

Flora Protection Order - bryophytes

Lejeunea hibernica

Status: Near Threatened; listed on the Flora Protection Order

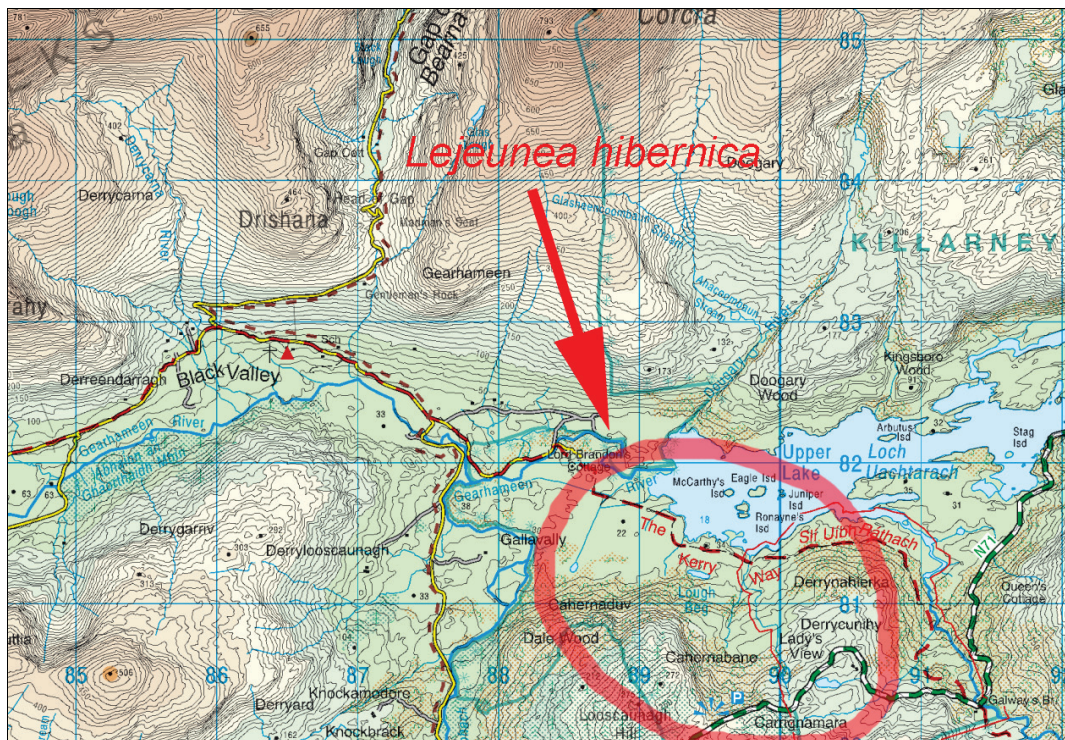
Location: Derrycunihy Wood, Co. Kerry

Species Records

Taxon	Vice County number	Taxon Site	Locality / habitat	Grid Reference	Date	Recorder	Protected site
<i>Lejeunea hibernica</i>	01	09	Cummeenduff Glen	V88	1967.09.18	Birks, H.J.B., Birks, H.H. & Ratcliffe, D.A.	SAC000365
<i>Lejeunea hibernica</i>	01	09	Looscaunagh Woods	V88	1983.07.28	British Bryological Society meeting	SAC000365
<i>Lejeunea hibernica</i>	01	09	Upper Lake, above Lough Beg	V8981	1983.07.28	Long, D.G.	SAC000365
<i>Lejeunea hibernica</i>	01	09	Gallavally; above Lough Beg	V8920881147	2014.10.23	Rory Hodd	SAC000365

Several rather old and vague records of this species in this area have been reduced to three, and two of those are essentially duplicates. The name of the taxon site has been designated to bring it into line with that of other rare species in the area. The records probably come from somewhere within the area indicated in the Discovery map below. Rory Hodd's 2014 record is accurately localised near Lough Beg.

Location (1:50,000 Discovery map)



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Field Data Sheet – Survey of FPO Bryophytes in Cork & Kerry 2014

Species <i>Lejeunea hibernica</i>	County Kerry	6" Map Kerry Sheet 74	Discovery Map 78
Locality/ Site name Gallavally Wood (east), SW of L. Beg	Vice-county (No.) South Kerry (H1)	SAC/NHA 000365 Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment	
Grid ref (GPS, National Grid) V8920881147(±6)	2005 Aerial Photo O6223-A	Recorder(s) R.L. Hodd	
Elevation (m) 30	Solid geology Sandstone	Survey date 23/10/2014	
Site description	<i>L. hibernica</i> was recorded in an extensive area of <i>Quercus petraea</i> woodland, on the underside of a boulder in a stream, 40m from the woodland edge.		
Population description	<i>L. hibernica</i> occurs as scattered shoots on the undersides of two boulders above the flow of a small stream, 3m separating two populations.		
Associated species	Associated species consist of <i>Plagiochila exigua</i> , <i>Fissidens bryoides</i> var. <i>caespitans</i> and <i>Lejeunea patens</i> .		
Vegetation (Fossitt, 2000)	ER3 Siliceous loose rock		
Current management	Deer grazing is moderately intense, little human impact in vicinity.		
Threats	There are few specific threats to this population, erosion while the stream is in spate is a minor possibility.		
Conservation measures	The habitat should be kept in good condition.		
Ownership	This site is located within the Killarney National Park.		
Access	Access is from path between Derrycunihy and Lord Brandon's Cottage, crossing rough area of wet heath and bog to reach woodland.		
Other remarks			

Additional GPS readings for the species

National Grid Letter	Easting	Northing	Comments

Synonymous habitat/vegetation types :

First record and other comments:

L. hibernica was previously recorded by D.G. Long and the British Bryological Society in 1983, but was not relocated by D.T. Holyoak in 2006.

References:

Hodd, R.L. 2014. *Survey of Flora Protection Order bryophytes in Cork and Kerry (H1-H5)*. Unpublished report to National Parks and Wildlife Service. Dublin.

Photographs:



Photograph 1: Location of *Lejeunea hibernica*, marked by red arrow, under boulders in a stream in humid woodland at Gallavally.



Photograph 2: Boulders in stream, under which *L. hibernica* grows, scattered through a mat of bryophytes.

Maps and Aerial Photographs:

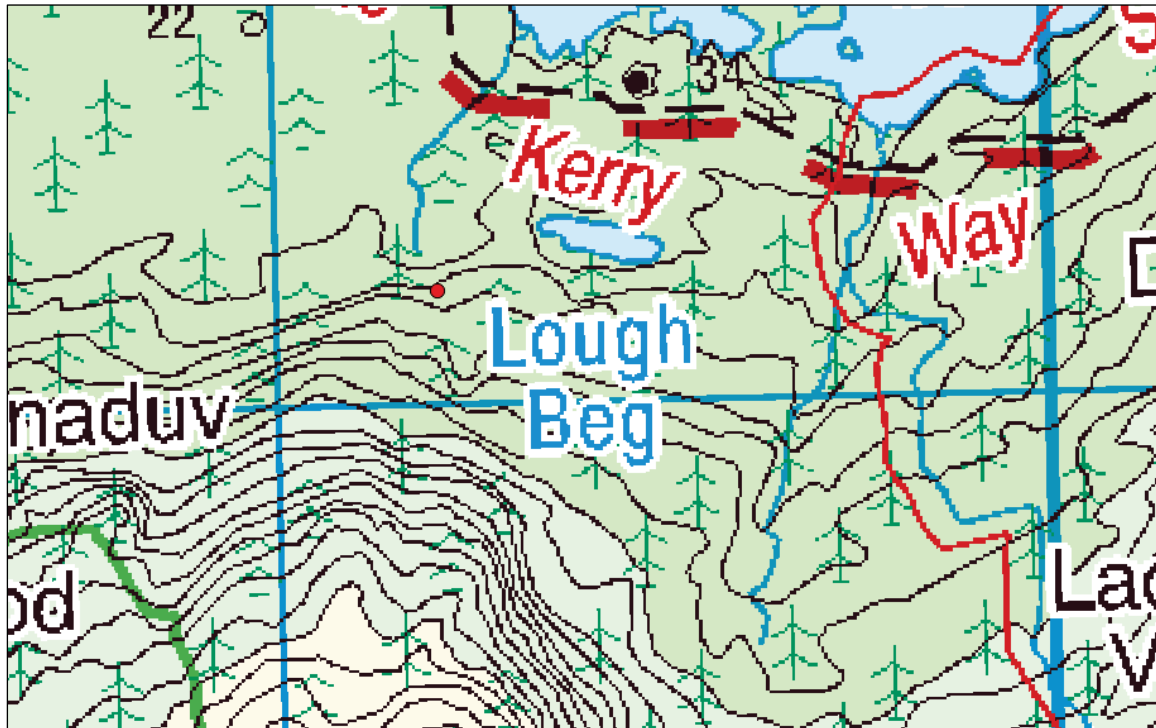


Figure 1: OSI Discovery Series map showing the location of *Lejeunea hibernica* (marked by red dot) at Gallavally (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

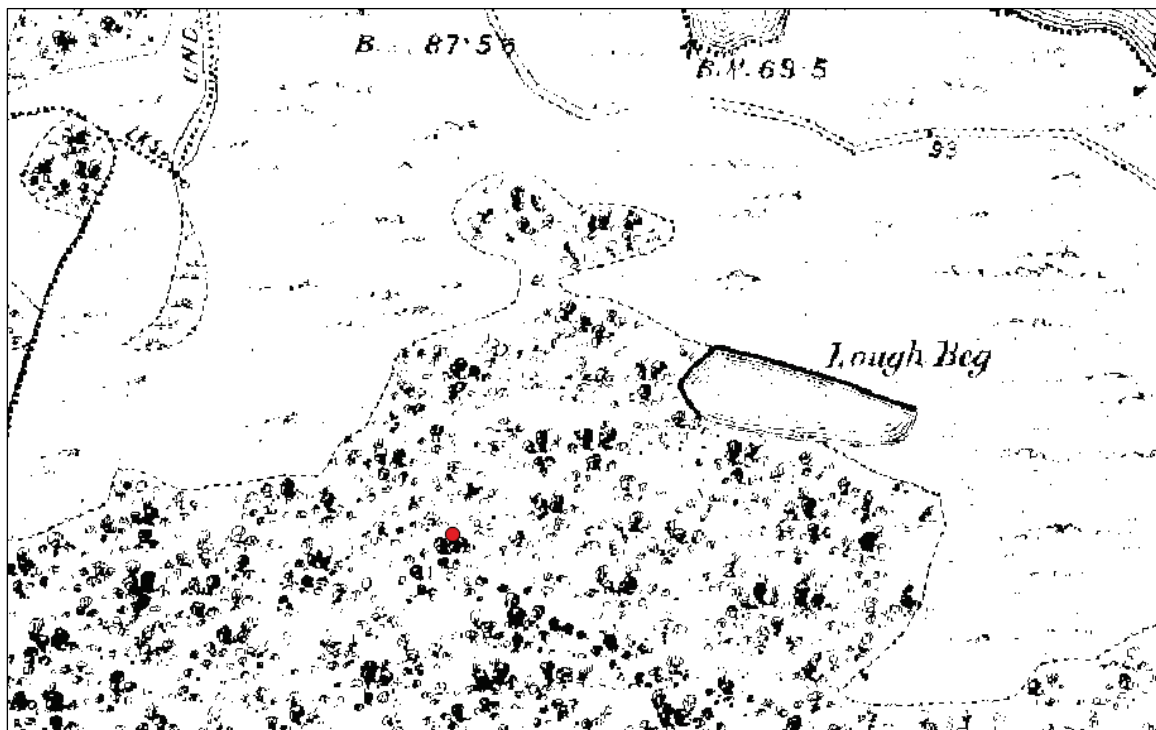


Figure 2: 6-inch map showing the location of *Lejeunea hibernica* (marked by red dot) at Gallavally (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

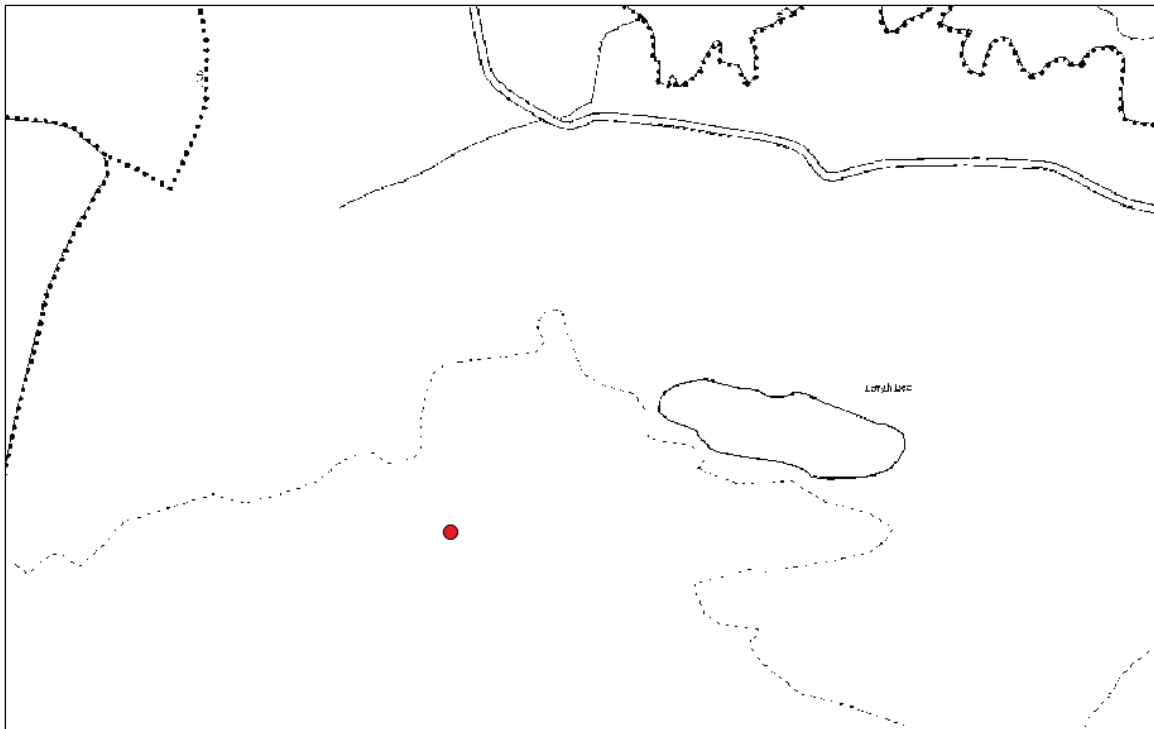


Figure 3: 1:5,000 map showing the location of *Lejeunea hibernica* (marked by red dot) at Gallavally (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).



Figure 4: 2005 aerial photo showing the location of *Lejeunea hibernica* (marked by red dot) at Gallavally (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).



Figure 5: Bing aerial photo showing the location of *Lejeunea hibernica* (marked by red dot) at Gallavally.

Management & Conservation

General

- There are no clear threats to this species, which is locally frequent in the extreme SW
- Some localities may be vulnerable to afforestation, overstocking, burning, building, etc

Potential site-specific threats/issues

- There are few specific threats to this population; erosion while the stream is in spate is a minor possibility.

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 hibernica Bischl. *et al.* ex Grolle

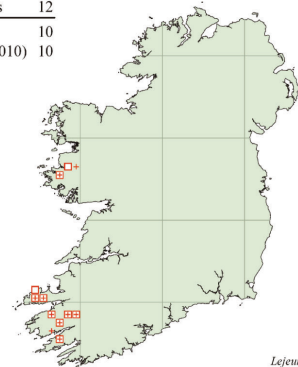
Irish Pouncewort

syn. *Lejeunea diversiloba* auct. non Spruce

Status in Ireland: Near Threatened; **Status in Europe:** Rare



Number of Hectads	12
+ Old (pre-1970)	10
□ Recent (1970–2010)	10



Lejeunea hibernica

Identification

As in other species of the genus, the leaves of *L. hibernica* are more or less oval with sac-like ventral lobules and the underleaves are bilobed. *L. hibernica* is a particularly small species, the pale green, rather rigid shoots reaching only c. 1.5 cm long and 0.6 mm wide. It grows as isolated shoots creeping through other bryophytes or as mats, which can occasionally be extensive. It is characterised by its neat, rigid shoots, and the very variable lobules, which may, on the same shoot, be minute or obsolete to inflated and almost as large as the lobes. The leaf cells are unlike those of other Irish *Lejeunea* species, being

uniformly thick-walled. It is most similar to *Microlejeunea ulicina*, but that species has much less variable lobules and lacks the uniformly thick-walled leaf cells.

Distribution in Ireland

This plant has a strongly south-western distribution, with most records from Co. Kerry where it can be locally abundant at some sites. There are recent records from 17 localities in five vice-counties: S. Kerry (Brandon Mountain, 1967–2006; Connor Pass, 1881–2006; An Loch Dubh, 2006; An Loch Geal, 2006; Lough Cummeenoughter, 2006; Lough Anscaul, 1898–2006;

Lough Doon, 2006; Loch Bhearna na Gaoithe, 2006; Maghanaboe Glen, 2006; S. of Coomacullen Lake, 2006; Mullaghanattin, 1972, 1983; Ballaghbeama Gap, 1967–2006; Looscaunagh Wood, 1983); N. Kerry (Torc Cascade, 1842–2005); W. Cork (Lackawee, 1955–2006); W. Galway (Kylemore, 1933–2010) and W. Mayo (Mweelrea, 1987, 2003). There are older records from S. Kerry (Lough Coomeathcun, 1951; Cummeenduff Glen, 1967); N. Kerry (Five Mile Bridge, 1965; Eagle’s Nest, 1861–1965; Glena, 1863) and W. Mayo (Devil’s Mother, 1901) as well as unconfirmed records from Pontoon (W. Mayo, 1901) and Errisbeg (W. Galway, 1994). Ratcliffe (1968) includes *L. hibernica* in the Southern Atlantic group.

Ecology and biology

A strongly oceanic species, this plant grows with other bryophytes on shaded, moist rocks and boulders, particularly near streams, lakes and waterfalls, in damp recesses, ravines, block scree and under rock overhangs. It tends to grow on mildly base-rich rocks. Typical associates include *Fissidens dubius*, *Heterocladium heteropterum*, *Isoetecium myosuroides*, *Jubula hutchinsiae*, other *Lejeunea* spp., *Plagiochila* spp., *Radula* spp., *Saccogyna viticulosa* and *Thamnobryum alopecurum*. Lowland or subalpine, it has been found at altitudes of 50–400 m in Ireland.

This species may be autoicous or dioicous, and is usually fertile although sporophytes are rare. Gemmae

and other specialised means of vegetative reproduction are unknown.

World distribution

L. hibernica is known outside Ireland only from Madeira, where it is considered *Rare*, and the Azores. It is assigned to a Hyperoceanic Southern-temperate floristic element in Europe.

Threats

There are no clear threats to this species, as it seems to be relatively frequent in the extreme south-west. Some of the localities may be vulnerable to change through afforestation, overstocking, burning, building, etc.

Conservation

The very restricted distribution of this species and the global importance of the Irish populations mean that conservation measures, if necessary, are appropriate. Its continued presence at the more important sites should be monitored.

Protected sites with recent records: Glanmore Bog SAC; Killarney National Park; Killarney National Park, Macgillycuddy’s Reeks and Caragh River Catchment SAC; Mount Brandon SAC; Mweelrea/Sheeffry/Erriff Complex SAC; The Twelve Bens/Garraun Complex SAC; **Unprotected sites with recent records:** none.