest habitat network. The mix of species and woodland design as well as introductions of groundflora and deadwood will facilitate and encourage the colonisation of native insects, birds and mammals.

The project will create employment opportunities for local contractors, and encourage the development of local enterprises and tourism. An exciting and varied range of trails for walkers, cross-country skiers, horse riders and cyclists will be developed. For local schools, the project aims to provide an all-encompassing education package, as well as opportunities for researchers at universities and research institutes in the region, nationally and in other European countries.

The full benefits of Darrochwids may not be experienced by this generation or the generation to come. However we owe it to our descendants to restore some of these lost landscapes and the rich mix of wildlife that thrives within them. It is an opportunity to link the land and land-uses to both nature and people, not only by creating jobs, but also by promoting the health and well being of the communities in the region.



# ARTICLES

## THE NWDG - A LITTLE PREHISTORY

**Rawdon Goodier**

The arrival of the latest newsletter, with the editor's request for material for the next issue, coincided with discovering among my papers some long overlooked material relevant to the Group's foundation which may supplement Carol's interesting review of the Group's history in the 1999 Newsletter (Vol 24.2).

In September 1969 I transferred within the Nature Conservancy from the post of Regional Officer for North Wales to that of R.O. for East Scotland. I had served my apprenticeship in woodland conservation by writing management plans for several Welsh National Nature Reserves under the scrutiny of the Director Dr Elfyn Hughes and the chairman Professor P W Richards of tropical rain forest renown. I had not been on the job in Scotland long before I recognised the particular significance of the native pinewoods, stimulated by Donald McVean's work and of course by reading Steven and Carlisle's fine monograph. In the latter work I came across the suggestion, in their conclusions for promoting research and conservation, that:

"It would probably help to further this enterprise if the different owners, public and private, together with foresters and other biologists especially interested in the native pinewoods were linked together informally, so that there could be a periodic exchange of information about them, and also some cooperative planning of investigations. This should not be difficult to organise and perhaps the two government organisations interested, the Forestry Commission and the Nature

Conservancy, might take the lead."

This suggestion was the seed source of the Native Pinewoods Discussion Group. It also seemed a sensible way to develop a more active conservation strategy and indeed one wondered why it had not been adopted earlier. So, in discussion with the NC Director, Dr W J Eggeling, we decided to promote a meeting of the main interested parties at the Aberdeen Forestry Department under the chairmanship of Professor J D Matthews. This venue was chosen because of its links with Steven and Carlisle. The meeting was held on 27th November 1970 and comprised four groups of participants: Dr Eggeling and myself from the NC conservation branch with Mr A H F Brown and Dr R G Bunce from the NC's woodland research team. The FC were represented by Mr E Richards (Conservator E), Mr D T Seal (Asst.Cons) with Mr A S Neustein and Mr R G Crathie from the FC Northern Research Station. Aberdeen University were strongly represented by Professor Matthews, Dr S Murray and Mr C S Millar from the Forestry Department, Dr J B Kenworthy from the Botany Department and Dr E A Fitzpatrick from the Department of Soil Science. Private forestry interests were represented by Lord Glentanar and his Head Forester Mr D. Ross, Colonel Grant of Rothiemurchus and Major H W Duncan of the Scottish Woodland Owners Association.

The minutes of the meeting record that in my introduction I explained that:

"The present meeting had been called because the Nature Conservancy were engaged in a reassessment of their role in the conservation of the Scots Pine forests and because it was thought that it would be valuable if some of the Conservancy's ideas for future work were submitted to the

scrutiny of other interested persons so that advice could be taken at an early stage before the programme of work was initiated. The proposal which was the main subject of this meeting was for a re-survey of the whole range of pinewood remnants which would serve as a framework upon which could be built a strategy for conservation action”

The occasion of this meeting and its links to Steven and Carlisle’s suggestion was mentioned in a brief paper on “The Native Scottish Pinewoods” included in Supplement to “Forestry” 1971 pp 73-76. OUP.

The survey was initiated in 1971 with Bob Bunce supervising the field work undertaken by Aberdeen Forestry Department graduates. A further meeting to discuss the results of the survey was held at Aberdeen University on April 18th 1973 with many participants in common with the 1970 meeting. The eight page minutes of this meeting give a fascinating preview of many of the arguments which were to surround pinewood conservation for the next twenty years (or more!). The survey results were of course later published by the newly constituted Institute of Terrestrial Ecology under Bob Bunce’s editorship in the volume recording the results of the 1975 Aviemore Conference on the Native Pinewoods of Scotland. Another result of these early discussions was the founding in 1974 of the Native Pinewoods Discussion Group, our earlier incarnation and, as they say, the rest is history. ●

## **AFFINITIES BETWEEN SCOTTISH BRYOPHYTES AND TROPICAL FORESTS**

**Ben Averis**

Whenever people talk about the mild climate of the west Highland coast, there will probably be some mention of the palm trees and other tropical plants which have been grown in places such as the famous Inverewe Gardens in Wester Ross. Far less well known is that the native vegetation and flora of this part of Britain actually has its own natural tropical affinities in the form of certain mosses and liverworts (bryophytes). If those earlier planters had been bryologists they might not have troubled themselves to fetch trees and shrubs from the distant tropics in order to demonstrate the mildness of the west Highland climate, for they would have seen that the evidence already existed here, albeit less conspicuously. (Perhaps they were bryologists whose findings sparked off the idea of planting palms!)

The bryophytes in question are mostly what we in Europe call oceanic species: the term oceanic indicates their restriction in Europe to western areas where it rains a lot and temperatures are equable with mild winters. The habitats of these plants are mainly humid, sheltered, rocky places in woods, ravines and north-facing hillslopes. The British Isles has the greatest concentration of oceanic bryophytes in Europe: this is not surprising because we, together with the Faroe Islands, have the most humid and equable climate in Europe.

The tropical affinities of oceanic bryophytes become evident when we look at their world distributions. Some are known only from Europe, but others such as the mosses *Daltonia splachnoides*, *Dicranum subporodictyon* and *Sematophyllum micans*, and the liverworts *Adelanthus decipiens*, *Colura calyptrifolia*,

*Drepanolejeunea hamatifolia*, *Herbertus aduncus*, *Metzgeria leptoneura*, *Plagiochila exigua*, *P. carringtonii*, *Radula aquilegia*, *R. voluta* and *Scapania ornithopodioides* grow also in such places as temperate forests along the coast of western north America, and widely scattered tropical and subtropical montane forests in Africa, the Caribbean, south America, the Appalachians, the Himalayan foothills, Australia, New Zealand and oceanic islands such as Madeira, the Azores, Tristan da Cunha and Hawaii. The climates of these places show some similarities to those of Britain and the western European mainland. Many oceanic species belong to larger genera or families which are centred on tropical and subtropical areas. Exactly how some species came to have such markedly disjunct distributions as Scotland, British Columbia and Himalaya is a mystery. They might once had more continuous distributions which since became fragmented by climate change. Or they might have managed to disperse themselves very widely and colonize suitable habitats in far-flung parts of the world: dispersal by wind-blown spores comes to mind here, though some of these species are not known to produce spores in present-day Europe. Whatever the reason for their disjunct distributions, their obvious tropical affinities are fascinating, and can be clearly related to climate. The British Isles can be seen as one of those places where the humid and equable climate of tropical mountains extends north and south along some continental margins.

So far I have discussed tropical affinities on the basis of the distribution patterns of certain species. This is not the only way by which geographical relationships can be recognized. Rather than ask: "which species grow here?" one can also ask, as I often do: "in what kind of way do plants (regardless of their identity) grow here?"

The type of substrate on which bryophytes grow can reveal interesting geographical affinities and relationships with climate just as much as the identity of the species does. In areas with a mild and wet climate bryophytes are remarkably abundant, and appear to have a longer growing season and an ability to spread and colonize new habitats fairly quickly. For example, the bark of trees and shrubs is a shorter-lived habitat than rock. In humid, equable areas bryophytes can be just as abundant on both types of surface, whereas in colder or drier areas they are relatively scarce on bark. Within Scotland this can be seen not only by the greater luxuriance of bryophytes on trees in the wetter and more equable west, but also by the way in which some species are mainly rock plants in the east but become just as common on bark in the west. Furthermore, in the far west some species grow not only on trees and tall shrubs but also on the shorter-lived habitat of heather stems. On Harris I found the scarce and normally ground-dwelling moss *Myurium hochstetteri* growing as an epiphyte on heather stems, marking an ecological link with its occurrences as a woodland epiphyte in the much warmer islands of Madeira, the Azores and the Canaries.

A more remarkable expression of rapid growth and colonization in response to humid, equable conditions is that of bryophytes growing on the living leaves of vascular plants. When growing like this they are referred to as epiphyllous. Even evergreen leaves such as those of holly and rhododendron are much more temporary than the bark of woody species, and can be colonized only by species which can grow quickly. In most places these leaves come and go before bryophytes get a chance to colonize them. Not so in the warm and wet tropical rain forests which are the world headquarters of epiphyllous bryophytes.

You've probably guessed what I'm about to tell you, and yes you're right - we have epiphyllous bryophytes here in Scotland! Since my first findings in 1994 I have found them at 9 sites, all at low altitude in the Hebrides and the extreme western mainland. Most are not actually in woods. The most common epiphyll is the oceanic liverwort *Colura calyptrifolia* (itself a scarce species) which forms tiny pale yellowish tufts on the fronds of hard fern *Blechnum spicant* hidden away among tall heather on sheltered north-facing to east-facing slopes. Very rarely the equally small liverwort *Microlejeunea ulicina* accompanies the *Colura*. *Blechnum* fronds live for about two years, and *Colura* usually appears to take about a year or so to colonize as it grows invariably on the previous year's fronds. Even in the tropics, epiphylls grow mainly on longer-living evergreen leaves. On the Isle of Eigg in July 2002 I managed to find one tuft of *Colura* on one of that same year's *Blechnum* fronds - that is rapid colonization! Some people class small liverworts growing on filmy ferns *Hymenophyllum* spp. or on large mosses such as *Thamnobryum alopecurum*, as epiphyllous, but I am not convinced that these are true epiphylls because they seem to creep along and among stems rather than actually establish and grow on smooth living leaf or frond surfaces.

Although these epiphyllous bryophytes are not in woods, their sheltered heathland habitats and microclimates are rather like those of woodland in miniature. I have,

however, found epiphyllous bryophytes in a more wooded environment. In ornamental shrubbery in well-wooded grounds of The Lodge on Eigg I found the liverworts *Microlejeunea ulicina* and *Metzgeria fruticulosa* growing on the holly-like leaves of the Chilean evergreen shrub *Desfontainia spinosa*. Incidentally, The Lodge gardens have a most luxuriant and interesting bryophyte and lichen flora on various trees and shrubs. On apple trees some thalli of the normally flat-growing lichen *Lobaria virens* grow in a strangely tubular, more erect fashion around unusually elongated shoots of the moss *Ulota phyllantha*, the tips of which protrude from the lichen tubes: could this kind of growth form be more characteristic of warmer parts of the world?

The occurrence of epiphyllous bryophytes in Scotland must be one of our most remarkable botanical affinities with warmer parts of the world. We are much closer to the Arctic Circle than to the tropics! Nowhere else in the world have epiphyllous bryophytes been found so far from the Equator. The nearest contenders are some small liverworts on rhododendron, laurel and ivy leaves in SW Ireland (D. Synnott, pers. comm.), *Metzgeria fruticulosa* on box leaves at one site in Somerset and another site in Buckinghamshire (Porley 1996), the moss *Hypnum resupinatum* on bramble leaves in Norfolk (Stevenson 2001), and records from Spain, Madeira, the Azores, the Caucasus, Japan, China, British Columbia and the Appalachians (Porley 1996). There may be more Scottish records in future, but it is clear that epiphylls are rare here. The tropical affinities of our Scottish epiphyllous bryophytes are all the more remarkable in that some of their locations are within shouting distance of exposed places with vegetation showing clear affinities with cold, northern, montane environments. Also these plants, and oceanic bryophytes in general, highlight the affinities which the western Highlands

have with tropical environments while in contrast the eastern Highlands have affinities with very different cold, dry boreal environments. In this way bryophytes help to show us how Britain, small though it is, actually straddles a major divide in terms of different environments on a world scale.

### References

Porley, R.D. (1996). Foliicolous *Metzgeria fruticulosa* on Box leaves in the Chiltern Hills, England. *Journal of Bryology* Vol. 19, Part 1, Pages 188-189.

Stevenson, R. (2001). An epiphyllous moss in Norfolk. *Bulletin of the British Bryological Society* No. 77, Pages 49-50. •

## CULINARY USES OF WOODLAND PRODUCTS - 2

### Alison Averis

The cookery article in the last Newsletter was, unfortunately, not much use for our vegetarian members. This one is for everyone. Here are some ideas for using woodland produce of the Spring and Summer. The measurements are all Imperial rather than metric. This is not because of any tiresome anti-Europe attitude of mine, but because my kitchen scales were given to my parents as a wedding present in 1958.

#### Elderflower cordial

My father sent me this recipe some years ago. You need 28 large elderflower heads, two and a quarter pounds of sugar, three pints of water, two oranges, two lemons and two ounces of citric acid. Dissolve the sugar in the water, bring to the boil and boil for five minutes. Meanwhile, wash the flowers, cut off the larger stalks and chop the fruit into small pieces. Put the flowers, fruit and acid into a large plastic or pyrex container and pour the hot syrup over them. Stir well and leave to stand,

covered, for four days. Stir each morning and evening. Then strain through a muslin-lined funnel into sterilised bottles. This will keep for several weeks in a cool place. The cordial can be pasteurised and will then keep for a year. To do this, stand the filled but unstoppered bottles in a deep saucepan of water and boil for five minutes. Then screw on the caps and leave to cool.

#### Elderflower Sorbet

I got this from a book called 'The Magic Apple Tree' by Susan Hill (published by Penguin, Harmondsworth in 1982). You need six ounces of sugar, one pint of water, one egg white, the rind and juice of two lemons and four elderflower heads. Combine everything except the egg white and lemon juice in a saucepan. Dissolve the sugar over a low heat. Bring to the boil and boil for ten minutes. Allow to cool. Add the lemon juice and strain into a plastic box. Freeze until mushy. Beat the mixture well. Whip the egg white until stiff and fold in. Return to the freezer for another hour. Stir the mixture again. Return to the freezer until needed.

#### Gooseberry and elderflower jelly

I made this one up. By some mysterious means, green gooseberries transform themselves into a wonderful amber-coloured jelly or jam. If you make jelly rather than jam, you avoid the difficult choice between the interminable job of topping-and-tailing the fruit or of having jam full of spiky stalks and flowers. Put four pounds of gooseberries, stalks, leaves, greenfly and all into a preserving pan. Cover with water, bring to the boil and simmer for an hour or so until the fruit is really soft. Strain overnight through a jelly-bag. Measure the juice and return to the preserving pan with a pound of sugar to each pint of liquid. Tie the flowers from four heads of elderflowers in a piece of muslin or clean handkerchief and add to the pan. Bring to the boil and boil hard until a little of the jelly will set on a cold

plate. This takes about fifteen minutes. Remove the bag of elderflowers and pour the jelly into clean, sterilised jars. Cover with sterilised lids or with cellophane discs while the jars are still hot.

### **Fruit ice cream**

I invented this one, too. It is something to do with fruit you have gathered in the woods in too small a quantity to do anything else with. You need half a pint of milk, half a pint of double cream, two eggs and two tablespoonsful of sugar for the ice cream, plus about half a pound of soft fruit such as raspberries, wild strawberries, brambles or blaeberrries. Bring the milk to

the boil in a non-stick saucepan. While it heats, break the eggs into a jug and beat together with the sugar. When the milk starts to boil, pour it onto the eggs and sugar, stirring hard. Strain the mixture back into the rinsed-out saucepan and stir over a low heat until it is thick enough to coat the back of a wooden spoon. Allow to cool. Stir in the cream, pour into a plastic container and freeze until mushy. Remove from the freezer and beat well. Put the fruit in a liquidiser and whizz to a puree. Taste it and sweeten with icing sugar if it seems too sharp. Stir it thoroughly but quickly into the ice cream and put it all back into the freezer. •

# **NATIVE WOODLANDS DISCUSSION GROUP CONSTITUTION**

**Name:** The organisation shall be the Native Woodlands Discussion Group

**Aims and objectives:** The purpose of the group is to encourage interest in native woodlands, their ecology and management.

**Membership:** Membership of the group will be:

- a. Individual
- b. Family (1.5 x full rate)
- c. Concessionary (0.5 x full rate)

Membership of the group will cease 18 months after the payment of an annual subscription. Committee will advise the Meetings Organiser for the year of the fee for attendance of non-members.

**Officers and committee:**

- a. The group elects a committee of not more than eight members. The committee shall co-opt or appoint such officers as are considered necessary. Officers will be eligible to vote at committee meetings.
- b. Committee members shall serve for three years, but shall be eligible for re-election.
- c. The chairperson shall be nominated by the committee and endorsed by the Annual General Meeting.
- d. All members are free to attend committee meetings.

**Accounts:**

- a. The financial year shall be the calendar year
- b. The committee will set the annual membership fee before the end of October.
- c. The treasurer will keep accounts and present a financial report by 15th March each year. The accounts shall be independently audited by a competent person before presentation.

**Annual General Meeting:** An AGM shall be held at such a date as is determined by the committee. Notification of that meeting shall appear in the newsletter at least one month prior to the AGM.

Business at the AGM shall be determined by a simple majority except changes to the constitution which shall require a two-thirds majority of those members present. Family membership entitles up to two votes if both are present.

The chairperson and the treasurer will each submit a report at the AGM.

**Meetings:** The committee shall organise or authorise any member to organise such meetings as considered desirable.

**Publications:** The committee shall approve such publication as are considered desirable, and which carry the group's endorsement.

# **NWDG OBJECTIVES AND ACTIVITIES**

**Objectives:** The purpose of the Group is to encourage interest in native woods, their ecology and management, with a particular emphasis in Northern Britain.

**Activities:**

- \* Organise at least one Field Meeting with related discussion each year.
- \* Organise Workshops on subjects suggested by members (initially two per year).
- \* Issue Newsletters (currently two per year) with an emphasis on members' contributions.
- \* Maintain contact with like-minded organisations through the membership.

**Membership:** This is open to any interested individual (There is no corporate membership).

**Subscription:** According to the following categories -

<b>Ordinary individual</b>	<b>£15.00 p.a.</b>
<b>Family</b>	<b>£21.50 p.a.</b>
<b>Concs./Unwaged</b>	<b>£ 7.50 p.a.</b>

**Subscriptions should be sent to Membership Administrator: (see inside front cover for contact details)**

# **NOTES FOR FUTURE CONTRIBUTORS**

**Copy date for the Autumn 2003 newsletter is 15<sup>th</sup> September.** The newsletter will go out in November.

The following types of contributions are always welcome:

- Group or organisation reports
- Woodland reports/updates
- Research, management and articles
- Shorter items of news, e.g. new groups/initiatives/projects or personnel changes
- Letters to the editor
- Reviews of books or other publications relating to native woodlands.
- Illustrations - cartoons, logos, pen and ink drawings of trees and wildlife etc..

Contributions can be up to 1500 words long. They should ideally be word-processed in Word for Windows 98 or compatible software and sent by email or on floppy disk. Please include full contact details with any contribution. Contact the editor if you have something to contribute but are having difficulty meeting a deadline. Also if you have an idea for an article you wish to discuss.

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