

Sphagnum leucobryoides T. Yamag., R. D. Seppelt & Z. Iwats.

Status: **Vulnerable (VU)** D2

Class: Musci

Order: Sphagnales

Family: Sphagnaceae

Description and Biology: The plants of *Sphagnum leucobryoides* are whitish-green. In wet sand in button grass (*Gymnoschoenus*) moorland the whole plant is submerged except for the uppermost leaves. In the second known locality, a wet sedgeland, plants were intermixed with *Oreobolus* sp., in acid humic soil. The living stems in both collections are about 2 cm long, with sparse branches. Female sex organs are terminal on the stem. Male sex organs are oblong ellipsoidal, lateral on the stem and just below the female sex organs.

Distribution and Habitat: This species is only known from two localities of southwestern Tasmania. The habitat of the holotype is an almost level sandy wash composed almost entirely of white quartzitic sand. Rainfall in the area exceeds 2000 mm per annum and the sand is permanently wet, often with a film of water flowing across the surface. The vegetation of the surrounding area is hummock sedgeland dominated by *Gymnoschoenus sphaerocephalus* on peaty soils of low pH, usually in the pH range 3.5-5.5. The second locality along the Jane River Track, south of Lake St. Clair, near the western edge of the Central Plateau, is a wet sedgeland of similar rainfall. The soils are humic. Plants were found growing amongst the small sedge, *Oreobolus* sp.

History and Outlook: This species was discovered in 1988 and described as new species in 1990. Since its discovery no further research has been carried out at the type locality. Recognition of the species amongst small sedge plants at its second locality was quite accidental. However, judging from the delicate nature of the plants and the vulnerability of the sedgeland habitat to wildfire or management controlled burning the species must be considered as vulnerable, if not endangered. The conservation of this species is important as it has such strikingly unique taxonomical characters, making it important for the phylogenetical studies of the genus *Sphagnum*. Current threat is uncontrolled, intensive burning of the sedge vegetation.

References:

Yamaguchi, T., R. D. Seppelt, Z. Iwatsuki & A. M. Cuchanan. 1990. *Sphagnum* (sect. *Buchanania*) *leucobryoides* sect. et sp. nov. from Tasmania. *J. Bryol.* 16: 45-54.

Yamaguchi, T., R. D. Seppelt & Z. Iwatsuki. 1992. *Buchanania* (*Sphagnum*, Sphagnaceae) sect. nov. *Hikobia* 11: 139-140.

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