

in order to mature the spores, which turned out to belong to *F. pusilla*, the 75th species of a list which considerably increased what was hitherto known of Credenhill's bryoflora.

On a brilliantly sunny November day, our last meeting of the year found us at another Woodland Trust reserve, **Helmeth Hill Wood** (SO4693) to the east of Church Stretton, Shropshire. Much of the reserve is fairly dry oak coppice, and accordingly not noticeably alluring to bryophytes. *Plagiothecium curvifolium* fruited at the base of an oak tree, and Ralph Martin came across *Bryum laevifilum*, with brown filamentous gemmae in the leaf-axils distinguishing it from *B. capillare*. *B. laevifilum* seems to be quite frequent on the Welsh border.

The northern end of Helmeth Wood is noticeably more humid. *Metzgeria fruticulosa* and *Heterocladium flaccidum* (*H. heteropterum* var. *flaccidum*) went on the list, and the banks of a

small stream just outside the reserve provided some additional liverworts, including *Cephalozia bicuspidata* with prolific perianths and *Scapania nemorea* with bunches of beautiful chocolate-brown gemmae. Dan Wrench found *Fissidens pusillus* on a stone by the water.

We emerged from the shade into a sunny pasture, where mortared stonework of a long-abandoned dwelling yielded *Bryoerythrophyllum recurvirostrum*, *Didymodon rigidulus* and *Neckera complanata*. On the western slope of Hope Bowdler Hill above, flushes held *Blindia acuta*, *Fissidens osmundoides*, *Philonotis calcarea*, *P. fontana* and *Scorpidium (Drepanocladus) revolvens*. Several of the party were making their bryological *débuts*, so it mattered little that the bryophytes on show were not rare, and as the last of the afternoon's sunshine flattered the slopes, we would have been content with half of the 100 species that went on the card during our day at Church Stretton.

Research and herbaria

Moss genome-sequencing project

P.L. King

13 Meadowside Gardens, Rushmere St Andrew, Ipswich, Suffolk, IP4 5RD

Since 2004 an international moss genome-sequencing project has been in progress, mainly in the United States, Germany and Great Britain. Whole plants and mature capsules are still needed from any location. The taxa under study at present are *Aphanorrbegma patens* and any species of the genus *Physcomitrium*.

Whether the genome-sequencing project should come to fruition or founder, there will still be a need for such material at the University of

Freiburg, where it will be incorporated into a cryogenically preserved plant tissue collection, which is intended to be permanent.

Because the collection criteria are rather specific, particularly in the case of *in vitro* cultured material, and some species of *Physcomitrium* are rare, details of what is needed and a protocol to avoid the over collection of uncommon specimens, drawn up by Dr D.T. Holyoak, are available from Paul King on request. Please

phone +44 (0)1473 622381 or e-mail
pawlbrennin@aol.com.

To avoid the loss in transit of specimens, they should best be sent direct by post to the Freiburg address below but I am happy to act as postman if this is more convenient:

- Dr Mark von Stackelberg, University of Freiburg, Plant Biotechnology, Schaezlestr. 1, D-79104, Freiburg, Germany; tel: + 49 761 203 6943; e-mail: mark.stackelburg@biologie.uni-freiburg.de.

Specimens should be well padded to prevent crushing. According to Dr von Stackelberg there is no need for a customs declaration.

Both of us and our associates will be very pleased if you are able to help with material, so please accept our sincere thanks in advance.

I have collected some papers from the internet about genome sequencing in general and that of mosses in particular. Much more information, both electronic and on paper, remains untapped. On request I can easily supply a list of the papers I have readily available and photocopies of their first pages. I am not an expert and envisage that my augmentation of the available data will be led by the enquiries I receive. Some information on the internet and elsewhere is not available for free, in which case I shall liaise with anyone requesting the information before initiating a request.

Web news

The internet is always in a state of change, and there are a number of UK sites that have developed over the last couple of years which should be of considerable interest to both active members and armchair bryologists.

Des Callaghan's website Moss Images <http://www.mossimages.pwp.blueyonder.co.uk> goes from strength to strength and has been expanded to include liverworts. There are now over 250 species of UK bryophyte illustrated with images of great clarity and beauty. Species are being added at a rate of about ten a month, so presumably we can look forward to the entire UK bryophyte flora being illustrated sometime in 2012. There is a useful link to the website of supermodel Kate Moss to help those who may have stumbled onto his site by accident. The colours of the bryophyte images are very natural and the images crisp, and I'm sure that those of us who dabble in digital photography would be interested to see a section on the site dealing with techniques. Another BBS member, Martin

Godfrey, now has his records for Staffordshire displayed as a series of online maps at <http://www.staffs-ecology.org.uk/atlas/atlas.php>. Look out for changes following the spring meeting this year in v.-c. 39.

The NBN Gateway at <http://www.searchnbn.net> is now a very powerful tool for anyone wishing to interrogate the BBS bryophyte records database. Species distribution maps at various levels can be rapidly generated, and individual records can be queried using the interactive map. More sensitive data requires a password, but in practice this is unlikely to be needed unless you are a regional recorder. Data can be displayed on a background of an OS map or the UK Land Cover Map 2000. It is also possible to download species lists for individual 10-km squares.

After many years of secrecy, English Nature has now put details of Sites of Special Scientific Interest (SSSIs) in the public domain on their website at <http://www.english-nature.org.uk>,

which provides a feast of information for those in the nature conservation business. It is possible to search for SSSIs in a particular area and view the details on another interactive map which can also show the Biodiversity Action Plan priority habitats. Reasons for citation are given, as well as management plans and reports on the recent condition of the given site. Other areas of interest include guides to British regional geology and an on-line image library.

There have been a number of additions to the BBS website over the last six months. The new recording cards are available as pdf files, and

Sean Edwards has been busy providing both an update to *English Names for British Bryophytes* and an improved version of Michael Fletcher's *Moss Grower's Handbook*. A new resource is the Amblystegiaceae page, where copies of 65 of the slides used by Lars Hedenäs at the 2005 taxonomic workshop can be seen. They have been selected to illustrate both the general appearance of what can be a very perplexing group of plants and some of their critical taxonomic features.

Jonathan Sleath (Website Manager), The Villa, Kingstone, Hereford, HR2 9ET; e-mail: jonathan.sleath@btinternet.com.

Society business

Future meetings of the Society

Members are reminded to read the BBS Safety Code, which was published in *Bulletin 43* and is available from local secretaries for inspection during BBS meetings. Please inform local secretaries well in advance if you intend to join a meeting, even if you are not staying at the headquarters accommodation.

BBS workshop 2006, Ascot, 11-12 March. Inaugural meeting of the Bryophyte Ecology Group: *Ecological traits of common British bryophytes: what should we measure and how?*

Local secretary: Dr Jeff Bates, Division of Biology, Imperial College London, Silwood Park Campus, Ascot, Berkshire, SL5 7PY; e-mail: j.bates@imperial.ac.uk.

Saturday 11 March

- 09.00 Botanical tour of Silwood Park (for those who stay overnight or manage to arrive early). Leader: Mick Crawley
- 10.30 Coffee

Morning session (Chairman: Michael Proctor)

- 11.00 Aims of the BBS Bryophyte Ecology Group (BRECOG) (*Jeff Bates*)

- 11.20 Comparative plant ecology: the vascular plant experience (*Philip Grime*)
- 11.50 Ellenberg values and life forms for bryophytes: do they work and what do they tell us? (*Mark Hill, Chris Preston & Sam Bosanquet*)
- 12.20 Measuring gametophore growth rates and competitiveness (*Jeff Bates*)
- 12.45 Lunch

Afternoon session (Chairman: Jeff Duckett)

- 14.00 Comparative cryptogam ecology: screening for traits that affect ecosystem functioning in arctic and alpine biomes (*Nadia Soudzilovskaia & Hans Cornelissen*)
- 14.30 Reproductive biology and population ecology: what parameters could BRECOG realistically investigate? (*Royce Longton*)
- 15.00 What biologically-important information can be gleaned from cultures of bryophytes and how could a systematic survey be achieved? (*Silvia Pressel & Jeff Duckett*)
- 15.30 Tea
- 16.00 Comparative physiology: what basic data on water relations and photosynthetic behaviour would be useful and what resources would be needed? (*Michael Proctor*)