Flora Protection Order - bryophytes

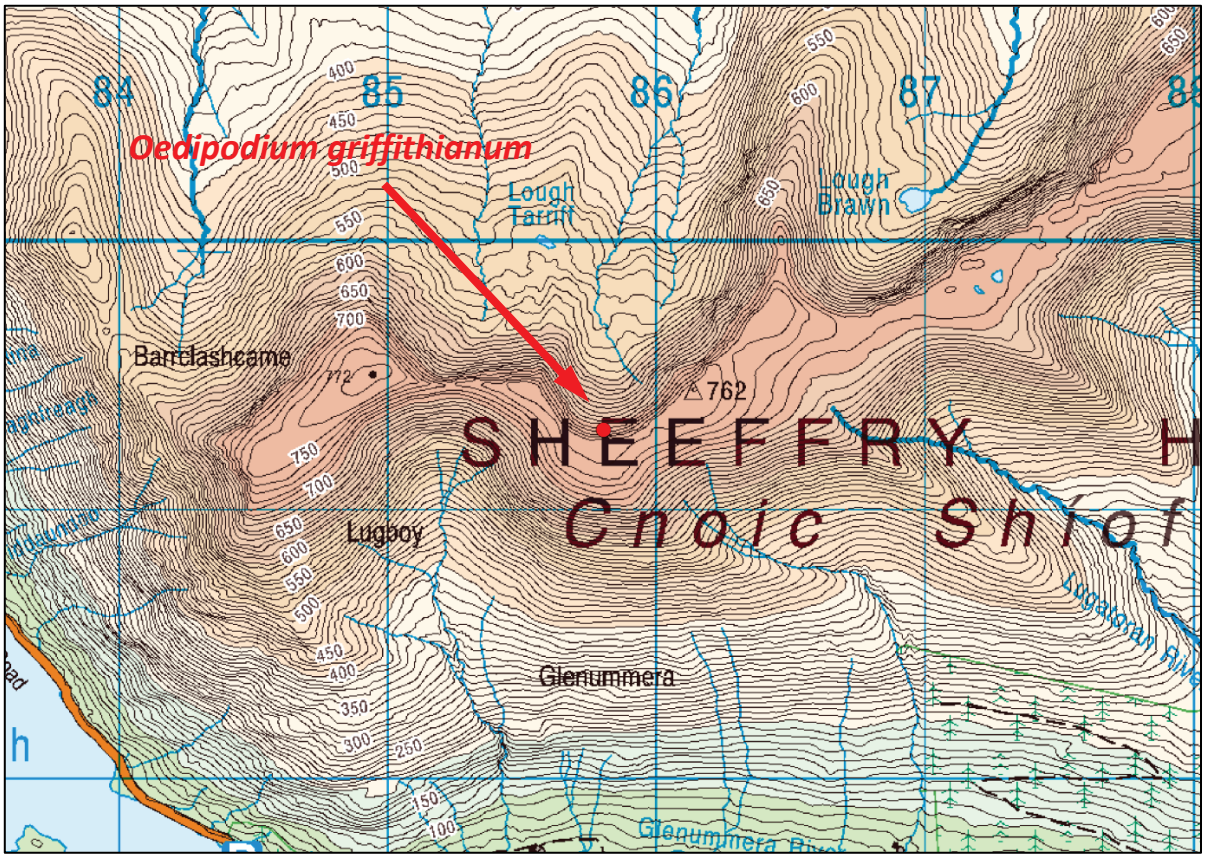
Oedipodium griffithianum

Status: Critically Endangered; listed on the Flora Protection Order
Location: Sheeffry Hills, Co. Mayo

Species Records

Taxon	Vice County number	Taxon Site	Locality / habitat	Grid Reference	Date	Recorder	Protected site
Oedipodium griffithianum	27	04	Sheeffry Hills; Sloes above L. Tarriff	L8580069298	2015.08.28	Rory Hodd	SAC001932

Location (1:50,000 Discovery map)



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Field Data Sheet – Survey of FPO Bryophytes 2015

Species *Oedipodium griffithianum*	**County** Mayo	**6" Map** Ma106	**Discovery Map** 37
Locality/ Site name N slope of Sheeffry Hills, above L. Tarriff	**Vice-county (No.)** H27	**SAC/NHA** 001932 Mweelrea/Sheeffry/Erriff Complex SAC	
Grid ref (GPS, National Grid) L8580069298(±3)	**2005 Aerial Photo** 2388-C	**Recorder(s)** R.L. Hodd	
Elevation (m) 715	**Solid geology** Mudrock/sandstone	**Survey date** 28/08/2015	
Site description	Located on very steep slope of north-facing corrie wall, consisting of extensive areas of loose scree, interspersed with rocky grassland.		
Population description	Ca. 10 small patches, consisting of 1-5 rosettes, with frequent gemmae, are scattered over a 1x1m area of very loose scree.		
Associated species	Growing in proximity to *Oligotrichum hercynicum, Breutelia crysochoma, Racomitrium lanuginosum, Pogonatum urnigerum, Racomitrium fasciculare, Agrostis capillaris, Festuca vivipara* and *Anthoxanthum odoratum*.		
Vegetation (after Fossit, 2000)	ER3 Siliceous scree		
Current management	These slopes are subject to moderate to high levels of sheep grazing.		
Threats	As this habitat is extremely unstable, there is a threat from erosion due to overgrazing, although a certain amount of disturbance is desirable.		
Conservation measures	Maintenance of current grazing levels.		
Ownership	Commonage.		
Access	Accessed via a long walk along the northern side of the Sheeffry Hills from the head of Doo Lough.		
Other remarks			

GPS readings for the species

National Grid Letter	**Easting**	**Northing**	**Comments**

Synonymous habitat/vegetation types :

First record and other comments:
This species has not previously been recorded at this site.

References:

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

Photographs:



Photograph 1: Location of population of *O. griffithianum*, indicated by red arrow, on the northern slopes of the Sheeffry ridge.



Photograph 2: View east from a point on the ridge of the Sheefrys, red arrow indicating the location of *O. griffithianum* on very steep slopes.



Photograph 3: Habitat of *O. griffithianum* on a small patch of fine, loose scree, indicated by red arrow.



Photograph 4: *O. griffithianum*, producing gemmae, amongst loose scree on the Sheeffry Hills.

Maps and Aerial Photographs:

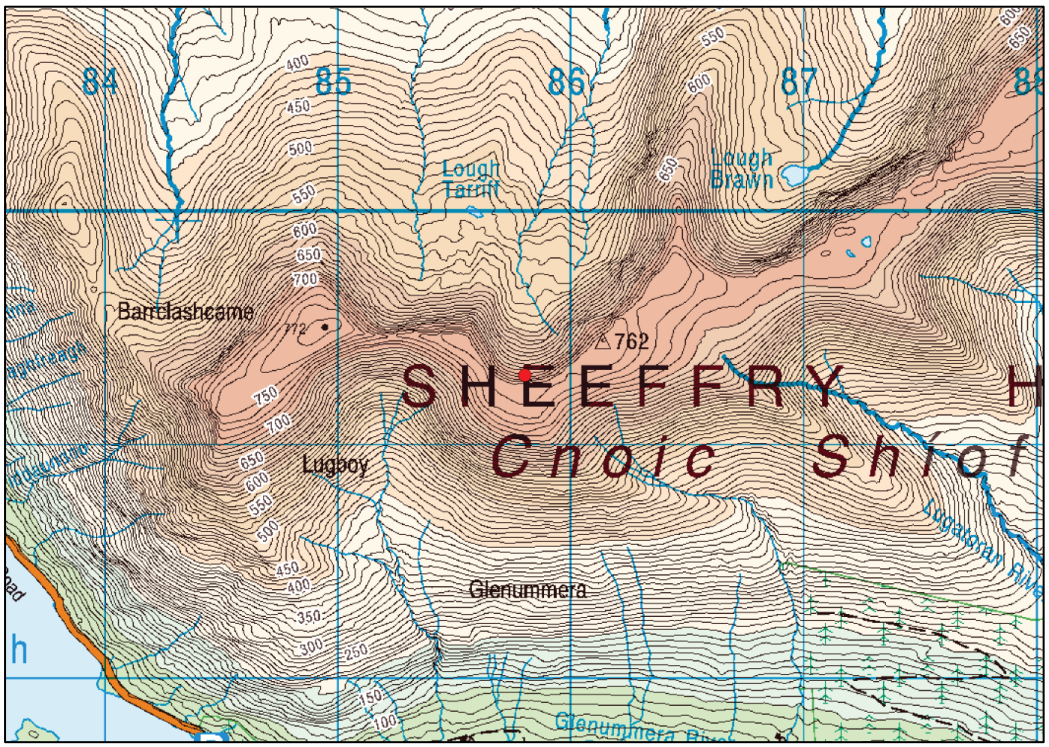


Figure 1: OSI Discovery Series map showing the location of *O. griffithianum* (marked by red dot) on the north slope of Sheeffry Hills, above L. Tarriff (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

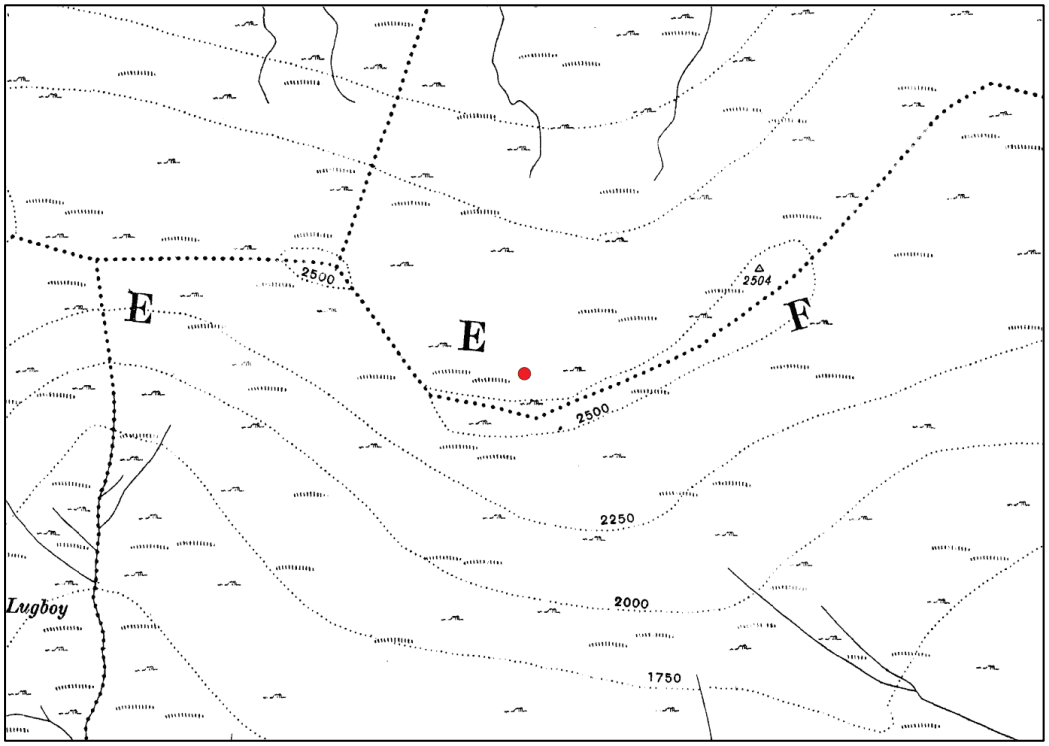


Figure 2: 6-inch map showing the location of *O. griffithianum* (marked by red dot) on the north slope of Sheeffry Hills, above L. Tarriff (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

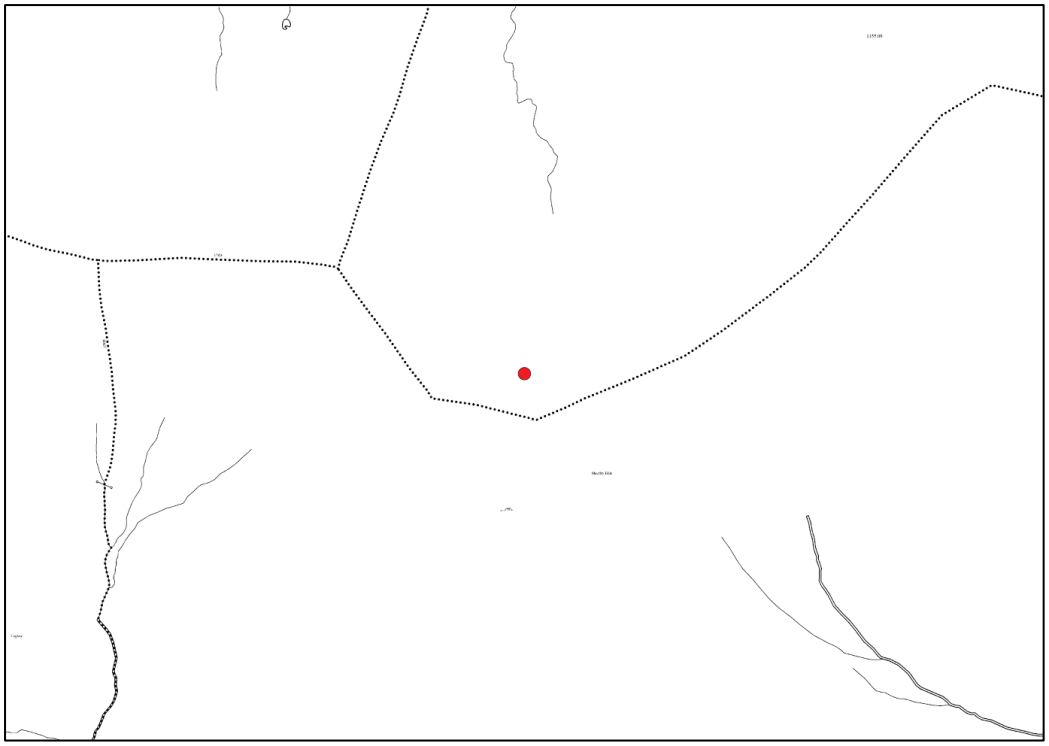


Figure 3: 1:5,000 map showing the location of *O. griffithianum* (marked by red dot) on the north slope of Sheeffry Hills, above L. Tarriff (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

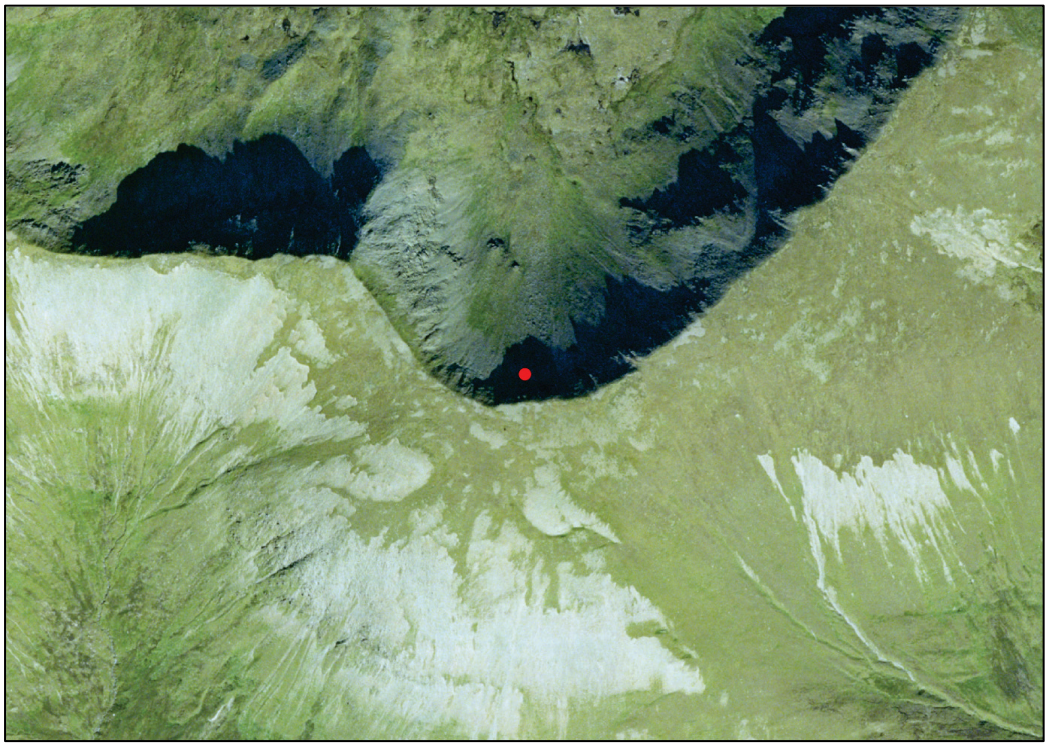


Figure 4: 2005 aerial photo showing the location of *O. griffithianum* (marked by red dot) on the north slope of Sheeffry Hills, above L. Tarriff (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).



Figure 5: Satellite image showing the location of *O. griffithianum* (marked by red dot) on the north slope of Sheeffry Hills, above L. Tarriff (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

- Eutrophication and erosion of habitat due to visitor pressure
- Disturbance and eutrophication by sheep
- Botanical collecting
- Climate change?

Potential site-specific threats/issues

- As this habitat is extremely unstable, there is a threat from erosion due to overgrazing, although a certain amount of disturbance is desirable.

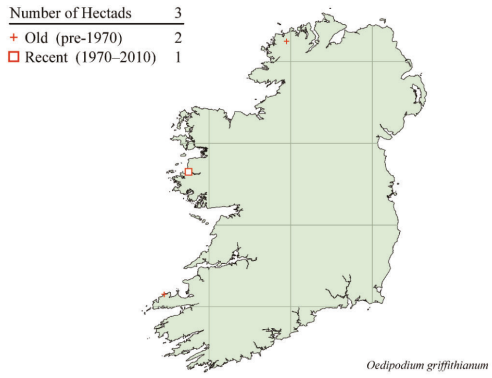
Excerpt from:
Lockhart, N., Hodgetts, N. & Holyoak, D. (2012). *Rare and Threatened Bryophytes of Ireland.* Belfast: National Museums Northern Ireland Publication No. 028.

Oedipodium griffithianum (Dicks.) Schwägr.

Gouty-moss

Status in Ireland: Critically Endangered (B1a, bi, ii, iv, B2a, bi, ii, iv); **Status in Europe:** Least Concern





Identification

An acrocarpous moss that grows as scattered plants or loose pale green tufts up to about 10 mm tall. The leaves are obovate-spathulate to almost orbicular with a long narrow ciliate base and soft succulent texture, becoming shrivelled when dry. The leaf apex is rounded, the margins plane and entire and the costa ends well below the leaf apex. Leaf cells are hexagonal, smooth, large and rather lax. Stalked discoid or oval multicellular gemmae are often present in the leaf axils or scattered on the leaves after they become detached. The capsules are shortly ellipsoid, with a long fleshy neck, gymnostomous and exserted on a succulent seta.

Molecular studies have revealed that the traditional classification of *Oedipodium* among the Splachnales or Funariales is incorrect and that this monotypic family occupies an isolated position among much more primitive groups of mosses.

Distribution in Ireland

The only modern record is from the NE slope of Mweelrea in W. Mayo, where it was discovered by D.G. Long in 2003. There are two old records, from S. Kerry (Brandon Mountain, 1836) and W. Donegal (Errigal, 1890). Despite the distinctive appearance of the species, an old report from N. Kerry (near Loo Bridge) must be rejected because it seems unlikely to occur in this lowland locality and no voucher specimen has been traced.

Ecology and biology

The only recent record was from loose, partly bare, fine soil on a slope of unshaded fine scree of Mweelrea Grit, facing east at 530 m altitude. The old record 'near summit of Errigal' was presumably somewhere just below 751 m altitude. In Britain, it grows on moist humus-rich or peaty soil in more or less shaded rock crevices or block screes or in mountain regions, mainly at moderate to high altitudes (A.C. Crundwell in Hill *et al.* 1994). In Norway, it is also known beside tree roots and on earth at the edge of grassy turf on rocks and boulders (Störmer 1969).

Individual plants are probably short-lived, but no details are available. The species is autoicous or synoicous and (in Britain) it frequently produces capsules that ripen in summer. Tubers are unknown but vegetative propagation presumably occurs from the discoid foliar gemmae.

World distribution

In Europe, it is known in Norway, Sweden (where it is listed as *Near Threatened*) and the extreme NW of Finland, mainly in the mountains (Störmer 1969). It is assigned to an Oceanic Boreal-montane floristic element in Europe. Elsewhere, there are records from the Russian Far East, Japan, Alaska, Washington State, Canada, Greenland, Tierra del Fuego and the Falkland Islands.

Threats

O. griffithianum is apparently extinct around the summit

of Errigal, where intense pressure from human visitors has eutrophicated and littered potential habitat. Mweelrea has the only population known to survive and, although in a remote location, it occurs only in small quantity there and potentially is at risk from disturbance of the scree by sheep or botanists and from thoughtless collection of specimens.

Conservation

The Mweelrea site and the two localities with old records are all on protected land.

Protected sites with recent records: Mweelrea/ Sheeffry/Erriff Complex SAC; **Unprotected sites with recent records:** none.