



Ramsar Information Sheet

Published on 7 March 2023

Update version, previously published on : 30 May 1990

Ireland

Meenachullion Bog



Designation date	30 May 1990
Site number	475
Coordinates	54°54'08"N 08°07'07"W
Area	194,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

The Meenachullion Bog Nature Reserve lies in west County Donegal 3km north of the village of Fintown and 15km north east of Gweebarra Bay. The site lies in the south eastern corner of the Derryveagh and Glendowan upland area which is a large expanse of upland and lowland blanket bog, heath, grassland, river and lake habitats. While only a small part of this complex, the Ramsar site comprises upland blanket bog habitat on the slopes of Gubbin Hill and lowland blanket bog as the hill grades into flatter ground at its base. The Ramsar site includes rivers and lakes which connect the site to the Gweebarra River and Gweebarra Bay. A small road is present in the southern part of the site, which is otherwise undeveloped. Otter are present in the area and are likely to use the lakes, river and streams of the Ramsar site for foraging. The habitat is also suitable for breeding Golden Plover and Red Grouse and foraging Merlin, Peregrine and Golden Eagle, all of which are known from the wider area

The Meenachullion Bog Ramsar site is a small part of the much larger Cloghernagore Bog and Glenveagh National Park SAC and the Derryveagh and Glendowan Mountains SPA. This is an exceptionally large inland site which includes a rich diversity of habitats and landscape features, including mountains, exposed rock and scree, blanket bogs, dry, wet and alpine heath, upland grassland, wet grassland, rivers, lakes, scrub and woodland. The Gweebarra fault bisects the area forming a long valley, orientated north-east to south-west. The area is generally mountainous, taking in most of the Derryveagh and Glendowan ranges and including the two highest mountains in Donegal, Errigal (751 m) and Slieve Snaght (678 m). Towards the centre-west of the site are the fine ice-carved cliffs of the Poisoned Glen and Bingorms, which contrast dramatically with the gently undulating expanses of blanket bog in the south-west and north-east of the site. The underlying rock is predominantly granite. The SAC is of importance for its habitats as well as otter, freshwater pearl mussel, Atlantic Salmon and Killarney Fern. The SPA is of high ornithological importance with nationally important breeding populations of five species: Red-throated Diver, Peregrine, Merlin, Golden Plover and Dunlin (subsp. schinzi). The SPA is one of only a few locations where Red-Throated Diver breed in Ireland. It is also of importance for Red Grouse, Ringed Ouzel, Golden Eagle and Greenland White-fronted Geese.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	National Parks and Wildlife Service, Department of Housing, Local Government and Heritage
Postal address	National Parks and Wildlife Service, 90 North King Street, Smithfield, Dublin, Ireland D07 N7CV

National Ramsar Administrative Authority

Institution/agency	National Parks and Wildlife Service, Department of Housing, Local Government and Heritage
Postal address	National Parks and Wildlife Service, 90 North King Street, Smithfield, Dublin, Ireland D07 N7CV

2.1.2 - Period of collection of data and information used to compile the RIS

From year

To year

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary Yes No

(Update) B. Changes to Site area No change to area

(Update) For secretariat only: This update is an extension

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS? Not evaluated

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<3 file(s) uploaded>

Former maps

Boundaries description

The boundaries for this site were defined using the boundaries of the Meenachullion Bog Nature Reserve which was designated in 1990. The Meenachullion Bog Ramsar site is lies within the much larger and extensive Derryveagh and Glendowan Mountains SPA (004039) and the Cloghernagore Bog and Glenveagh National Park SAC (002047). While a small part of both the SAC and the SPA (which largely overlap with each other), Meenachullion Bog Ramsar Site is integral to this wider wetland complex. Details of the SAC and SPA can be found on the NPWS website at <https://www.npws.ie/protected-sites>.

Within this area a number of GIS data layers were used to define the Ramsar habitats within the site. These included:

- NPWS data (Site-Specific Conservation Objectives)
- CORINE (Co-Ordinated Information on the Environment) land cover data sets (2012).
- Bing Maps Aerial - © Harris Corp, Earthstar Geographics LLC © 2017 Intermap Earthstar Geographics SIO © 2017 Microsoft Corporation.
- Environmental Protection Agency of Ireland Rivers and Lakes layers data layers.

Habitat areas were estimated by reference to the available imagery and layers and should be considered representative but approximate.

2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre?

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

Area, in hectares (ha) as calculated from GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	Atlantic
EU biogeographic regionalization	Atlantic

Other biogeographic regionalisation scheme

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided

Blanket bogs cover approximately 13% of Ireland. They contain in excess of 90% water and act as vast water reservoirs. Blanket bog habitat with associated pool systems and connected lake and river habitats as present at this Ramsar site (and in the wider SAC and SPA) provide a number of key ecosystem and hydrological services. In terms of hydrological services blanket bogs host high status water bodies, regulate stream flow and act as source areas for high quality drinking water. An Environmental Protection Agency (EPA) funded study "Quantification of blanket bog ecosystem services to water", was carried out jointly by researchers from Queen's University Belfast and University College Dublin, and sought to raise awareness of the wider contributions provided by healthy blanket bog ecosystems to society and the environment, while also examining the wider cost of their degradation. The study found that habitat condition influences stream flow and water quality, with more intact areas of blanket bog having more stable flow and water quality regimes, and with more stable hydrogeological regimes in peat ensuring more consistent contributions of bog water to stream flow, while maintaining terrestrial biodiversity (EPA, 2021). See also <https://www.catchments.ie/blanket-bogs-hydrology-ecosystem-services-water/>

Other ecosystem services provided

Blanket bogs provide a range of ecosystem services (in addition to hydrological). • they provide a refuge for a rich biodiversity of species including several rare plants, birds and invertebrate species. • are commonly used as rough grazing land for sheep and cattle, grouse shooting, deer stalking and fishing. • they preserve prehistoric farming landscapes beneath the peat as well as a diverse range of artefacts within the peat mass. • the patterns of pools on the flatter areas of blanket bog is of particular conservation significance. The pools support a specialised range of mosses (especially species of Sphagnum) and plants and they provide essential feeding habitats for wetland birds. • within their peat layers, blanket bogs preserve a record of their own growth and development and on a larger scale, they provide insights into regional vegetation change, climate change, atmospheric pollution and act as chronometers for other events such as volcanic eruptions. • they accumulate and store millions of tonnes of carbon and have a vital function in controlling the green house gases that cause climate change. • their utilisation for recreation can have positive benefits on the health of people. See <http://www.ipcc.ie/a-to-z-peatlands/blanket-bogs/>

- Criterion 2 : Rare species and threatened ecological communities

3.2 - Plant species whose presence relates to the international importance of the site

<no data available>

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
Others																	
CHORDATA/ MAMMALIA	<i>Lutra lutra</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex II (EU Habitats Directive), Red Listed in Ireland (Least Concern)	Annex II Habitats Directive, site provides foraging and commuting habitat for Otter
Birds																	
CHORDATA/ AVES	<i>Falco columbarius</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I listed (EU Birds Directive), Red-listed (Birds of Conservation Concern in Ireland (BoCCI),	Annex I Birds Directive listing. Potential foraging habitat.
CHORDATA/ AVES	<i>Pluvialis apricaria</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I listed (EU Birds Directive), Red-listed (Birds of Conservation Concern in Ireland (BoCCI),	Annex I Birds Directive listing. Potential breeding habitat.

1) Percentage of the total biogeographic population at the site

Merlin and Golden Plover nest within the Derryveagh and Glendowan Mountains SPA. Meenachullion Bog lies within this SPA. Merlin are likely to forage over habitats within the Meenachullion Bog Ramsar site. Golden Plover may nest at this site (no records available to show nesting Golden Plover within the Ramsar Site) or at a site with suitable habitat nearby. The Ramsar site is an integral part of the wider peatland complex which supports breeding populations of both of these species.

3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Blanket bogs [7130]	<input checked="" type="checkbox"/>	Lowland and upland blanket bog	Annex I (Habitats Directive)
Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]	<input checked="" type="checkbox"/>	Oligotrophic lakes	Annex I (Habitats Directive)
Northern Atlantic wet heaths with Erica tetralix [4010]	<input checked="" type="checkbox"/>	Wet heath	Annex I (Habitats Directive)

Optional text box to provide further information

The wider wetland complex within which the Meenachullion Bog Ramsar site lies is designated as an SAC for the following additional wetland communities: [3260] Floating River Vegetation, [4010], Dry Heath, [4060] Alpine and Subalpine Heaths, [6410] Molinia Meadows, [7130] and [7150] Rhynchosporion Vegetation. The latter community (Rhynchosporion Vegetation) may be present within the Ramsar site however there is no specific data for the site.

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

Meenachullion Bog Ramsar lies in the south east corner of the Derryveagh and Glendowan Mountains upland complex. The Ramsar site is dominated by the north west slope of Gubbin Hill (250m) which grades into largely flat ground at its base, except for a small hillock (155m) in the south west part of the site. There are two oligotrophic lakes within the site (Lough Currin and Lough Fad). The Cloghernagore River which is part of the head waters of the Gweebarra River flow from this site before joining the main river channel which flows into Gweebarra Bay. The site has both lowland and upland blanket bog habitat, wet heath and oligotrophic lakes. The site forms a small part of the extensive Derryveagh And Glendowan Mountains SPA (004039) and the Cloghernagore Bog And Glenveagh National Park SAC (002047).

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks	Rivers, streams	2	7	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes	Lakes	2	5	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands	Blanket bog	1	179	Representative

4.3 - Biological components

4.3.1 - Plant species

Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Rhododendron ponticum</i>	Potential	unknown

Optional text box to provide further information

The wider SAC within which the Ramsar Site lies supports the *Trichomanes speciosum* (Killarney Fern) [1421]. Killarney Fern is categorised as rare and vulnerable in Ireland and is listed under Annex II and IV of the EU Habitats Directive (Ní Dhúill et al, 2015). There are no records of the fern from within the Ramsar site.

Rhododendron ponticum is present in the Glenveagh National Park with potential to spread to the Ramsar site.

4.3.2 - Animal species

Optional text box to provide further information

The following species are present within the wider wetland and upland complex which the Ramsar site is integral to: Red-throated Diver, Peregrine, and Dunlin (subsp. *schinzii*). Each of these species are listed under Annex I of the EU Birds Directive. Red-throated Diver nest only in County Donegal where there is a small breeding population of no more than ten pairs which breeding on small bog loughs. Dunlin is a Red Listed species in Ireland with a small breeding population overall and even smaller numbers of blanket bog habitat. Peregrine nest of cliff sites within the wider area and are likely to forage over Meenachullion Bog.

Within the wider Glenveagh and Glendowans Special Protection Area the following species are also present: Red Grouse (Red Listed in Ireland) is widespread on the bogs and Ring Ouzel, a rare species of the uplands, breeds sparingly, with at least 2 pairs recorded in a 2002 survey. Several pairs of Whinchat, a scarce Irish species, breed within the SPA. Goosander is also a regular visitor to the lakes of the SPA, though breeding within the site has not been proved. Snowy Owl has also attempted to breed within the SPA - a clutch of eggs was laid but these did not hatch. Wood Warbler is present annually, with perhaps three pairs occurring. Redstart has bred on at least one occasion within the SPA but there have been few sightings in recent years and it is not known if breeding occurs regularly (NPWS, 2014).

Glenveagh National Park within which the Meenachullion Bog Ramsar site lies is the central location for the Golden Eagle re-introduction programme, which commenced in 2000. With time, this species may become successfully re-established as a breeding species in Ireland (NPWS, 2014).

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mild with no dry season, warm summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Tributaries of the Gweebarra river rise within the Ramsar site. The Cloghernagore River rises within the Ramsar site and flows into the main Gweebarra River Channel before reaching the transitional waterbody of Gweebarra Bay. The Cloghernagore and Gweebarra Rivers are part of the Gweebarra sub catchment and the Gweebarra - Sheephaven catchment (EPAMaps.ie)

4.4.3 - Soil

Organic

(Update) Changes at RIS update No change Increase Decrease Unknown

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes No

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from precipitation	<input checked="" type="checkbox"/>	No change
Water inputs from surface water	<input type="checkbox"/>	unknown
Water inputs from groundwater	<input type="checkbox"/>	unknown

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Unknown	unknown

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site

(Update) Changes at RIS update No change Increase Decrease Unknown

Significant accretion or deposition of sediments occurs on the site

(Update) Changes at RIS update No change Increase Decrease Unknown

Significant transportation of sediments occurs on or through the site

(Update) Changes at RIS update No change Increase Decrease Unknown

Sediment regime is highly variable, either seasonally or inter-annually

(Update) Changes at RIS update No change Increase Decrease Unknown

Sediment regime unknown

4.4.6 - Water pH

Acid (pH<5.5)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Oligotrophic

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar ii) significantly different site itself.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Low
Erosion protection	Soil, sediment and nutrient retention	Low

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium
Scientific and educational	Educational activities and opportunities	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	Medium
Soil formation	Sediment retention	Medium
Soil formation	Accumulation of organic matter	Medium
Nutrient cycling	Carbon storage/sequestration	Medium
Pollination	Support for pollinators	Medium

Outside the site: 1000's

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

RIS for Site no. 475, Meenachullion Bog, Ireland

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

The site is a Statutory Nature Reserve and is state owned.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

National Parks & Wildlife Service (NPWS), Department of Housing, Local Government and Heritage
Donegal County Council.
Environmental Protection Agency (EPA).
Department of Communications, Climate Action and Environment.

Provide the name and/or title of the person or people with responsibility for the wetland:

Maurice Eakin

Postal address:

National Parks and Wildlife Service, Department of Housing, Local Government and Heritage
90 North King Street,
Smithfield, Dublin,
Ireland
D07 N7CV

E-mail address:

maurice.eakin@housing.gov.ie

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	unknown impact	unknown impact	<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown

Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Renewable energy	unknown impact	unknown impact	<input type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	increase

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Low impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	unknown impact	High impact	<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	increase

Please describe any other threats (optional):

Rhododendron ponticum is present within the National Park and threatens adjacent blanket bog and woodland habitat owing to its ability to successfully seed into and spread within these habitats.

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Cloghernagore Bog And Glenveagh National Park SAC	https://www.npws.ie/protected-sites/sac/002047	whole
EU Natura 2000	Derryveagh And Glendowan Mountains SPA	https://www.npws.ie/protected-sites/spa/004039	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Park	Glenveagh National Park	https://www.glenveaghnationalpark.ie/	whole
Nature Reserve	Meenachullion Nature Reserve	https://www.npws.ie/nature-reserves/donegal/meenachullion-nature-reserve	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Glenveagh National Park	http://datazone.birdlife.org/site/factsheet/656/details	whole

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Land conversion controls	Implemented
Hydrology management/restoration	Implemented

Species

Measures	Status
Reintroductions	Implemented

Human Activities

Measures	Status
Harvest controls/poaching enforcement	Implemented
Livestock management/exclusion (excluding fisheries)	Implemented
Research	Implemented
Regulation/management of recreational activities	Implemented

Other:

The Meenachullion Bog Ramsar site within the Cloghernagore Bog And Glenveagh National Park SAC (002047) and the Derryveagh And Glendowan Mountains SPA (004039) Under European and national legislation, Ireland must maintain at favourable conservation status areas designated as Special Protection Areas and Special Areas of Conservation. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites. Conservation objectives have been set for the Cloghernagore Bog And Glenveagh National Park SAC (002047) and the Derryveagh And Glendowan Mountains SPA (004039) and can be accessed on NPWS.ie.

Legislation in the Republic of Ireland affords protection to bird species outside of designated sites e.g. all wild bird species are afforded protection by The Wildlife Act 1976. Waterfowl shooting is under license only, managed by the National Parks & Wildlife Service.

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

The Meenachullion Bog Ramsar Site lies within Glenveagh National Park. The National Park has visitor and educational facilities.

URL of site-related webpage (if relevant): <https://www.glenveaghnationalpark.ie/>

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Water quality	Implemented
Plant community	Implemented
Plant species	Implemented
Birds	Implemented

The rivers and lakes associated with the site are monitored under the Water Framework Directive monitoring programme which is implemented by the EPA.

As part of a EU Natura 2000 site, it is required under Article 12 and 17 of the EU Birds and Habitats Directives respectively, that the status and trends of the conservation objectives within the site are monitored and reported on every 6 years.

The site is regularly inspected by the National Parks and Wildlife Service Conservation Rangers for the area.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Byrne, M, 2014. Monitoring and Breeding Success Of Red-throated Divers in Co. Donegal, 2014. National Parks and Wildlife Service, Northern Division. Prepared by: Mark Byrne, Conservation Ranger. BSc. Wildlife Mgt.

Colhoun, K. & Cummins, S. (2013) Birds of conservation concern in Ireland 2014-2019. Irish Birds 9 (4): 523-544.

Cromie, J. 2002. Breeding status of Red - throated Diver *Gavia stellata* in Ireland, Irish Birds, 7: 13 - 20

Cummins, S., Swann, M. & Newton, S.F. 2004. Upland Bird Survey Report, 2004. BirdWatch Ireland Unpublished Report for National Parks and Wildlife Service.

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Flynn, R., Mackin, F. and F. Renou-Wilson. 2021. Towards the Quantification of Blanket Bog Ecosystem Services to Water. EPA Research Report. Prepared for the EPA by Queens University Belfast and University College Dublin. EPA Research Programme 2021 - 2030.

McLoughlin, D and Beaubier, J.E. (2009) Breeding status of red-throated diver in County Donegal, 2009. Unpublished report, National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin.

Marnell, F., Looney, D. & Lawton, C. (2019) Ireland Red List No. 12: Terrestrial Mammals. National Parks and Wildlife Service, Department of the Culture, Heritage and the Gaeltacht, Dublin, Ireland.

Norris, D.W. Haran, B., Hennigan, J., McElheron, A., McLaughlin, D.J., Swan, V. & A. Walsh. 2010. Breeding Biology of Merlins *Falco columbarius* in Ireland, 1986 – 1992. Irish Birds, Vol 9, No. 1.

Ní Dhúill, E., Smyth, N., Waldren, S. & Lynn, D. (2015) Monitoring methods for the Killarney Fern (*Trichomanes speciosum* Willd.) in Ireland. Irish Wildlife Manuals, No. 82. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Ireland.

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NPWS (2017) Conservation Objectives: Cloghernagore Bog and Glenveagh National Park SAC 002047. Version 1. NPWS.

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[Birdwatchireland.ie](http://birdwatchireland.ie)

<http://www.ramsar.org>

<http://eunis.eea.europa.eu>

Epa.ie

Ippcc.ie

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Reindeer lichen (*Cladonia portentosa*) on Meenachullion Bog (*Martin Toye, Conservation Ranger, 29-11-2021*)



Pools on Meenachullion Bog (*Martin Toye, Conservation Ranger, 29-11-2021*)



Pools on Meenachullion Bog (*Martin Toye, Conservation Ranger, 29-11-2021*)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1990-05-30