

Raptors and Peatlands – BOOKINGS ABOUT TO CLOSE

<http://www.ukeconet.org/raptors.html>

Deer surveys and ID: Check out the biggest wild herbivores on our peatlands – new on-line guide and survey with help from BES Outreach grant – now live! Exciting citizen science project:

<http://www.ukeconet.org/deer-identification.html>

Sphagnum moss ID and on-line guide: with BES support this is live and the advanced section has been added

<http://www.ukeconet.org/identification-guides-sphagnum-introduction.html>

Sphagnum moss ID workshops and support:

<http://www.ukeconet.org/sphagnum-workshops.html>

WAXCAP FUNGI ID and on-line guide: with BES Forest Ecology SIG support this is live

<http://www.ukeconet.org/waxcaps-identification-intro.html>

WAXCAP FUNGI ID workshops and support:

<http://www.ukeconet.org/waxcaps-workshops.html>

Please post up and circulate these as widely as possible – many thanks.

A new BES Peatlands SIG Newsletter will come round shortly but in the meantime check out Cumbria BogLIFE & IUCN, for their conference updates, and IPS for the outputs from their recent Indonesian conference. Our Peatlands SIG event on 'energy and landscapes' will be in Sheffield on 17th / 18th November – contact us for details: Peatlands@BritishEcologicalSociety.org or

i.d.rotherham@shu.ac.uk

And some exciting news: Citizen Science project shows remarkable moorland recovery by peat-building bog mosses

The *Eco-science in the Park* project is headed by **Professor Ian Rotherham** of **Sheffield Hallam University**, and supported by the **British Ecological Society** and the **South Yorkshire Biodiversity Research Group**, together with other partners. Working with sphagnum (bog moss) expert Dr Paul Ardron, the project has been developing professional and community training, including a unique on-line guide to sphagnum identification – available on <http://www.ukeconet.org/identification-guides-sphagnum-introduction.html>. (They are a difficult group and only recently became identifiable with confidence).

Breaking news: a result of now four years of dedicated events and training is a new understanding of the peat-forming bog mosses of the Peak District and South Pennines moorlands. This region was described in the 1980s as ‘something of a sphagnum desert’ as gross air pollution (to which the bog mosses are very sensitive) had caused their almost total decline. However, nowadays with reduced air pollution and careful management by bodies such as the **Moors for the Future Partnership**, the mosses are making a remarkable recovery. Our citizen science projects are demonstrating a recovery with areas of bare peat bog re-wetting and covering over, plus the return of a diversity of bog moss species (anything from 15 to 20 species). These recovering species include the most important of all – the active peat bog formers – mopping up atmospheric carbon dioxide and holding back potential flood waters – so delivering important ‘ecosystem services’ and even economic benefits.

Excitingly, the research and surveys have turned up a number of important ‘peat formers’ returning, but even more intriguing, a number of plants which the experts so far have been unable to identify with certainty. These may be unusual hybrids, as mosses and ferns can hybridise and this is one way in which new species may emerge. Alternatively, these could be peculiar forms induced by the former gross levels of air pollution, or even species ‘new to science’. A possibility is that some species are long-distance colonisers moving into this vacant niche from which the natives have been removed by pollution – and mosses can travel long distances as spores. We are now collaborating with UK and European experts to get to the bottom of this mystery – and the work may require genetic fingerprinting in order to resolve the identities.

Following our free events last year, the public ‘*Meet the Bog Mosses*’ events with the British Ecological Society have again proved popular. These days help local people discover the fascinating histories and ecologies of the plants that have generated the Peak District moors and bogs. There is also now an easy to use on-line guide to the bog mosses on the www.ukeconet.org website.