



Why conserve bryophytes?

Is there any point in bryophyte conservation? This may seem an odd question from the new Conservation Officer, but I feel I need to ask it just to force myself to think about it. After all, bryophytes are really quite resilient. We know that most of them are effective colonists, and that interesting and rare species often crop up in unexpected places. And have any species of bryophyte actually become extinct globally? Perhaps *Flabellidium spinosum* in Bolivia, but even this plant may yet be rediscovered. All I know is that several species that were assumed to be extinct in Britain have unexpectedly turned up again. Anyway, won't the bryophytes be fine so long as suitable habitat exists? In which case we should all support big and powerful nature reserve-owning organizations like the RSPB and trust the bryophytes to take care of themselves. And is it not interesting to observe the often surprisingly dynamic state of nature, with species and habitats fluctuating according to prevailing conditions, rather than trying to preserve a particular and perhaps arbitrary status quo? And who cares anyway? Is bryology not a rather elitist business, pursued by a small number of specialists? The BBS membership comprises a mere 0.001% of the population of Britain – or it would if a third were not overseas members!

The case has been made elsewhere for the importance of bryophytes as an integral part of biodiversity, their crucial role in ecosystems, and their role in education, science and culture. Most of us would now agree that nature conservation – and therefore bryophyte conservation – is in some sense important. The real question is whether we can do anything specific to conserve bryophytes rather than just letting them 'hitch a ride' on other conservation initiatives. Bryophyte conservation is part of the much wider nature conservation movement, and of course we have to take care of the habitats, but what else is necessary for bryophyte conservation? Perhaps the BBS cannot do very much in terms of direct conservation of bryophytes, but what we can do is use our expertise to ensure that bryophytes are taken into account. I can think of a number of ways we can do this.

Firstly, there are places where bryophytes form a major part of the natural interest, and conservation organizations need to know about them. For instance, it may be difficult to make a case for prioritizing the conservation of Atlantic ravine woodland without the bryophytes being at the top of the agenda. While most naturalists, and even most people even vaguely interested in the environment, would agree that such a ravine

is a special place and worthy of conservation, hard facts about its biodiversity may be required to defend it against damage or destruction. Bryophyte diversity may well be the major interest. Other examples might include bogs, snow patches and the North Atlantic mixed hepatic mat.

Secondly, there are instances where particular species need targeted conservation effort. As far as we know, there is only one site left in Britain for *Bartramia stricta*, *Bryum schleicheri* and *Didymodon glaucus*. OK, it is possible that they may be discovered elsewhere, but meanwhile BBS members are working with conservation organizations to ensure, as far as possible, that they do not die out. The fact that these extreme rarities were added to key lists of species requiring special protection, notably Schedule 8 of the Wildlife and Countryside Act and the Biodiversity Action Plans, is largely down to BBS members.

Thirdly, bryophytes can contribute very significantly to the general nature conservation effort. Large swathes of Welsh upland have been designated as Special Areas of Conservation partly for breeding birds, but also partly because of the presence of *Hamatocaulis vernicosus*, a plant listed in EU and Council of Europe legislation. Again, the result of specialist input. 'Big conservation',

like SAC designation, takes place all too readily without any reference to lower plants, unless the BBS terrier is out there nipping at the ankles of the authorities.

Finally, it's a matter of communication. These days, with statutory conservation bodies discarding scientific specialists like old shoes, it is increasingly up to us to tell them about our bryophyte flora, why it is worth conserving, and to suggest conservation measures. The BBS is small, but can punch above its weight because it is increasingly the only serious source of bryological expertise. It's not easy – we all have busy lives, and there is always a paucity of resources – but we can make an impact. We need to keep on plugging the message that our bryophytes are wonderful and special, that our Atlantic communities are among the world's richest and rarest, that we have a huge percentage of the world's peatland, that bryophytes are ecologically vital components of nearly every ecosystem, and, perhaps most importantly, that the small-scale beauty of bryophytes is worth something to every human being, if only they care to look.

So yes, I think I have convinced myself that there is a point to bryophyte conservation. We should definitely all be members of as many 'big' conservation organizations as we can afford, while still paying our subs to the BBS, but we should also try to influence nature conservation directly, in our local Wildlife Trust, at our local nature reserve, with our town and parish councils, and through the Conservation and Recording Committee. I hope this new regular conservation column in *Field Bryology* will become a forum for ideas and initiatives promoting real bryophyte conservation.

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