BRECOG Update - February 2014

The map below shows the BRECOG coverage that has been achieved so far. Each dot is a hectad in which at least one, and sometimes many, BRECOG cards have been completed, each in a separate microhabitat.



Hectads visited by end 2013

So far, 607 cards (or samples) have been completed and the information entered into a database. That represents 3335 quadrats and 14269 individual cover scores for the various taxa. We have some data for 462 species but adequate information for far fewer than this.

The maps below give examples of three relatively well recorded taxa and one that has been inadequately covered todate.



Simplifying a little, we need at least 30 'dots' spread over the entire geographical range of each species for our conclusions about its ecology to be believable. For some, such as the first three above, we have already exceeded this number and their dispersion is reasonably encouraging. For many others, such as *Weissia controversa*, there is still much to do. Of course, we are only interested in 'common' bryophytes, but a facet of the project is to define what is common and what is not. There are still plenty of microhabitats that have hardly been sampled and major parts of Britain and Ireland that require visits. To improve coverage we intend to continue field recording until the end of 2016.

Physiological comparisons of species

As I have explained elsewhere the responses of species to light intensity and their relative susceptibilities and recovery rates from periods of desiccation are important predictors of ecological behaviour. Over the winter I have been able to generate further physiological data for the project. Currently we have photosynthesis-light intensity response curves for 168 mostly common British bryophytes, with replicates for many comparing different populations or seasons, totalling 247 sets of information. There are also data on responses to a standard set of desiccation treatments (4 periods x 2 intensities) for 135 species, with another ten currently under investigation. The target is to provide this physiological information for up to 250 of the most common species found in Britain and Ireland by the end of the project. The data have revealed quite a few surprises.

How the field data and the physiological information will be combined was the subject of a talk I gave at the Dublin meeting (Autumn, 2012), briefly summarised in volume 110 (2013) of *Field Bryology*.

Future BRECOG field work

In spring 2014 there will be a BRECOG weekend get-together to sample some of the distinctive habitats of Anglesey. This is being organised by Lucia Ruffino, 4th-6th April. We will be pleased to see any new participants who will be able to work alongside more seasoned recorders to hone identification skills and learn a little field ecology.

I will also be attending the Society's Spring Meeting in Sussex and will again be undertaking BRECOG sampling if anyone else wishes to join in then. I will be staying for the week, 18th-25th April.

Later in the year I am thinking of undertaking BRECOG work in southern Ireland (perhaps a week each in the Comeragh Mtns and Killarney in June) and then, in September, visiting the Trossachs prior to attending the BBS Meeting in Edinburgh. That's as well as a few 'days out' recording locally. The Irish and Scottish visits are still only at the musing stage.

If you are unable to join one of the organised trips mentioned above, we very much welcome records that are sent in by individuals working on their home patch. Full details of the methodology and a downloadable recording sheet are available from the 'Bryophyte Ecology Group' section on the BBS Website.

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