

# BRECOG at Malham Tarn

In the first of this new series in *Field Bryology* focussing on ecological issues **Jeff Bates** describes the visit of the Society's Bryophyte Ecology Group to Malham Tarn in Yorkshire.

The Society's Bryophyte Ecology Group (BRECOG) held its third annual workshop at Malham Tarn Field Centre in West-central Yorkshire (v.c. 64) over the weekend of 7–9 March 2008. Ten hardy souls braved the early spring weather to record a range of bryophyte habitats using quadrats for the Bryophyte Habitats Survey. A pleasing feature of the Malham Tarn estate is that a wide range of bryophyte-rich habitats of upland character is available within easy walking distance of the accommodation. I opted for Malham in the mistaken view that all this diversity was in one of the Survey's 'target' 10-km squares, but in fact the official target square (SD87) is the next one northwards!

After a wet night Saturday dawned fair, but, the moment we left the comfort of the laboratory, heavy showers whipped across the Tarn on the stiff breeze. It was agreed at the onset that we should work in pairs, each consisting of one more-experienced and one less-experienced bryologist. This avoided anyone becoming marginalized and proved to be an effective arrangement. Each pair chose different categories of habitat to avoid duplication of effort. Among those selected were: decorticated logs in an old beech plantation; sycamore and beech trunks in the steep rocky woodland

above the lake; south-facing limestone cliffs; limestone grassland; different examples of the drystone walls that characterize the area; stony woodland soil, the Centre's septic tank wall (!); the main gravel driveway; and *Salix* branches in lakeside carr. There were no great surprises among the wide variety of species seen. At times water films made identification or even spotting adpressed bryophytes through steamed-up lenses exceedingly difficult. Many field cards from the Saturday are water-stained, muddy or partially disintegrated, a reminder of the difficulties. Everyone returned to the laboratory for lunch and to dry-off before venturing out again, but around mid-afternoon an increased intensity of the downpour drove us back indoors and a later respite failed to lure anyone outside again. Instead, this opportunity was taken to determine soil pH values and identify voucher specimens. After the evening meal I gave an informal demonstration of the Microsoft Access database in which information from the quadrat survey is being stored. A second 'database' (in MS Word) of ecophysiological attributes of common British bryophytes was also aired. This is slowly being built up from published sources and original data on light and desiccation responses of species, the latter obtained during paid summer placements of undergraduate students at Imperial College. Those of us staying at the Centre finished



◁ *Homalothecium lutescens*. Robert Goodison

the evening in relaxed mood, sipping red wine and chatting in the common room.

A more depleted party assembled on Sunday morning and three main working groups emerged. Initially, we set out clockwise around the Tarn, where two groups settled down to record different areas of Ha Mire, a basic fen (pH 6.6–7.0) receiving minerals from the limestone cliffs above. The quadrats here contained much *Calliergonella cuspidata*, *Campylium stellatum*, *Ctenidium molluscum* and *Drepanocladus cossonii*, with occasional large plants of *Climacium dendroides* and smaller quantities of fen specialities like *Plagiomnium elatum*. Flurries of snow briefly concealed the landscape, but then held off as the recording got underway and I was thankful for the insulation provided by my foam kneeler as the thermistor of my pH meter recorded a temperature of 4°C in the fen water! The third group recorded examples of the limestone scree vegetation on the cliffs, finding that *Homalothecium lutescens* was prevalent along with other calcicoles such as *Neckera crispa* and *Tortella tortuosa*. *Grimmia laevigata* was present here in small quantity. We later retraced our steps to the Centre and then beyond to the main Tarn-side mire where examples of acidic mire (pH 4.2–4.3) were sampled from the board walk. One of the talking points of the weekend had been the controversial coppicing, by National Trust staff,

of willow carr in an area famous for supporting the rare *Sphagnum riparium*. Happily, a modest patch of reasonably healthy-looking plants was rediscovered and seen by all members of the party, a high note on which to end the meeting.

I am indebted to all participants for their positive attitudes in very poor conditions and to Martin Godfrey for once again acting as our local secretary. The Field Studies Council staff are thanked for making our stay at Malham a comfortable one. It is problematic fitting these workshops in before the BBS Spring Meeting, especially with expectations of good weather and a reasonable turnout. During the meeting it was mooted that, in future, we should move and combine the BRECOG workshop with the normally later BBS Spring Meeting. This might take the form of one or two days where there are additional ‘ecology’ excursions. It would certainly be advantageous to benefit from the longer days and potentially fairer weather of a meeting later in spring. Who knows, perhaps the opportunity to lounge over quadrats in pleasant places might just make an appealing alternative option for some BBS members!

Jeff Bates

Department of Life Sciences, Imperial College London, Silwood Park Campus, Ascot, Berkshire SL5 7PY (e j.bates@imperial.ac.uk)