

# Flora Protection Order - bryophytes

## *Oedipodium griffithianum*

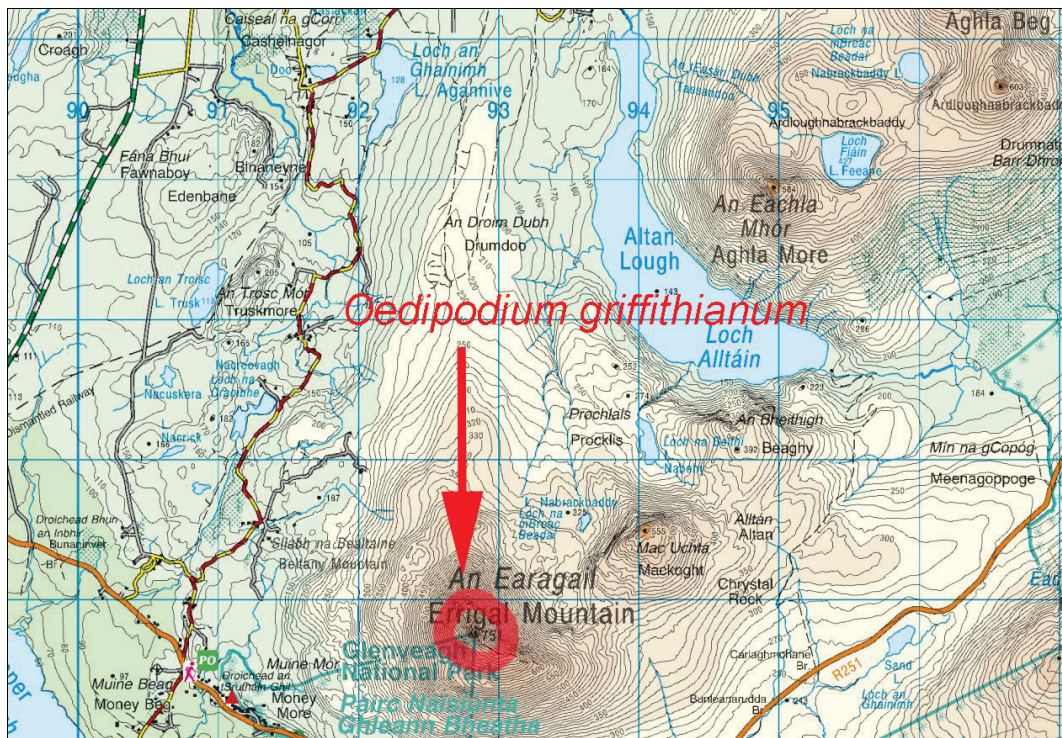
**Status:** Critically Endangered; listed on the Flora Protection Order

**Location:** Errigal, Co. Donegal

### Species Records

Taxon	Vice County number	Taxon Site	Locality / habitat	Grid Reference	Date	Recorder	Protected site
<i>Oedipodium griffithianum</i>	35	03	Near summit of Errigal	B92	1890.07.	Dixon, H.N.	SAC002047
<i>Oedipodium griffithianum</i>	35	03	Errigal, near summit	B9281520846	2016.10.28	Rory Hodd	SAC002047

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



Ordnance Survey of Ireland Licence No EN 0059214  
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## Field Data Sheet – Survey of FPO Bryophytes 2016

<b>Species</b> <i>Oedipodium griffithianum</i>	<b>County</b> Donegal	<b>6" Map</b> dg042b	<b>Discovery Map</b> 1
<b>Locality/ Site name</b> Errigal, near summit	<b>Vice-county (No.)</b> H35	<b>SAC/NHA</b> 002047 Cloghernagore Bog And Glenveagh National Park SAC	
<b>Grid ref (GPS, National Grid)</b> B9281520846(±5)	<b>2005 Aerial Photo</b> 0204-A	<b>Recorder(s)</b> R.L. Hodd	
<b>Elevation (m)</b> 740	<b>Solid geology</b> Whitish quartzite with pebble beds	<b>Survey date</b> 28/10/2016	
<b>Site description</b>	Very steep rocky northeast-facing slope below summit, with numerous rock outcrops and cliffs.		
<b>Population description</b>	Ca. 10 plants present on thin, loose soil in open declivity in low outcrop along a small band of cliffs, gemmae present on some plants.		
<b>Associated species</b>	Growing with <i>Dicranella heteromalla</i> , <i>Marsupella emarginata</i> , <i>Nardia scalaris</i> and <i>Oligotrichum hercynicum</i> .		
<b>Vegetation</b>	ER1 Exposed siliceous rock		
<b>Current management</b>	These slopes are grazed by sheep, and there is a popular walking route above.		
<b>Threats</b>	There are few direct threats, although littering by walkers from the summit above could have a detrimental impact.		
<b>Conservation measures</b>	Make walkers aware of the impacts of littering.		
<b>Ownership</b>	Commonage		
<b>Access</b>	A well-worn path leads from a carpark beside the Glenveagh to Dunlewey Road to the summit, from where it is possible to carefully descend steep slopes to the population.		
<b>Other remarks</b>			

### Synonymous habitat/vegetation types :

### First record and other comments:

The only previous record at this site was by H.N. Dixon in 1890.

### References:

Hodd, R.L. 2016. *Survey of Flora Protection Order Bryophytes 2016*. Unpublished report to National Parks and Wildlife Service. Dublin.

**Photographs:**



Photograph 1: The summit ridge of Errigal, with the location of *O. griffithianum* marked by red arrow.



Photograph 2: Line of low crags on which *O. griffithianum* occurs, location indicated by red arrow.



Photograph 3: Habitat of *O. griffithianum* in crevice under overhang, location of population indicated by red arrow.



Photograph 4: Part of population of *O. griffithianum* on loose soil in crevice.

Maps and Aerial Photographs:

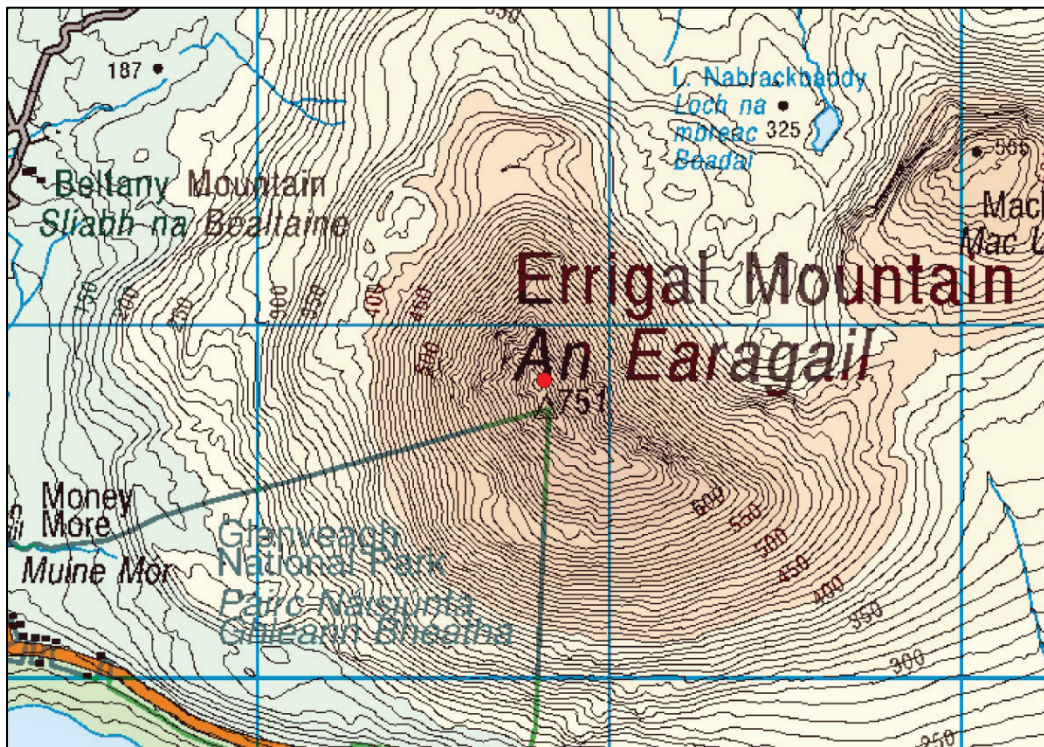


Figure 1: OSI Discovery Series map showing the location of *O. griffithianum* (marked by a red dot) on Errigal Mountain (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

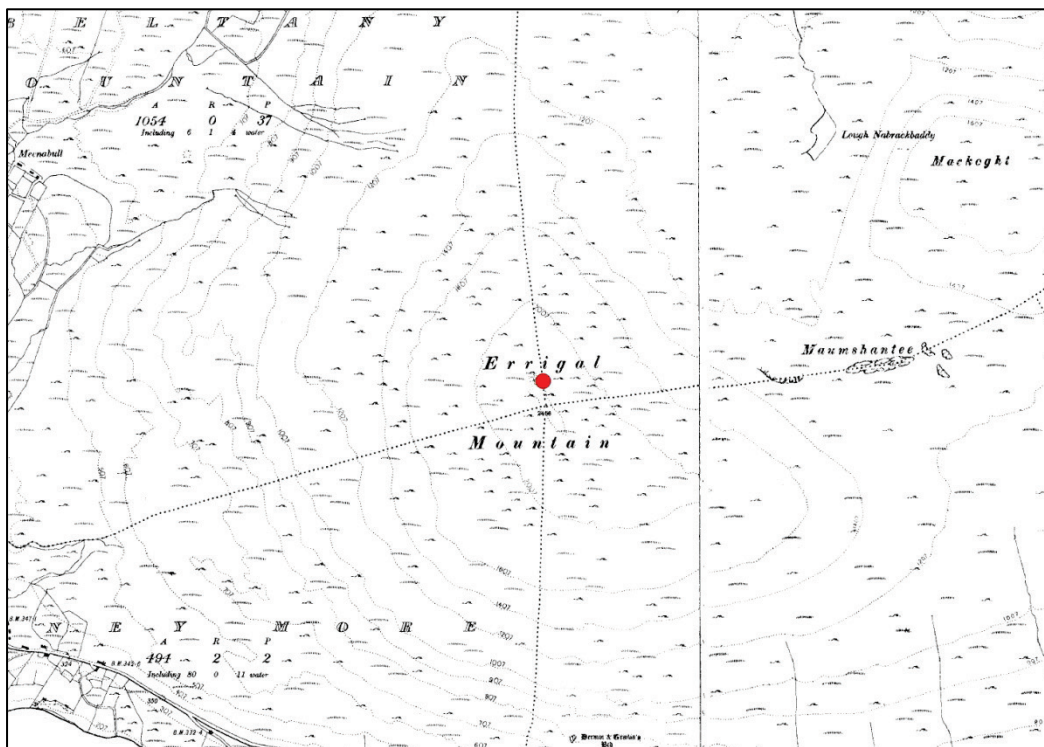


Figure 2: 6-inch map showing the location of *O. griffithianum* (marked by a red dot) on Errigal Mountain (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).



Figure 3: 1:5,000 map showing the location of *O. griffithianum* (marked by a red dot) on Errigal Mountain (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

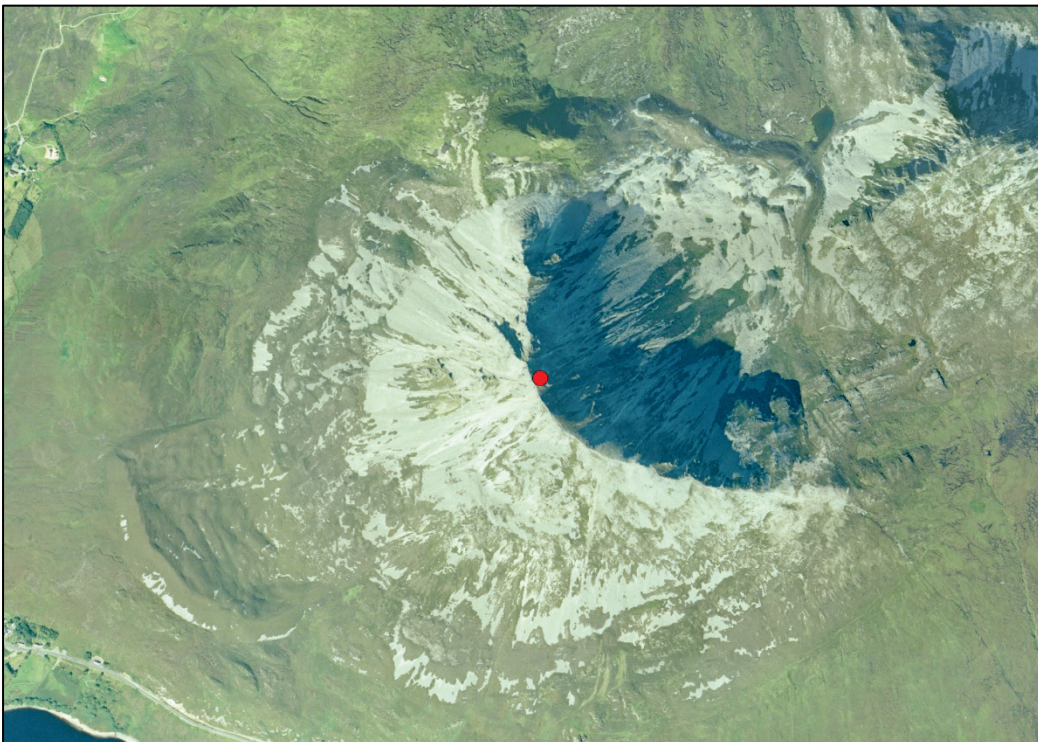


Figure 4: 2005 aerial photo showing the location of *O. griffithianum* (marked by a red dot) on Errigal Mountain (Ordnance Survey Ireland Licence No EN 0059214 © Ordnance Survey Ireland/Government of Ireland).

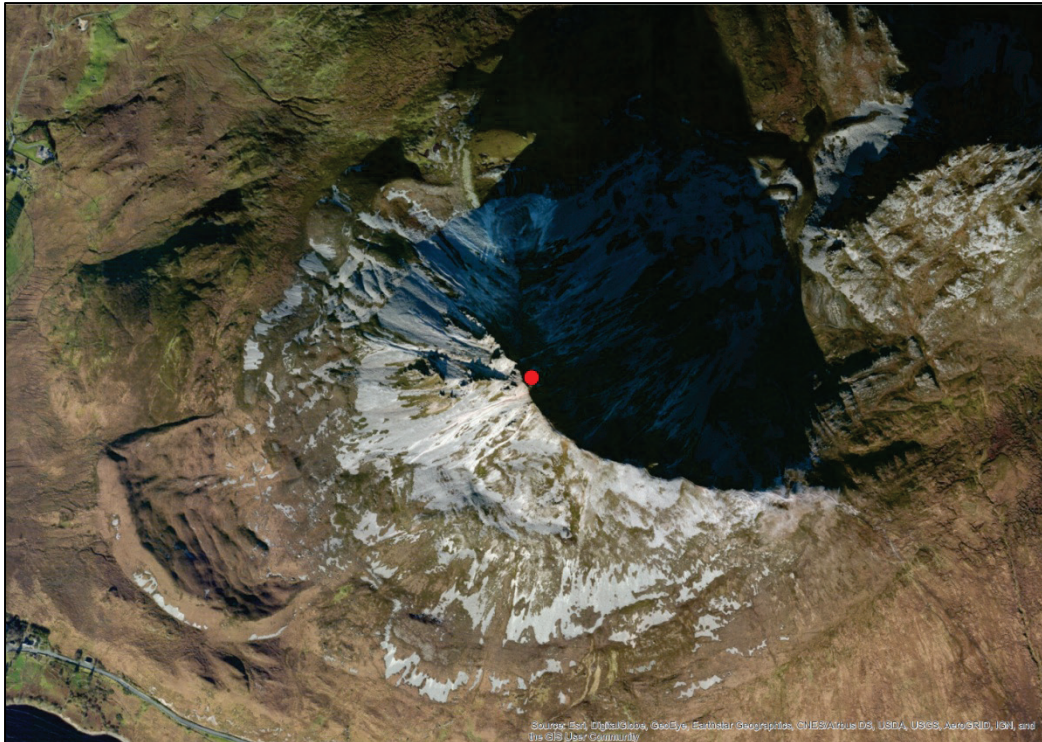


Figure 5: Satellite image showing the location of *O. griffithianum* (marked by a red dot) on Errigal Mountain (Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community).

## 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

- There are few direct threats, although littering by walkers from the summit above could have a 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.

RARE AND THREATENED BRYOPHYTES OF IRELAND

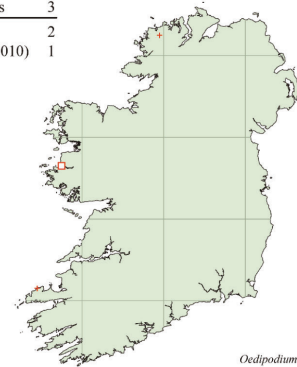
*Oedipodium griffithianum* (Dicks.) Schwägr.

Gouty-moss

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



Number of Hectads	3
+ Old (pre-1970)	2
□ Recent (1970–2010)	1



*Oedipodium griffithianum*

**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

*Mosses*

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.

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