

Sphagnum riparium discovered in Wales

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Material of a robust *Sphagnum* referable to section Cuspidata was collected in August 2005 during survey work at Salbri Site of Special Scientific Interest (SSSI), a small oligotrophic topogenous (basin) fen at ca 67 m altitude located in the northern part of Anglesey, v.-c. 52 (SH373888). The material was determined as *S. riparium* by T.H. Blackstock and is the first record for this boreal species in Wales and thus a marked extension of its known British range. The material collected at Salbri conforms well in all substantive respects to M.O. Hill's description in Smith (2004), being of typically robust habit with a conspicuous apical bud and cleft stem leaves. Sporophytes were not observed.

Ecology

S. riparium is locally dominant in three small patches totalling ca 100 m² at Salbri and occupies sinuous quaking hollows within a matrix of poor-fen vegetation dominated by *Erica tetralix*, *Eriophorum angustifolium* and *S. palustre*; associated species recorded within a one metre radius of three areas dominated by *S. riparium* are listed in Table 1. *S. riparium* appears to occur as a localised replacement for *S. fallax* in this vegetation, which is regarded as conforming to the M4 *Carex rostrata* - *Sphagnum recurvum* mire community of the British National Vegetation

Table 1. Species noted within a one metre radius of patches of *Sphagnum riparium* at Salbri SSSI, Anglesey (11 October 2005).

	Domin cover abundance values		
<i>Sphagnum riparium</i>	9	10	8
<i>Sphagnum fallax</i>	3	4	4
<i>Sphagnum palustre</i>	4	2	2
<i>Eriophorum angustifolium</i>	3	4	4
<i>Carex limosa</i>	3	1	3
<i>Drosera rotundifolia</i>	3	1	3
<i>Erica tetralix</i>	3		
<i>Menyanthes trifoliata</i>	2		
<i>Narthecium ossifragum</i>	2		
<i>Carex rostrata</i>		2	
<i>Potentilla palustris</i>			3
<i>Polytrichum commune</i>			3
<i>Succisa pratensis</i>			2
<i>Molinia caerulea</i>			1

Classification (Rodwell, 1991). Most of this vegetation manifests as a fairly distinct stand on the southern flank of the mire and fringes a central expanse of ericoid-dominated poor-fen, which may represent an incipient ombrogenous feature. This small basin mire supports a diverse range of (mostly poor-) fen vegetation, including stands referable to M1 *Sphagnum auriculatum* bog pool, M2 *Sphagnum cuspidatum/recurvum* bog pool, M5 *Carex rostrata* - *Sphagnum squarrosum* mire, M21 *Narthecium ossifragum* - *Sphagnum papillosum* mire and S27

Carex rostrata - *Potentilla palustris* tall-herb fen. There are also comparatively species-rich hollows dominated by *Carex limosa* and *S. contortum* in which *S. platyphyllum* occurs rarely, at its only Anglesey station.

The vegetation in which *S. riparium* occurs is likely to receive some soligenous influence, emanating chiefly as surface run-off from an adjacent heath-clad outcrop of metamorphosed sedimentary rocks of the Anglesey Precambrian South Stack Group. Interstitial water from the *Sphagnum* raft of an adjacent stand of *S. fallax*-dominated M4 exhibited a pH of 3.9 and conductivity of 185 $\mu\text{S}/\text{cm}$ (field determinations).

Salbri is one of a nationally important series of bedrock basin poor-fens in North Anglesey, several of which are likely to offer suitable environmental conditions for *S. riparium*.

Acknowledgements

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References

- Rodwell JS (ed). 1991. *British plant communities. Volume 2: mires and heaths*. Cambridge: Cambridge University Press.
- Smith AJE 2004. *The moss flora of Britain and Ireland*, 2nd ed. Cambridge: Cambridge University Press.

Amblystegium radicale in reed-beds in south Wales

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Background

I have been interested in *Amblystegium radicale* since 2002 when I was part of the Countryside Council for Wales (CCW) team involved in the examination of its only known Welsh site in Merioneth (v.-c. 48) to assess whether it was still extant (Blackstock & Holyoak, 2004). It grows in rank *Molinia* there and given the widespread distribution of such vegetation in Wales it seemed likely that further surveys might yield significant extensions to its known range. However, despite much conscious searching I failed to find any *A. radicale* in south Wales until 2005 when a scrap of *Amblystegium* that I

collected from an arable field in Carmarthenshire was identified as *A. radicale* by Lars Hedenäs (Sleath, 2005).

Following the extinction of the Cornish colony (Blackstock & Holyoak, 2004), the site in north Wales was the only known station for the species in Britain, so it seemed to deserve its Critically Endangered status in the Red Data Book (Church *et al.*, 2001). However, the subsequent discovery of plants growing as casuals in arable fields in south Wales and two northern Scottish vice-counties suggested that this might not be a true reflection of its status. It is clear from recent finds from reed-beds in