**SUMMARY**

*Sphagnum balticum*

**Baltic bog moss**

**Sphagnaceae**

**SYN.:** *Sphagnum cuspidatum* var. *brevifolium. Sphagnum recurvum* ssp. *balticum* Russow

**OVERVIEW:**

*Sphagnum balticum* is a boreal bog-moss of oligotrophic, valley and raised mires. It has only been recorded from 9 sites (10 hectares) in the UK (5 in England, 3 in Scotland and 1 in Wales), and may have been lost from all but 2 of these. *S. balticum* has a continental distribution in Europe. This tendency is apparent from British stations, although its sites are fairly scattered. Its historic stronghold appears to have been in the North-west of England on the mosses and meres of Cheshire and South Lancashire. *Sphagnum balticum* is now extinct in this region. Drainage of its bog habitats, peat extraction, afforestation and eutrophication appear to be the principal causes of decline throughout Britain. At two of its historic sites (Thorne Moors in Yorkshire and Cors Caron in Ceredigion), *S. balticum* was recorded from old peat cuttings, which suggests that it is an early successional species, reliant on niches that are relatively free from competition from more competitive *Sphagnum* species and vascular plants. At its only English site in Northumberland, it occurs in a very wet valley mire, that is believed to be very similar to mire types occurring in Scandinavia, where the plant is relatively common. Searches of other mires in Northumberland and in Cumbria have failed to turn up any new sites. Ecological information on this species is derived from observations in Northumberland and a review of Scandinavian literature.

In Northumberland, *Sphagnum balticum* was found to favour bog ‘lawns’ and ‘low ridges’ about 5cm above the water table, where it is associated with *Sphagnum magellanicum*, *Eriophorum angustifolium*, *Andromeda polifolia* and *Vaccinium oxycoccus* in a community corresponding closely to the **M18a Erica tetralix - Sphagnum papillosum** mire (**Sphagnum magellanicum – Andromeda polifolia** sub-community). **National Vegetation Classification** (NVC) community. It generally occurs within a matrix of *S. magellanicum*, although it does occasionally grow as scattered individuals in hummocks composed of other *Sphagnum* species. It appears to be fairly mobile, having disappeared from parts of the mire from which it was recorded in the 1980s, and having recently colonised a cleared conifer plantation. High water levels and low levels of naturally induced disturbance, such as splitting of the acrotelm and a fluctuating water level, are believed to enable *S. balticum* to compete successfully with more robust species such as *S. magellanicum.*

**DISTRIBUTION:**

No of sites;

**ENGLAND**

| Extant     | Northumberland | 1 |
| Extinct    | West Yorkshire | 1 |
**SUMMARY**

### WALES
- **Extinct**
  - Ceredigion: 1

### SCOTLAND
- **Extant**
  - Rynuie: 1
- **Extinct**
  - Dumfriesshire: 1
  - South Aberdeenshire: 1

**RECENT DEVELOPMENTS:**
Recent studies have shown that it may be at a competitive disadvantage with more mesotrophic species of *Sphagnum*, due to variable responses to elevated atmospheric N and CO₂ deposition. This is perceived to be a long-term threat, as is future climate change - particularly the possible onset of higher winter temperatures. The short-term future of the Northumberland population seems safe, however, and current conservation management, concentrated on maintaining high water levels, appears to benefit the species.

**RECOMMENDED FUTURE ACTION:**
- Maintain current management practices at Muckle Moss NNR.
- Monitor extent of population and record data from permanent plots every 5 years.
- Encourage genetic work to be carried out to discover relationship between *S. balticum* and *S. fallax*.
- Establish ex-situ stocks to safeguard sole English population and consider introduction to previously unoccupied sites should any suitable ones be found in north-eastern England.

A full profile of *Sphagnum balticum* can be viewed or downloaded from our Species dossier web page.

**Contacts**
Plantlife International - The Wild-Plant Conservation Charity
14 Rollestone Street,
Salisbury, Wiltshire SP1 1DX.
Tel: 01722 342730

Jenny Duckworth
01722 342743
Jenny.Duckworth@plantlife.org.uk

Amanda Miller
01722 342749
Amanda.Miller@plantlife.org.uk

Johnny Turner
pallavicinia@hotmail.com

Plantlife International’s Back from the Brink (species recovery) programme is supported by:

- English Nature
- Scottish Natural Heritage
- the Countryside Council for Wales

Work on *Sphagnum balticum* is supported by:

**FIRST DRAFT DATED 5TH JANUARY 2003**
**LAST REVISED 22 JANUARY 2004**