

# Flora Protection Order - bryophytes

## Lejeunea mandonii

**Status:** Endangered; listed on the Flora Protection Order

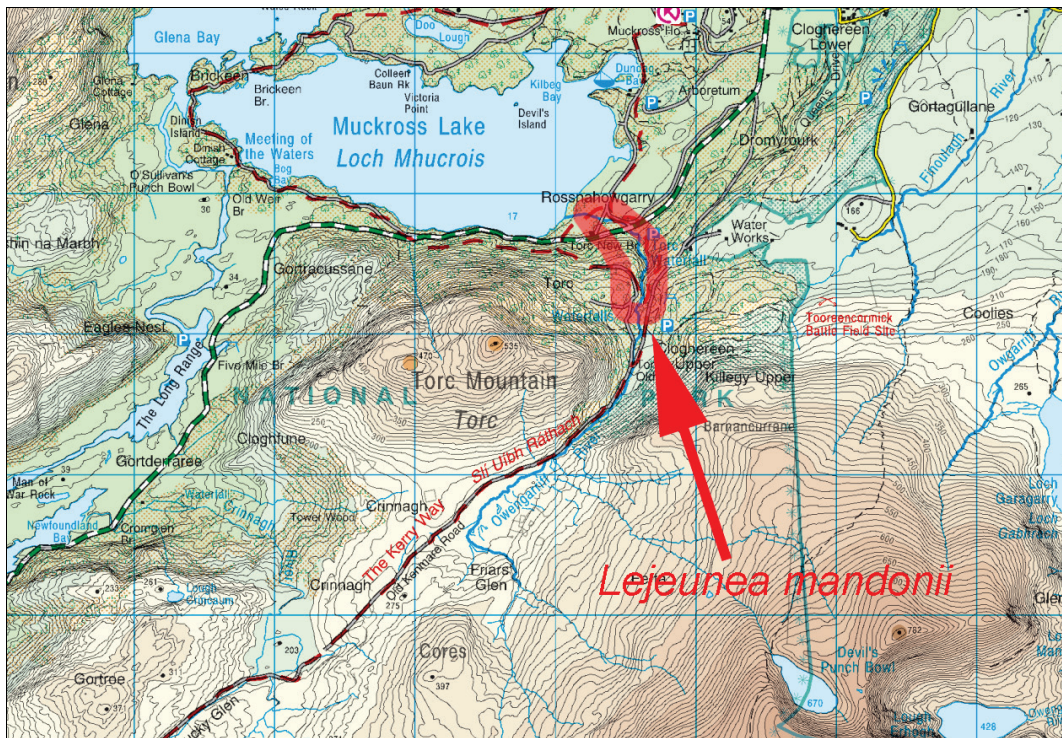
**Location:** Torc Cascade, Co. Kerry

### Species Records

Taxon	Vice County number	Taxon Site	Locality / habitat	Grid Reference	Date	Recorder	Protected site
<i>Lejeunea mandonii</i>	02	02	below Torc Cascade, Killarney, shaded rock	V98	1966.	Paton, J.A.	SAC000365

This record was made somewhere in the valley below Torc Cascade.

### Location (1:50,000 Discovery map)



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### Location (6" map)

No map available.

### Field Data Sheet

None available. Not refound by David Holyoak during fieldwork in 2005, nor by Rory Hodd in 2014.

## Aerial photograph

No aerial photograph available.

## Site photographs

None available.

## Management & Conservation

### General

- The small size of the populations make them vulnerable to damage
- Botanical collection a potential threat
- Afforestation, overstocking, desiccation and nutrient enrichment leading to out-competition by coarser vegetation are all potential threats

### Potential site-specific threats/issues

- *L. mandonii* needs to be refound at this locality

Excerpt from:

Lockhart, N., Hodgetts, N. & Holyoak, D. (2012). *Rare and Threatened Bryophytes of Ireland*. Belfast: National Museums Northern Ireland Publication No. 028.

RARE AND THREATENED BRYOPHYTES OF IRELAND

***Lejeunea mandonii*** (Steph.) Müll.Frib.

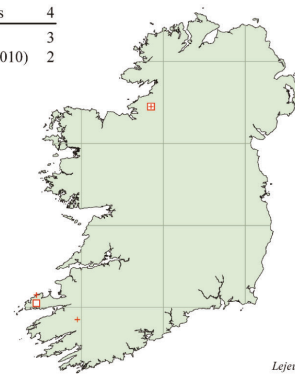
Atlantic Pouncewort

syn. *Inflatolejeunea mandonii* (Steph.) Perss., *Lejeunea macvicari* Pearson, *Microlejeunea mandonii* Steph.

**Status in Ireland:** Endangered (B2a, bii, iv); **Status in Europe:** Rare



Number of Hectads	4
+ Old (pre-1970)	3
Recent (1970–2010)	2



*Lejeunea mandonii*

**Identification**

*L. mandonii* is a very small leafy liverwort forming small mats or creeping among or over other bryophytes, with shoots up to 1.2 cm long and c. 0.6 mm wide. The leaves are more or less oval with sac-like ventral lobules and the underleaves are bilobed. It differs from other species of *Lejeunea* by the relatively long leaves (oval or ovate rather than suborbicular or ovate) and smooth cylindrical perianths. There are c. 8–15 homogeneous to faintly granular and fugacious oil bodies per cell, but this feature has to be observed in fresh material. *L. mandonii* is similar in size and general appearance to *Harpalejeunea molleri*, but that species has a pointed leaf apex and broad, retuse underleaves, whereas in *L. mandonii* the leaf apex is rounded and the underleaves are more or less oval and deeply bilobed.

**Distribution in Ireland**

A hyperoceanic species confined to the extreme west, and listed as Southern Atlantic by Ratcliffe (1968), *L. mandonii* is very rare. It has recently been recorded from just two localities in two vice-counties: S. Kerry

(Loch an Mhónáin, below Brandon Peak, 2006) and Leitrim (Peakadaw, 1963–2000). There are also older records from S. Kerry (below Brandon Mountain, 1967–1968) and N. Kerry (below Torc Cascade, 1966), where it may persist in small quantity, although recent survey work has failed to refind it.

**Ecology and biology**

This species is found among base-rich boulders and on crags, in shaded damp crevices with other bryophytes, especially Atlantic species, in oceanic areas. On Brandon Mountain, it was found in a deeply shaded declivity amongst boulders by a mountain stream. At Peakadaw, it grows on small ledges in crevices on a S.-facing limestone crag at the base of, and shaded by, a large N.-facing crag. *L. mandonii* usually occurs in very small quantity. Associates in Ireland include *Cololejeunea rossettiana*, *Fissidens dubius*, *Lejeunea hibernica*, *L. lamacerina*, *L. patens*, *Radula carringtonii* and *Trichomanes speciosum*. In Britain, it also occurs as an epiphyte on Ash, and its normal habitat in Macaronesia is also epiphytic. It is a lowland plant, growing at altitudes up to 275 m in Ireland.

*Hornworts and Liverworts*

Although this species is autoicous and often fertile, it rarely produces sporophytes. Gemmae are absent.

**World distribution**

It is also present in England and Scotland (*Endangered* in Britain), Spain and Portugal (*Vulnerable* in both), Madeira and the Canaries. This is a rare species globally, being endemic to Europe and Macaronesia, where its distribution is categorised as Hyperoceanic Southern-temperate.

**Threats**

The small size of the populations renders them susceptible to damage; only a very small amount was seen during recent fieldwork on Brandon Mountain and only small

patches were found at Peakadaw. Potential threats include thoughtless collection of specimens, afforestation, overstocking, desiccation and nutrient enrichment leading to unsuccessful competition with coarser species and algae.

**Conservation**

Populations should be monitored, and the localities should be protected from afforestation, overstocking and disturbance generally. *L. mandonii* may occur elsewhere on the west coast, and it should be searched for actively by bryologists, as it is very small and easy to overlook.

**Protected sites with recent records:** Ben Bulbin, Gleniff and Glenade Complex SAC; Mount Brandon SAC;

**Unprotected sites with recent records:** none.

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