

Flora Protection Order - bryophytes

Scapania ornithopodioides

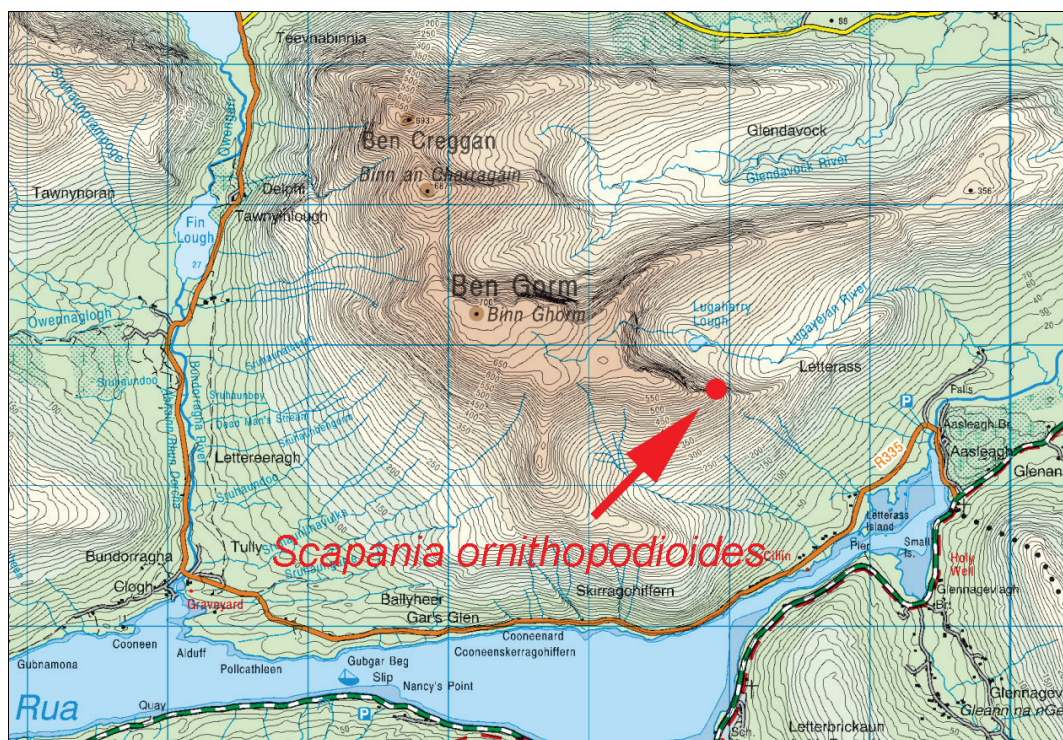
Status: Vulnerable; listed on the Flora Protection Order

Location: Ben Gorm, Co. Mayo

Species Records

Taxon	Vice County number	Taxon Site	Locality / habitat	Grid Reference	Date	Recorder	Protected site
<i>Scapania ornithopodioides</i>	27	18	Mweelrea Sheefry Erriff Complex cSAC; Site 1	L8793064702	2010.10.08	Hodd, R.L	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8805964760	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8804264727	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8801364711	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8796464737	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8792464707	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8774264778	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8770464817	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8760264901	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8751664908	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8746764915	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8743864892	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8739764916	2015.06.25	Rory Hodd	SAC001932
<i>Scapania ornithopodioides</i>	27	18	Ben Gorm; Lugaharry	L8737264954	2015.06.25	Rory Hodd	SAC001932

Location (1:50,000 Discovery map)



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Field Data Sheet – Survey of FPO Bryophytes 2015

Species	County	6" Map	Discovery Map
<i>Scapania ornithopodioides</i>	Mayo	Ma115/ Ma116	37
Locality/ Site name	Vice-county (No.)	SAC/NHA	
Lugharry, Ben Gorm	H27	001932 Mweelrea/Sheefry/Erriff Complex SAC	
Grid ref (GPS, National Grid)	2005 Aerial Photo	Recorder(s)	
(i) L8805964760(±3)	2525-B/2526-A	R.L. Hodd	
Elevation (m)	Solid geology	Survey date	
320	Sandstone	25/06/2015	
Site description	<i>S. ornithopodioides</i> grows at this site on steep grassy slopes below cliffs, often where water is running down, and sometimes on relatively exposed slopes.		
Population description	Forming scattered shoots and relatively pure patches amongst grassy vegetation and with other hepatics, frequent patches occur over a large area of slope.		
Associated species	Associated with <i>Nardus stricta</i> , <i>Molinia caerulea</i> , <i>Trichophorum germanicum</i> , <i>Sphagnum palustre</i> , <i>Pleurozia purpurea</i> , <i>Campylopus flexuosus</i> , <i>Potentilla erecta</i> , <i>Rhytidiadelphus loreus</i> and <i>Racomitrium lanuginosum</i> .		
Vegetation (after Fossit, 2000)	GS3 dry-humid acid grassland, with elements of HH3 Wet heath in places		
Current management	These slopes are extensively grazed, with little dwarf shrub cover remaining.		

Threats	There is potential threat from overgrazing, but current levels of grazing are having little detrimental impact.
Conservation measures	Avoid any increases in stocking levels.
Ownership	Located on commonage.
Access	A rough path can be followed between fences from Aasleagh Falls onto the open mountain and up to the edge of the corrie.
Other remarks	

GPS readings for the species

National Grid Letter	Easting	Northing	Comments
L	88042	64727	(±4) (ii) 335m alt.
L	88013	64711	(±6) (iii) 360m alt.
L	87964	64737	(±5) (iv) 360m alt.
L	87924	64707	(±5) (v) 395m alt.
L	87742	64778	(±7) (vi) 410m alt.
L	87704	64817	(±6) (vii) 390m alt.
L	87602	64901	(±5) (viii) 405m alt.
L	87516	64908	(±4) (ix) 420m alt.
L	87467	64915	(±5) (x) 450m alt.
L	87438	64892	(±5) (xi) 480m alt.
L	87397	64916	(±6) (xii) 480m alt.
L	87372	64954	(±6) (xiii) 470m alt.

Synonymous habitat/vegetation types :

First record and other comments:

Previously recorded by R.L. Hodd in 2010.

References:

Hodd, R.L. 2015. *Survey of Flora Protection Order Bryophytes 2015*. Unpublished report to National Parks and Wildlife Service. Dublin.

Photographs:



Photograph 1: General location of populations of *S. ornithopodioides*, indicated by red arrows, in the Lugharry corrie.



Photograph 2: Damp grassy slopes of corrie wall, at location (i) on which *S. ornithopodioides* is frequent.



Photograph 3: Habitat of *S. ornithopodioides* in damp flushed grassland at location (i).



Photograph 4: Slopes at the head of the corrie, above Lugharry Lough, on which a number of populations of *S. ornithopodioides* occur.

Maps and Aerial Photographs:

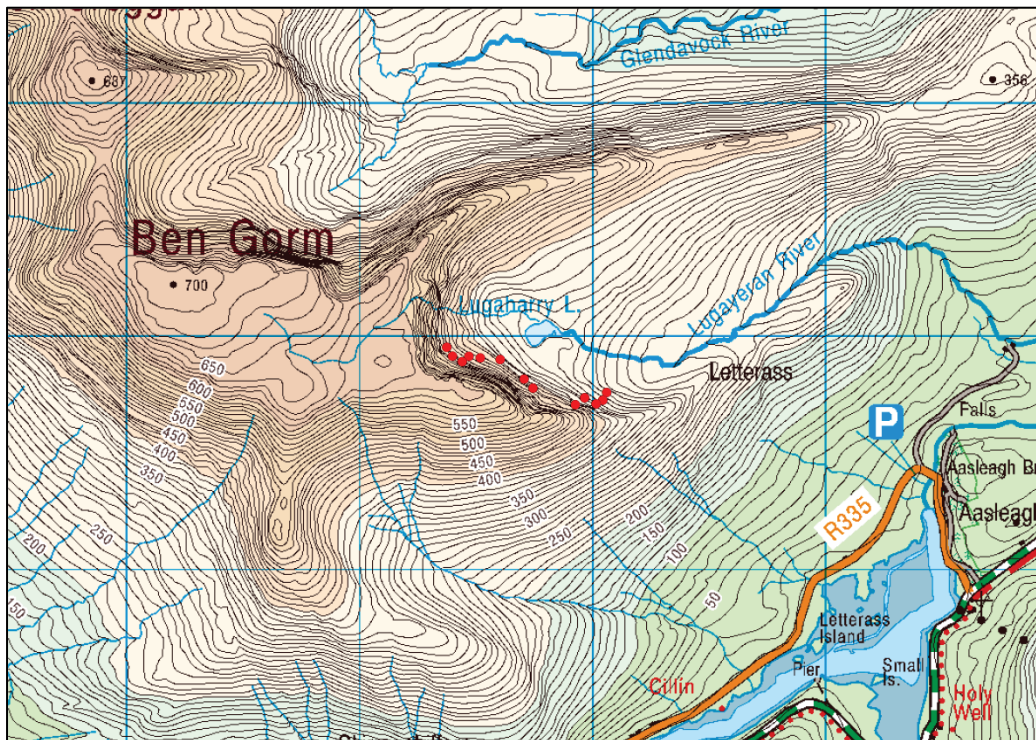


Figure 1: OSI Discovery Series map showing the locations of *S. ornithopodioides* (marked by red dots) at Lugaharry, Ben Gorm (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

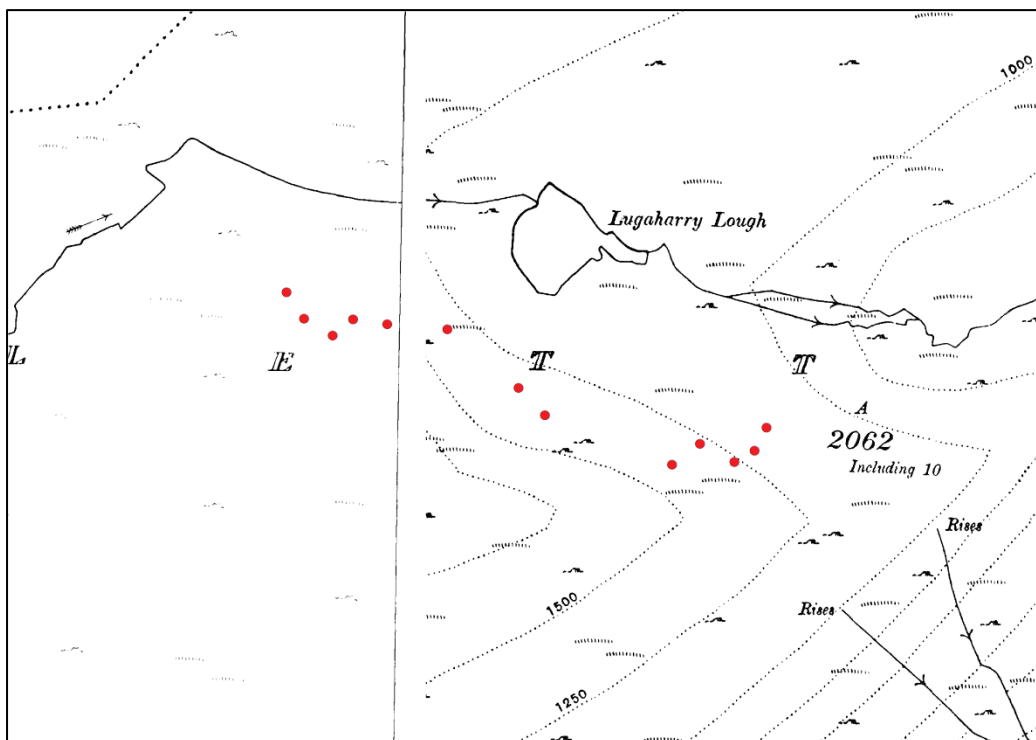


Figure 2: 6-inch map showing the locations of *S. ornithopodioides* (marked by red dots) at Lugaharry, Ben Gorm (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

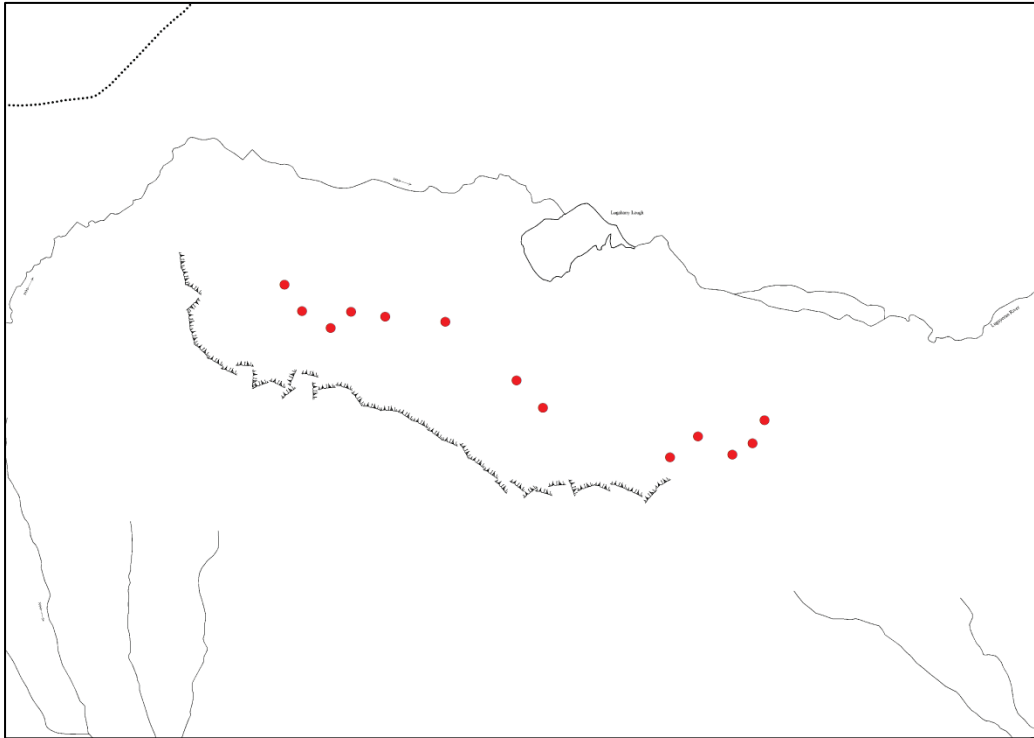


Figure 3: 1:5,000 map showing the locations of *S. ornithopodioides* (marked by red dots) at Lugaharry, Ben Gorm (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

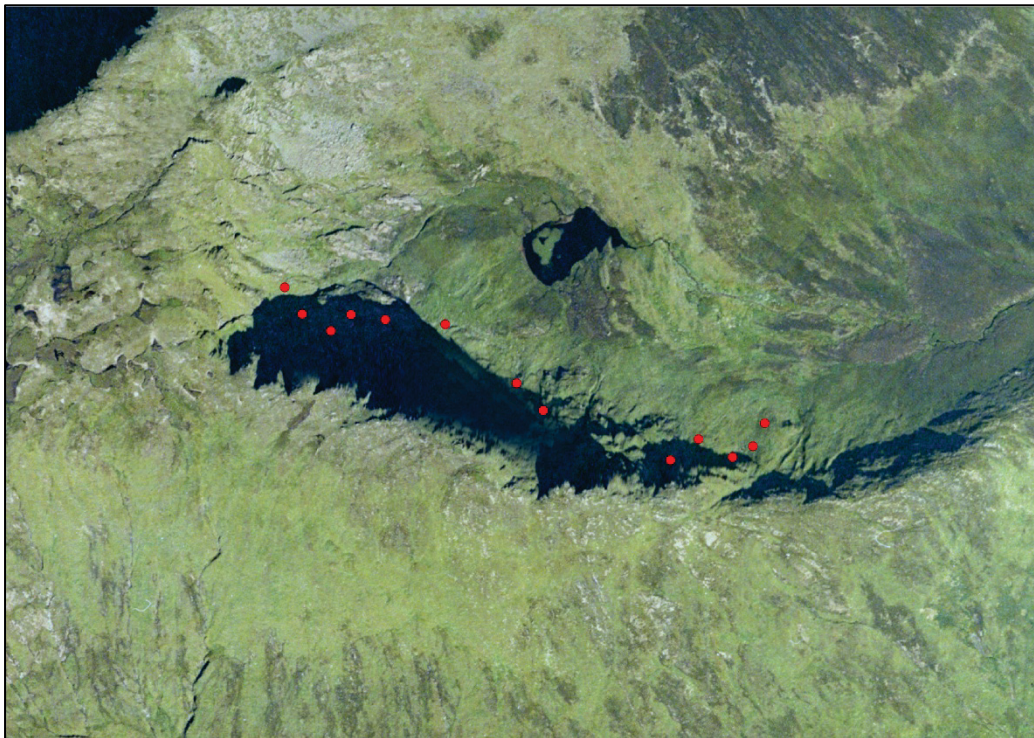


Figure 4: 2005 aerial photo showing the locations of *S. ornithopodioides* (marked by red dots) at Lugaharry, Ben Gorm (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

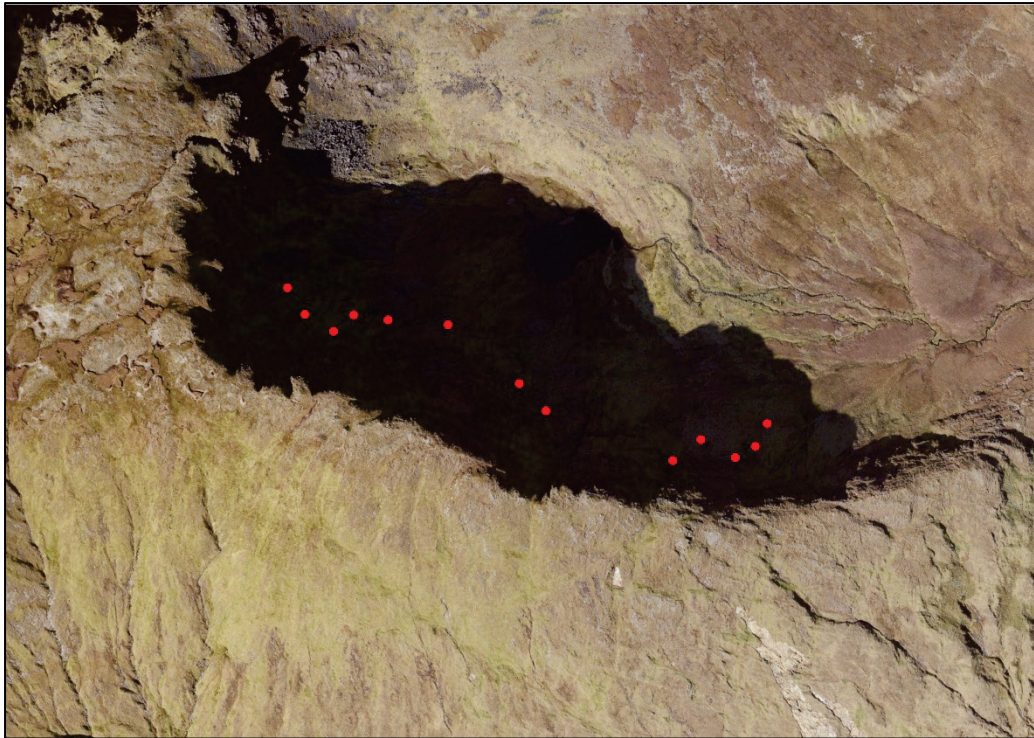


Figure 5: Satellite image showing the locations of *S. ornithopodioides* (marked by red dots) at Lugharry, Ben Gorm (Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community).

Management & Conservation

General

- Overstocking with sheep, damaging the habitat, has badly affected some sites, particularly in Connemara
- Other potential threats include burning and afforestation
- Climate change?

Potential site-specific threats/issues

- There is potential threat from overgrazing, but current levels of grazing are having little detrimental impact.

Excerpt from:

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

Hornworts and Liverworts

Scapania ornithopodioides (With.) Waddell

Bird's-foot Earwort

syn. *Jungermannia ornithopodioides* With.

Status in Ireland: Vulnerable (A2c); **Status in Europe:** Least Concern

Identification

This is a large dark reddish-brown or purple leafy liverwort. Like other species of *Scapania*, it has the leaves divided into two unequal lobes, the slightly smaller antical lobe overlying the postical lobe, and there are no underleaves. It resembles

S. nimbose in size (shoots up to c. 10 cm long and 5.5 mm wide) and general appearance, but the leaf lobes are divided all the way to the base, so that there is no keel, and the lobes are bordered with many closely-set teeth, more numerous and shorter than those of *S. nimbose*.

RARE AND THREATENED BRYOPHYTES OF IRELAND

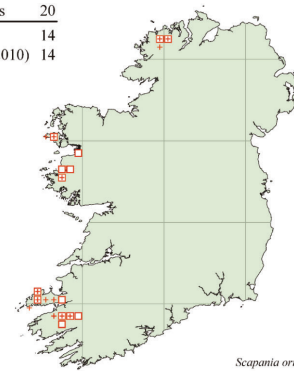
**Distribution in Ireland**

S. ornithopodioides is confined to the extreme west, with recent records from at least 13 localities in five vice-counties: S. Kerry (Brandon Mountain, 1813–2009; Macgillicuddy's Reeks, 1961–2009; Cummeenduff Glen, 1972; The Pocket, Mullaghanattin, 1972); N. Kerry (Mangerton Mountain, 1972–2009; Gormagh, 2009; Coumbrack Lake, 2009); W. Galway (Muckanaght, 1933–1970); W. Mayo (Croagh Patrick, 1987; Mwelrea, 1970–2010; Slievemore, 1910–1999) and W. Donegal (Errigal, 1962–2002; Muckish Mountain, 1955–2009). There are older records from S. Kerry (Ballysitteragh, 1951; Coomacullen Lake, 1951; Coomasaharn, 1951; Coomanare Lakes, 1898; Mount Eagle Lough, 1898; Stradbally Mountain, 1953); W. Galway (Benbaun, 1957; Bengower, 1950); W. Mayo (Croaghau, 1951) and W. Donegal (Slieve Snaght, 1962). Ratcliffe (1968) places *S. ornithopodioides* into the Northern Atlantic group.

Ecology and biology

One of the Northern Atlantic hepatic mat species in Ireland, *S. ornithopodioides* is confined to N.- and NE-facing rocky slopes, often in block scree or in patchy heather, at medium to high altitudes in oceanic areas. It is usually associated with other large Atlantic liverworts, including *Herbertus aduncus* subsp. *hutchinsiae*, *Bazzania tricrenata*, *B. pearsonii*, *Mastigophora woodsii*, *Pleurozia purpurea* and *Mylia taylorii*, and the moss *Breutelia chrysocoma*. At Stumpa Barr na hAbhainn, Beenkeragh, Macgillicuddy's Reeks (S. Kerry) it occurs in numerous large patches across an area of c. 5 × 10 m, among large overhanging rocks/boulders, in association with other hepatics and grasses, mainly *Festuca vivipara* and *Agrostis*

Number of Hectads	20
+ Old (pre-1970)	14
□ Recent (1970–2010)	14



Scapania ornithopodioides

capillaris; at Muckish Mountain (W. Donegal) it is found in large patches across a slope, within an area of c. 100 × 50 m, under an open canopy of *Calluna*, in association with *Herbertus aduncus* subsp. *hutchinsiae* and *Pleurozia purpurea* (R.L. Hodd, pers. comm.). It is alpine to subalpine, recorded at 400–1035 m in Ireland.

It is dioicous; female inflorescences are rare and male inflorescences and sporophytes are unknown. Gemmae are also rare.

World distribution

This plant is restricted to the north-western fringe of Europe, occurring in the Faeroes, Scotland (*Nationally Scarce* in Britain) and Norway. In Europe, it is classified as an Oceanic Boreal-montane floristic element. Outside Europe, it occurs in disjunct populations in the Himalaya, China, Japan, Taiwan, the Philippines and Hawaii.

Threats

Overstocking with sheep has damaged the habitat at some sites, particularly in the Connemara area of W. Galway, where this species was not refound during recent fieldwork. Burning is also a potential threat. Climate change may also affect this species.

Conservation

It is difficult to recommend any conservation measures to counter climate change, but the now very restricted stands of Northern Atlantic hepatic mat vegetation should not be subjected to any more overstocking or burning. The system of EU farm subsidies, which has largely been responsible for overstocking with sheep in the uplands over the last few decades, is now changing,

Hornworts and Liverworts

and hopefully the habitat will recover. Populations require monitoring to ensure their continued survival.

Protected sites with recent records: Cloghernagore Bog and Glenveagh National Park SAC; Croagh Patrick pNHA; Croaghnaun/Slievemore SAC; Killarney National

Park, Macgillicuddy's Reeks and Caragh River Catchment SAC; Mount Brandon SAC; Muckish Mountain SAC; Mweelrea/Sheeffry/Erriff Complex SAC; Slieve Mish Mountains SAC; The Twelve Bens/Garraun Complex SAC; **Unprotected sites with recent records:** none.
