

An Bord Achomharc Um Cheadúnais Dobharshaothraithe
Aquaculture Licences Appeals Board



Brádan Fanad Teo,
t/a MOWI Ireland,
Kindrum,
Fanad,
Letterkenny,
Co. Donegal

15 February 2021

Our Ref: AP2/1-14/2015
Site Ref: T05/555 Shot Head, Bantry Bay, Co Cork

Re: Appeal against the decision by the Minister for Agriculture, Food and the Marine to the conditions/grant of Aquaculture Licence to Bradán Fanad Teo t/a Marine Harvest Ireland, Kindrum, Fanad, Letterkenny, Co. Donegal on site Ref: T05/555 for the cultivation of Atlantic Salmon; *Salmo Salar* on a site on the foreshore at Shot Head, Bantry Bay, Co Cork

Dear Sirs

I refer to the appeals received by Aquaculture Licences Appeals Board (**the Board**) in relation to decision by the Minister to grant an Aquaculture Licence for the cultivation of Atlantic Salmon; *Salmo Salar* on a site on the foreshore at Shot Head, Bantry Bay, Co Cork (**the Site**).

Following consideration by the Board of submissions received following the Public Notice pursuant to Regulation 42(13) of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) concerning the Board's Appropriate Assessment of the proposed salmon farm on the Site, the Board has determined that further documents, particulars and information are necessary for the purpose of enabling it to determine the appeals.

In accordance with section 47 (1) (a) of the Act, the Board requires the following information:

1. Please provide the Board with the most recent available data collected, or research carried out by MOWI or on MOWI's behalf, relating to potential or observed effects on bird species at MOWI Ireland sites for the cultivation of Atlantic Salmon; *Salmo Salar*.
2. Please provide the following information, relating to, and in addition to, the information provided in Section 4.4.6 (page 130) of the Natura Impact Statement dated 7 July 2020 provided by MOWI to the ALAB Board (see Appendix I for extract):

- 2.1 Details (and copies of) formal protocols (if any) implemented by you in respect of the collection and reporting of bird injury and mortality data at MOWI Ireland sites for the cultivation of Atlantic Salmon; *Salmo Salar*;
- 2.2 Details of training administered to and undertaken by MOWI staff in respect of the collection and reporting of bird injury and mortality data at such MOWI Ireland sites;
- 2.3 Details of the methods of species identification of bird injuries or mortalities at such MOWI Ireland sites;
- 2.4 Details as to whether data concerning bird injury and mortality data at such MOWI Ireland sites forms part of an external auditing procedure; and
- 2.5 If so, copies of such externally audited reports concerning the collection and reporting of bird injury and mortality data for such sites for all years available or for the past 5 years, whichever is the greater.

In accordance with section 47 (1) (a) of the Act, the Board requires this information no later than 30 days of receipt of this letter.

Please note that if the documents, particulars or other information specified above is not received before the expiration of the period specified above, or such later period as may be agreed by the Board, the Board will, without further reference to you, determine the appeal.

We await hearing from you.

Yours sincerely,



Mary O'Hara
Secretary to the Board

Appendix I: Extract from page 130 of the Shot Head Natura Impact Statement, prepared by Watermark Consultants on behalf of Mowi Ireland:

4.4.6. Empirical evidence.

A wide range of Sustainability Indicators are collected and collated annually from member salmon farming companies worldwide under the auspices of the Global Salmon Initiative¹¹³. Mowi Ireland has been a member of GSI since 2015. One of the many Sustainability Indices monitored is for seabird mortalities. The results of the indices for bird interactions on Mowi Ireland sites, which can be found on the Mowi Ireland page of the GSI website, are given in Table 4.5.

Table 4.5.
NIS for a proposed salmon farm site at Shot Head, Bantry Bay.
Global Salmon Initiative (GSI) Sustainability Index for Mowi Ireland sites for seabirds (= seabird mortalities / operational sites pa).

Year	GSI Seabird Sustainability Index	
	Accidental	Intentional
2018	0.20	0.00
2017	0.11	0.00
2016	0.00	0.00
2015	0.00	0.00

The 2018 index represents the accidental loss of a total of two seabirds across ten operating sites in 2018 and one seabird across nine operating sites in 2017. These mortalities were all herring gulls.

Mary O'Hara
Secretary to the Board
Aquaculture Licences Appeals Board
Kilminchy Court
Dublin Road
Portlaoise
Co. Laois. R32 DTW5

02.03.2021

RINMORE

Your Ref. AP2/1-14/2015: Site Ref: T05/555 Shot Head. Bantry Bay, Co. Cork.

Dear Mary,

I refer to your letter dated February 15th 2021 requesting the following additional information.

1. Total reported bird entanglement data for bird mortality in 2020 was one herring gull.
2. Mowi ASA are no longer members of GSI.
 - 2.1 Note the attached Mowi procedure for Interaction with Wildlife - SOP Document ID. 42248 in addition to accompanying Wildlife observation record Document ID. 37353. These records are maintained by all our farm sites.
 - 2.2 Site staff are provided with basic identification training in accordance with our Interaction with Wildlife SOP. In addition, each production region of Mowi Ireland has at least one fulltime Biologist on staff who can be called upon to assist with any staff queries.
 - 2.3 Farm sites are provided with wildlife information pertaining to their local bay and surrounds. Attached are two examples for Bantry Bay (TQM No. 40240) and Kenmare Bay (TQM No. 37415. This information is displayed in the staff floating barge facilities as well as used for training.
 - 2.4 Data relating to bird or other animal entanglements is audited under Criterion 2.5 of the ASC Salmon Standard – Version 1.3, by the Aquaculture Stewardship Council (ASC) .
 - 2.5. All ASC audit data is published on the ASC website. Information relating to Mowi Ireland farms can be found <https://www.asc-aqua.org/find-a-farm/>

With Regards



Catherine McManus

TECHNICAL MANAGER

Mowi Ireland	OFFICE Kindrum Letterkenny Co. Donegal, Ireland F92 XD93	PHONE +353 74 9192105
Registered in Ireland as Comhlucht Iascaireachta Fanad Teoranta, VAT No: IE4530734O: Registration No. 66929 Directors: Jan Feenstra, Pat Connors, David Brennan	ADDRESS Rinmore, Ballylar P.O. Letterkenny Co. Donegal, Ireland F92 T677	EMAIL Catherine.McManus@mowi.com
		WEBSITE http://mowi.com

Location and process Ireland / Marine Production / Environmental Management

Document category Procedures

Last revision date 10/01/2020

Last approved date 12/02/2018 (McManus, Catherine)

Next revision date 10/01/2022

Date changed 07/11/2017 (Michelle Hay)

Interaction with Wildlife Procedure

1. Scope

As part of our daily activity, we are required to be aware of our interaction with local wildlife. As part of this, each site has area specific Wildlife Information documents which can be used as an aid to identifying birds and mammals of interest in an area (see below). Any wildlife observations should be recorded on the Wildlife Observation Record and any entanglements or mortalities should be recorded as described below.

2. Responsibility

It is the responsibility of each Site Manager to ensure that all staff are aware of this requirement and that the Wildlife Observation Record (TQM 37353) is completed regularly.

3. Procedure

Ensure all staff members become familiar with the local wildlife and record any observations regularly. Any mortalities of marine mammals or birds on the farm should be recorded in the site diary and e-mailed to the Technical Support Supervisor. The following information should be reported:

- Date
- Identification of bird/mammal e.g. seal, herring gull, cormorant etc.
- Cause e.g. entanglement
- Action to avoid repetition e.g. tightened loose bird net

It is important to accurately identify the species of bird or mammal, contact the Technical Support Supervisor for guidance if required. If in doubt about identification, e-mail pictures to the Technical Support Supervisor for assistance. Information about mortalities of endangered or red listed species (species listed as endangered or critically endangered by the IUCN or on a national endangered species list) will be made publically available on the website (ASC Criterion 2.5).

In the event of live entanglements, every effort should be made to free the bird or mammal. Record all live releases in the site diary. If there are 2 or more live entanglements per week, a record should be kept of the suspected cause (e.g. spinner out of line) and the action taken to minimise the risk of entanglement and prevent the cause from reoccurring.

In the event of a lethal incident, an assessment of the risk must be completed and evidence recorded to demonstrate the steps taken to reduce the risk of future incidents (ASC Criterion 2.5.7). The requirements relating to mortalities and lethal incidents of predators or other wildlife is intended to ensure minimal impact on populations of wildlife.

Location and process Ireland / Marine Production / Environmental Management

Document category Procedures

Last approved date 12/02/2018 (McManus, Catherine)

Last revision date 10/01/2020

Date changed 07/11/2017 (Michelle Hay)

Next revision date 10/01/2022

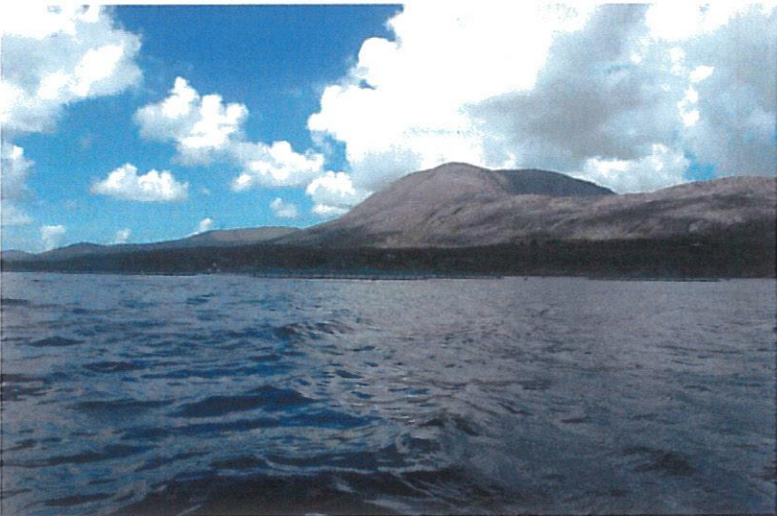
4. Related Documents & Record Sheets

- Birds, flora and fauna red list species – TQM 37454
- Wildlife Observation Record – TQM 37353
- Lough Swilly Wildlife Information – TQM 37669
- Mulroy Bay Wildlife Information – TQM 37654
- Donegal Bay Wildlife Information - TQM37586
- Clare Island Wildlife Information - TQM 37619
- Kenmare Bay Wildlife Information - TQM 37415
- Bantry Bay Wildlife Information – TQM 40240

Roancarrig & Ahabeg, Bantry Bay



Roancarrig Site, Bantry Bay



Ahabeg Site, Bantry Bay

Information for birds, flora and fauna of local interest.

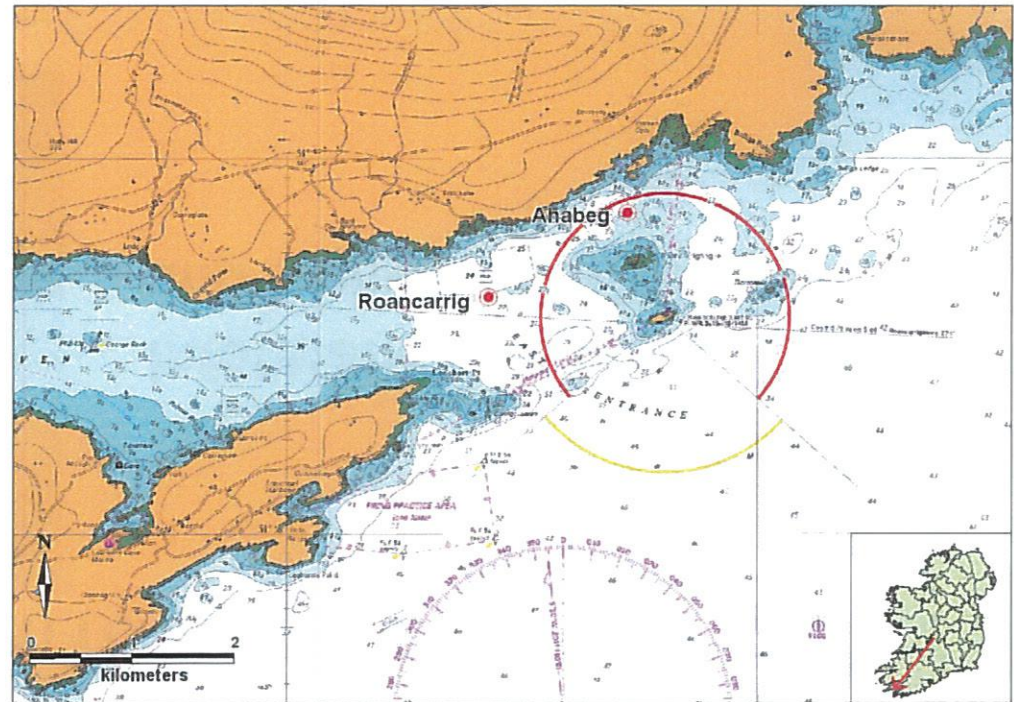
Details of some species of local significance are included for information. This list is not exhaustive, but can be used as a guide for species to be aware of and note. This guide should be used along with the site Wildlife Observation Record (TQM No. 37353) and the Interacting with Wildlife Procedure (TQM 42248). Further information can be obtained from the Environmental Assessment of Bantry Bay (TQM No. 40239)

Roancarrig & Ahabeg, Bantry Bay

The National Parks and Wildlife Service (NPWS) is responsible for the designation of areas of conservation.

- Special Areas of Conservation (SACs) are areas that meet criteria set down in the EU “Habitats Directive”, 92/43/EEC.
- Special Protection Areas (SPAs) are areas designated for protection under the EU “Wild Birds Directive”, 79/409/EEC.
- All the SACs and SPAs in Europe are grouped into the “Natura 2000” network under the Habitats Directive and are fully protected in Irish law.

Bantry Bay has high commercial use from the Whiddy Island Oil Terminal and Castletownbere is the second largest fishing port in Ireland, the largest for white fish. Bantry Bay is not a designated area, but the adjacent areas of Sheep’s Head SAC (000102) and Beara Peninsula SPA (004155) are protected, along with a number of proposed NHA’s including Roancarrigbeg and Roancarrig (001073). More information can be found on the NPWS website and the maps can be viewed at <http://webgis.npws.ie/npwsviewer/>



Harbour Seal (*Phoca vitulina*)



Source: Wikimedia Commons. Image by [Nevit Dilmen](#)



Source: Wikimedia Commons. Image by [Wordless Symbol](#)

IUCN European Threat Status: Least Concern (LC)

IUCN Irish Status: Not evaluated

Harbour Seals, also known as common seals, live near coastlines and eat a highly varied seafood diet, depending on what is available. They can dive as deep as 450 m and stay under for almost half an hour, but six-minute dives to depths of 30-100 m are more usual. Females usually have one pup a year, and two weeks after the pup is born, mate again.

When feeding, common seals travel up to 50 km from haul-out sites to feed and may stay out at sea for days. They can dive for up to 10 minutes, and reach depths of 50 metres or more.

When hauled out it often adopts a characteristic 'head-up, tail-up' posture. The colour is variable, ranging from black-grey to sandy brown with many small spots. The top of the small head is round and the nostrils form a 'V'. Males are often darker in colour than females and have a heavier appearance.

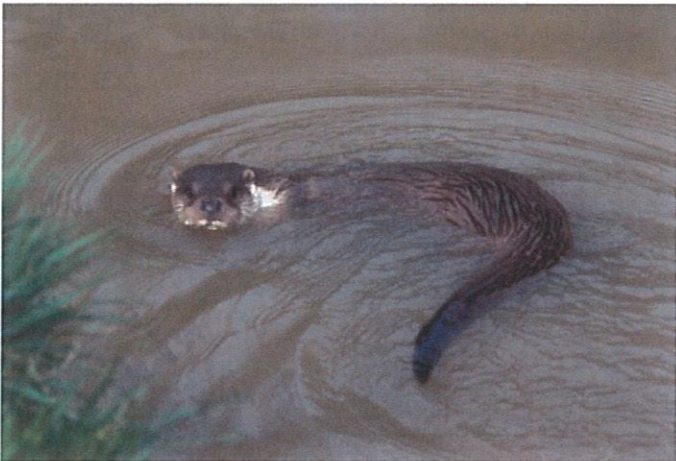
Common seals are protected under the Wildlife Act 1976 / 2000, the EU Habitats Directive 92/43 Annex V and the Bern Convention Appendix III.

<http://eol.org/pages/328629/details>

Otter (*Lutra lutra*)



Source: Wikimedia Commons. Image by [Factumquintus](#)



Source: [burrennationalpark](#). Image by Unknown

IUCN European Threat Status: Near Threatened (NT)

IUCN Irish Status: Near Threatened (NT)

The otter's feet are webbed and it has a dense layer of underfur that traps air, keeping the skin dry. Its body is streamlined and its large lungs allow it to stay under water for several minutes. Otters are found in rivers, lakes, marshes, estuaries and around the coast. They dig burrows in the riverbank, called 'holts', where they rest during the day. Otters are territorial, solitary, and are most active at dusk or after dark. Otters usually catch bottom-dwelling fish and will eat water birds, small mammals and carrion. Coastal otters also eat crabs, molluscs and sea urchins.

Males and females breed in spring and summer. There are usually two or three cubs in each litter, which are weaned at four months. The cubs stay with their mother for up to a year before dispersing. They usually begin to breed in their third year and can live to five years of age.

Lutra lutra. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2.

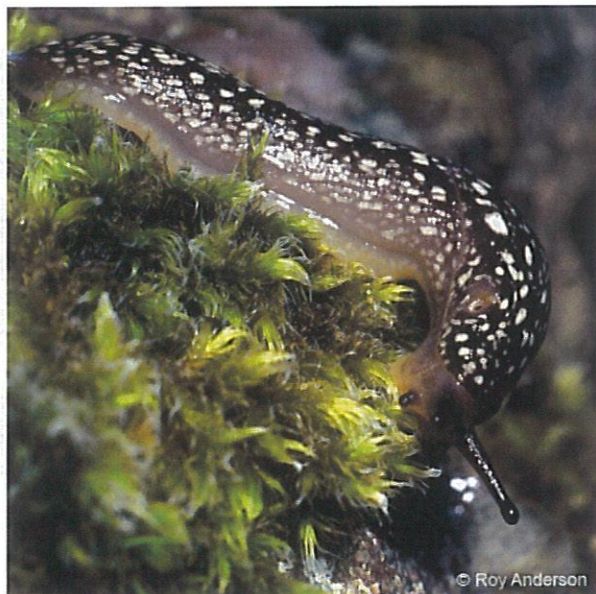
www.iucnredlist.org

<http://mammals.biodiversityireland.ie/speciesinfo>

Kerry slug (*Geomalacus maculosus*)



Source: Molluscs Ireland. Image by [Dr. Roy Anderson](#)



Source: Molluscs Ireland. Image by [Dr. Roy Anderson](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Least Concern

The Kerry slug or Kerry spotted slug, scientific name *Geomalacus maculosus*, is a rare species of medium-sized to large air-breathing land slug. It is a terrestrial pulmonate gastropod mollusc in the family Arionidae, the roundback slugs.

An adult Kerry slug generally measures 7–8 cm (2.8–3.2 in) in length and is dark grey or brownish in colour, with yellowish spots. The Kerry slug was described in 1843, rather late compared to many other relatively large land gastropods that form a part of the fauna of the British Isles; this is one indication of this slug's rarity and its secretive habits.

Although the distribution of this slug species does include some wild habitats in southwestern Ireland (e.g. in County Kerry), the species is more widespread in north-west Spain and from central to northern Portugal. However, it is not found anywhere between Ireland and Spain. The species appears to require environments that have high humidity and acidic soil (soil with no calcium carbonate in it). The slug is mostly nocturnal or crepuscular, although in Ireland it is active on overcast days. It feeds on lichens, liverworts, mosses and fungi, which grow either on boulders or on tree trunks.

This rare species is officially protected by conservation laws in each of the three countries in which it occurs. However, the survival of the Kerry slug is nonetheless threatened because it lives only in completely wild, unspoiled habitat of a particular type: acidic woodlands and moorlands that support the species of lower plants on which the slug relies for food. This habitat type is itself at risk from a number of different factors, ranging from climate change to the construction of roads. Attempts have been made to establish breeding populations in captivity, to help ensure the survival of this slug species, but with only limited success.

<http://www.habitas.org.uk/molluscireland/species.asp?ID=86>

http://en.wikipedia.org/wiki/Geomalacus_maculosus

Pale Dog Violet (*Viola lactea*)



Source: Encyclopedia of Life. Image by [Malcolm Storey](#)



Source: Encyclopedia of Life. Image by [Malcolm Storey](#)

IUCN European Threat Status: Not assessed
IUCN Irish Status: Not assessed

A milky-flowered member of the violet family known in French as *la Violette blanche* (the white violet). In fact the second part of its scientific name - *lactea* - means 'milky' in Latin. It has creeping stems originating from a rosette of leaves about its base. This perennial plant flowers in May and June each year. Buried seed is thought to have good longevity in the soil seed bank; sometimes germinating decades after it was shed from the parent plant.

Distribution

This species grows in humid heathland and grass heath. This species had already experienced a severe decline prior to 1930, but this has continued and it has disappeared from much of its former range relatively recently, however new populations have recently been discovered in Wales. Pale dog-violet is present in coastal locations around Ireland, England, but is absent from Northern Ireland and Scotland.

Habitat

Pale dog-violet is a species of humid heathland and grass heath (including the culm grasslands), favouring areas with short vegetation and considerable bare ground created by burning, grazing or incidental disturbance such as rutting, turf or gorse cutting, trampling and so on.

Status

In the UK, the Pale Dog Violet is classified as 'Vulnerable' and is included as a species "of principal importance for the purpose of conserving biodiversity" under Sections 41 (England) and 42 (Wales) of the Natural Environment and Rural Communities Act 2006.

http://www.plantlife.org.uk/wild_plants/plant_species/paledogviolet
http://www.plantlife.org.uk/uploads/documents/Pale_Dog-violet.pdf

Spotted Rock Rose (*Tuberaria guttata*)



Source: Encyclopedia of Life. Image by [António Pena](#)



Source: Encyclopedia of Life. Image by [António Pena](#)

IUCN European Threat Status: Not assessed

IUCN Irish Status: Not assessed

Spotted rockrose usually blossoms in early spring, having germinated in the autumn and survived the winter as a rosette of leaves. Wet summers can cause a summer blossom. However, if you want to see this plant flower, you'll have to get up early. Each flower blossoms only once and just for a few hours. It opens in the morning during warm sunny weather and the petals fall off before midday. Spotted rockrose grows in sunny places with low open growth and calcium-poor, weakly acidic soil.

Spotted rock rose is found in a few locations in western and south-western Ireland, and in the Channel Islands (Jersey and Alderney). Elsewhere in Europe it is found in the Mediterranean region, extending northwards in western Europe to north-west Germany. It is also occurs in the Canary Islands.

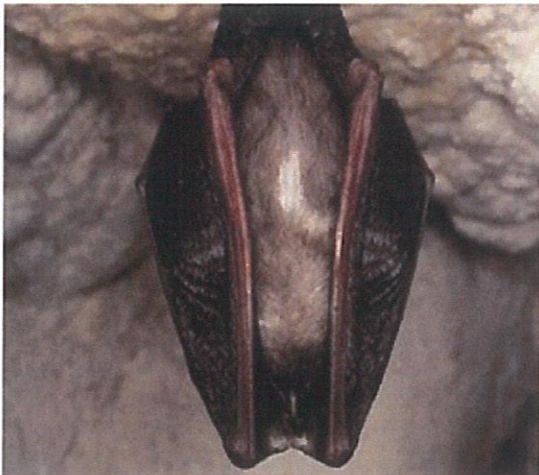
<http://www.ecomare.nl/en/encyclopedia/animals-and-plants/plants/flowering-plants/yellow-flowers/spotted-rockrose/>

<http://www.brc.ac.uk/plantatlas/index.php?q=plant/tuberaria-guttata>

Lesser Horseshoe Bat (*Rhinolophus hipposideros*)



Source: conserveireland.com . Image by Unknown.



Source: conserveireland.com . Image by Unknown.

IUCN European Threat Status: Near Threatened
IUCN Irish Status: Least Concern

The lesser horseshoe bat is the only member of the Rhinolophidae occurring in Ireland and is protected under the Wildlife Acts (1976,2000) and Habitat Directive (1992). It has a number of flaps or folds of skin around its nostrils that form a horseshoe shape. It is the only species of bat in Ireland that will hang by its feet and wrap its wings around its body. Summer roosting sites are often in the attics of old or derelict buildings. They are faithful to a roost site and will return to the same site each year. They usually hibernate in caves, disused mines, souterrains and cellars.

The bats forage predominantly in deciduous woodland and riparian vegetation normally within a few km of their roosts (Bontadina et al., 2002, Motte & Libois, 2002 as cited in NPWS, 2009). It is confined to 6 west coast counties: Mayo, Galway, Clare, Limerick, Cork and Kerry (McAney, 1994 as cited in NPWS, 2009).

Ireland Red List No. 3: Terrestrial Mammals, NPWS, 2009.
<http://www.npws.ie/publications/redlists/RL3.pdf>

http://www.batconservationireland.org/php/bats_lesser.php

White Tailed Eagle (*Haliaeetus albicilla*)



Source: [Bird Watch Ireland](#) . Image by Valerie O'Sullivan



Source: [Bird Watch Ireland](#) . Image by Valerie O'Sullivan.

IUCN Global Threat Status: Least Concern (LC)

IUCN Irish Status: High Conservation Concern (relisted in 2014)

White tailed eagles, also known as sea eagles, have been reintroduced to Ireland in Killarney National Park in 2007 by the Golden Eagle Trust and National Parks and Wildlife. Formerly a widespread resident along all Irish coasts, they became extinct in Ireland c. 1910 due to over hunting.

On a global status they are of least concern. The European population currently has less than 10,000 breeding pairs. The species has suffered large declines due to persecution and use of pesticides, but key populations in Europe are increasing. In Ireland, several re-introduced birds have been found dead due to ingestion of poisoned baits; in Fermanagh, February 2015 and Connemara, April 2015.

Together with Mute Swan, the white tailed eagle is the largest resident bird species in Ireland. They have a wingspan of over two metres, with a body length of around 1 metre. The white tailed eagles feed on carrion, such as dead sheep and seals, as well as fish caught after a spectacular dive. Less frequently, they take medium-sized mammals, such as hares and seabirds (Fulmar) from nesting sites.

Some of the re-introduced birds have settled in the Beara peninsula and can be seen flying around Bantry Bay. The White Tailed Eagles have successfully bred in 4 location in Ireland in 2015, the closest site in Glengarriff, Co. Cork. The released birds are tracked using GPS to record their activities and coverage. Sightings can be reported on the www.goldeneagletrust.org website.

<http://www.birdwatchireland.ie/IrelandsBirds/Raptors/WhitetailedEagle/tabid/1153/Default.aspx>
<http://goldeneagletrust.org/>

Chough (*Pyrrhocorax pyrrhocorax*)



Source: Encyclopedia of Life. Image by [Andrew](#)



Source: Encyclopedia of Life. Image by [Steve Johnson](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Low Conservation Concern

The chough is an agile flyer, and engages in spectacular aerobatics, including fast dives with wings folded back. The diet comprises mainly of insects, particularly beetle and fly larvae, which are found by probing the ground or dung with the bill, digging holes, and stone turning. They may also hide food underneath stones or plant material, and often perch on the backs of sheep to remove ticks.

This species typically breeds in small, loose colonies, but in areas with limited nest sites they will breed singly. Courtship involves a display, entailing mutual preening and feeding of the female by the male. The nests are built mainly of dry vegetation, often heather, by the male, and are located on ledges inside sea caves, on sea cliffs, in mine shafts, and in abandoned buildings. The female lines the nest with sheep wool, which both sexes help to collect.

Between 2 and 6 eggs are laid, which are incubated for up to 18 days. The male feeds both the female and his offspring, and the female helps just before the chicks leave the nest. Young choughs tend to hide under rocks and in holes after leaving the nest, only emerging to feed when they hear their parents. Five weeks after fledging, the choughs become independent.

<http://eol.org/pages/916569/details>

Herring Gull (*Larus argentatus*)



Source: Wikimedia Commons. Image by [M. Vierhaus](#)



Source: Wikimedia Commons. Image by Jeje42

IUCN European Threat Status: Secure

Irish Conservation Status: High Conservation Concern

The Herring Gull is a large (23-26 inches) seagull and is most easily identified by black-tipped wings, pale yellow eye, pink legs, and yellow bill with red spot on the lower half. Winter and immature gulls of many species are hard to identify as these birds may be splotched or streaked with brown on the head and breast. Male and female Herring Gulls are similar to one another in all seasons. Juvenile and first year birds, do not have any plain grey adult like feathers in the upperparts and can be difficult to tell apart from immature Lesser and Greater Black-back Gulls. Herring gulls are similar to the Lesser and Great Black-backed Gulls.

Diet: Both predator and scavenger, often feeds on the coast and follows fishing boats and uses landfill sites.

Breeding: Breeds in colonies around the coast of Ireland and also inland in Co. Donegal and Co. Galway. The biggest colony in Ireland is on Lambay island off Co. Dublin with over 1,800 nests.

<http://eol.org/pages/1049581/details>

<http://www.birdwatchireland.ie/Default.aspx?tabid=350>

Great Black-backed Gull (*Larus marinus*)



Source: Wikimedia Commons. Image by [Andreas Trepte](#)



Source: Wikimedia Commons. Image by [Andreas Trepte](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Medium Conservation Concern

Identification: A large gull and the largest widespread gull to be seen in Ireland. In adult plumage has blackish upperwings showing a broad white margin and darker wing tips showing white 'mirrors' (white at the very tips surrounded by black); the rest of the plumage is white. Has a bulky body, broad wings, dull pink legs, a very heavy bill and a thick neck. It attains adult plumage after three years when it moults into adult winter plumage.

Juvenile, first year birds and second winter birds lack blackish adult like feathers on the upperparts, having instead strongly patterned upperparts which are barred or chequered. Birds at this age can be difficult to tell apart from other large immature gulls. Great black backed gulls are similar to the herring and lesser black-backed gulls.

Diet: Fish, waste from commercial fishing, offal, and other birds, for example auks at colonies in the breeding season. Will also rob other birds of food - kleptoparasitism.

Breeding: Breeds on the ground in colonies all around the coast of Ireland. Most colonies are on well-vegetated off-shore islands, or in other areas difficult of access.

<http://www.birdwatchireland.ie/Default.aspx?tabid=353>

Arctic Tern (*Sterna paradisaea*)



Source: Wikimedia Commons. Image by [Jamumiwa](#)



Source: Wikimedia Commons. Image by [Malene Thyssen](#)

IUCN European Threat Status: Secure

Irish Conservation Status: Medium Conservation Concern

Arctic terns are summer visitors from March to September to all Irish coasts, winters off south Africa and as far south as Antarctica.

Arctic terns are usually seen over the sea. They are slender seabirds with narrow, pointed wings, long forked tails and long, pointed bills; grey above and white below, dark cap to head. Their flight is light and buoyant, and they can hover briefly over the sea before diving in. Very similar to Common Tern (with which it breeds) and told apart by plumage and structure.

Arctic Tern is smaller, with a smaller head, neck and bill and slightly narrower wings, which look forwardly placed on the body. Very short legs. Adults have a blood red bill, usually with no dark tip. The underparts are greyer than Common Tern and there is some contrast with the cheek. The wing pattern is useful in separation, Arctic terns show no dark wedge in the primaries but show a distinct trailing edge. Arctic terns have longer tail streamers, extending beyond the wing tips. Adult winter plumage, like all terns is different from breeding plumage, but is only seen in the wintering range.

<http://www.birdwatchireland.ie/IrelandsBirds/GullsTerns/ArcticTern/tabid/358/Default.aspx>

Cormorant (*Phalacrocorax carbo*)



Source: Wikimedia Commons. Image by [Sławek Staszczuk](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Medium Conservation Concern

Identification: Large, mainly all dark seabird, often stands with wings out stretched drying. Long body and neck, long strong hooked bill. Dark webbed feet. Swims low in the water with bill raised. Often seen inland, unlike the similar looking Shag, where it breeds in trees. Adult breeding bird is black with a green, bronze and blue gloss to its plumage, yellow and white bare flesh at the base of its lower beak and a white thigh patch. Cormorant lacks crest, instead having a sloping forehead which gives it a wedge shaped profile.



Source: Wikimedia Commons. Image by [Tim1965](#)

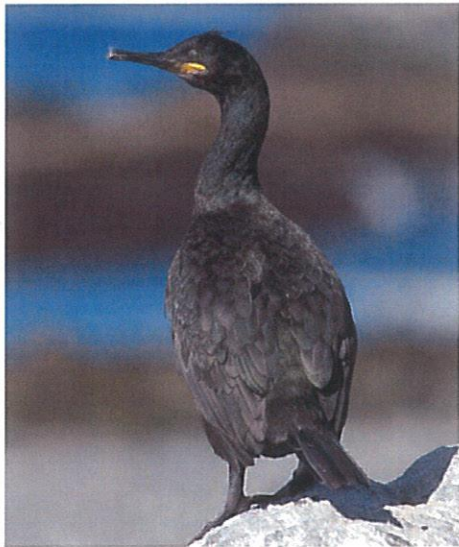
Breeding: Breeds in colonies mainly around the coast of Ireland, with some birds breeding inland. Most of the larger coastal colonies in Ireland are on the south and north west coasts. Birds on the coast breed on cliffs whilst those inland, in trees.

<http://www.birdwatchireland.ie/IrelandsBirds/Cormorants/Cormorant/tabid/145/Default.aspx>

European Shag (*Phalacrocorax aristotelis*)



Source: Wikimedia Commons. Image by [Boaworm](#)



Source: Wikimedia Commons. Image by [Andreas Trepte](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Medium Conservation Concern

Also called green cormorant in west Cork.

Identification: Medium sized, mainly all dark seabird. Long body and neck, long narrow hooked bill. Dark webbed feet. Rather short rounded wings. Swims low in the water with bill raised. Very rarely inland unlike the similar looking Cormorant. Adult breeding bird is black with a green and purple gloss to its plumage, yellow gape and a crest on its fore crown. While the Cormorant lacks a crest, instead having a sloping forehead and crown peaked at rear, the Shag has peaked fore crown at all seasons and in all plumages. The adult birds lack the crest outside of the breeding season.

Breeding: Breeds all around the coast of Ireland where ever suitable cliffs exist. Nests on ledges, in crevases, in caves or under boulders. A colonial nester in loose colonies with prolonged breeding season. More plentiful on the west and south coasts.

<http://www.birdwatchireland.ie/IrelandsBirds/Cormorants/Shag/tabid/146/Default.aspx>

Black Guillemot (*Cepphus grylle*)



Source: Wikimedia Commons. Image by [Mark Medcalf](#)



Source: Wikimedia Commons. Image by [D Gordon E Robertson](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Medium Conservation Concern

Identification: A species of Auk, highly marine and only found on land in the breeding season. Smaller than Guillemot, and only slightly bigger than Puffin. Plump and heavy at the rear end, flies with head pointing up. Strikingly distinctive in the breeding season, with an all black plumage, white upperwing patches and red feet. Can look all dark, at a distance, in the breeding season. Very different in the winter when the bird is white below with white barring above. The Black Guillemot is similar to other Auk species.

Diet: Marine fish and crustaceans.

Breeding: Nests amongst boulders at the base of cliffs, also in rock crevices and in man made structures, such as piers. Will nest singularly and in loose colonies.

Where to See: Lough Swilly in County Donegal, the Aran Islands off County Galway, Bray Head & Wicklow Head in County Wicklow, Cape Clear, County Cork and Rockabill Island, County Dublin are among the best breeding sites in Ireland.

<http://www.birdwatchireland.ie/Default.aspx?tabid=362>

Razorbill (*Alca torda*)



Source: Wikimedia Commons. Image by [Bird Watch Ireland](#)



Source: Wikimedia Commons. Image by [Gsd97jks](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Medium Conservation Concern

Identification: A species of Auk, highly marine and only found on land in the breeding season. A black and white seabird, black above and white below, with a distinct breeding plumage. Head and neck all black in the breeding season with white on the front of the neck and face in the winter. Bill heavy, except in first winter birds. At a distance can be confused with Guillemot. Razorbill slightly smaller with blackish rather than brownish upperparts, more white on the side of the body and the bill distinctly heavier and blunter on adult birds. White 'armpit' compared to the darker 'armpit' of the Guillemot. Razorbills are similar to other Auk species.

Diet: Mainly small fish, some invertebrates, caught by surface diving.

Breeding: Nests on sea cliffs. Similar in habits to Guillemot with which it will breed in mixed colonies. Returns to colonies in March and April and departs by August. Will also use more secluded nest sites, fissures in the cliffs and also in screes, where it is more difficult to see, except when birds stand outside of their nest sites.

Where to See: With over 3000 birds, Great Saltee island, off County Wexford, is the most accessible of the islands on which to view this species. However, the species can be seen from the mainland. The Cliffs of Moher, with over 7000 birds, in County Clare are well know. Horn Head, with over 6000 Razorbills, in County Donegal is another spectacular place to view Auks. Razorbills winter in large bays around Irland including Bantry Bay, Kenmare Bay, Clew Bay, Donegal Bay and Lough Swilly.

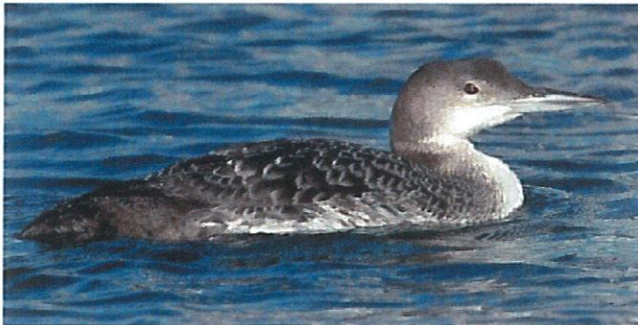
<http://www.birdwatchireland.ie/Default.aspx?tabid=361>

Great Northern Diver (Common Loon)

(Gavia immer)



Source: Bird Watch Ireland. Image by [Bird Watch Ireland](#)



Source: Bird Watch Ireland. Image by [Bird Watch Ireland](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Low Conservation Concern

Identification: Great Northern Divers are large and powerfully built. The heavy, spear-like bill is held in a horizontal position when birds are on the water. The head is large with a steep forehead and a crown that is usually flat; but can be raised forming a bump-like crown. During the winter the bill is grey with a dark tip and birds have a prominent pale eye-ring and a dark half-collar on the lower neck. In summer the head and bill darken becoming black and the upper body plumage takes on the distinctive black and white chequered and spotted pattern.

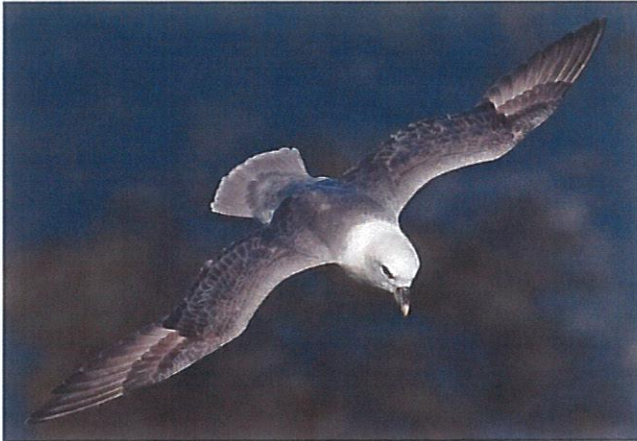
Diet: Mostly fish but also feeds on crustaceans, molluscs, annelids, insects and amphibians.

Breeding: Age of first breeding: not known. Great Northern Divers do not breed in Ireland. The closest breeding birds are in Iceland and the breeding distribution spreads east through Greenland to North America.

Wintering: Great Northern Divers occur along the Irish coastline between September and April and are usually observed as single birds or small groups. They are the most numerous of the divers occurring in Ireland and are particularly abundant off the south, west and northwest coasts over the winter. Great Northern Divers occur along a variety of coastlines, particularly deeper bays and inlets, as well as shallow bays with sandy shores. They can forage up to 10 km offshore and numbers close to shore tend to be highest when winds blow onshore.

<https://www.birdwatchireland.ie/IrelandsBirds/DiversGrebes/GreatNorthernDiver/tabid/139/Default.aspx>

Fulmar (*Fulmarus glacialis*)



Source: Wikimedia Commons. Image by [Bogbumper](#)



Source: Wikimedia Commons. Image by [rodtuk](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Low Conservation Concern

Identification: A gull-like bird with white underparts and pale grey upperparts. Has a thick neck and large head. Shows a pale primary patch on the upperwing. Does not show gull-like black tips to the primary feathers. Straight, stout bill with hooked tip and tube shaped nostrils on the upper beak, giving distinctive bill shape if seen at close range. Nostrils used to excrete salt. Flies with very stiff wings, uses long glides at sea, with series of stiff, shallow wing beats. Hangs in the wind in the fierce updrafts generated by steep cliffs, where it can even fly backwards. Cannot stand upright, so needs to launch itself from a high ledge or patters along surface of sea to become airborne.

Diet: A great variety of food taken including fish, discards from trawlers, crustaceans and whale flesh.

Breeding: A bird that has expanded its breeding range throughout Ireland over the last century, beginning in Mayo in 1911. Comes to land in the day, unlike its relatives the shearwaters and other petrels. Mainly breeds on sea cliffs, but will nest on level ground, on buildings and in burrows and crevasses. Will use both steep rocky cliffs, grassy cliffs and steep slopes above cliffs. Both incubating adults and chick use projectile vomiting as a defensive against predators, the oily stomach contents effectively fouling the plumage of other birds.

Wintering: Winters at sea, but can be seen in Irish waters throughout the year. Attends colonies in the winter sporadically, with breeding cliffs deserted one week and full the next.

<http://www.birdwatchireland.ie/IrelandsBirds/Tubenoses/Fulmar/tabid/142/Default.aspx>

Harbour Porpoise (*Phocoena phocoena*)



Source: Encyclopedia of Life. Image by [Erik Christensen](#)



Source: Wikimedia Commons. Image by [AVampireTear](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Good

Harbour porpoises live either solitarily or in groups, normally of three to five individuals, although sometimes more. Normally individual porpoises or couples (mother and calf) are observed and high numbers can be seen during migrations. Like dolphins, the harbour porpoise orientates itself by means of echo-sounding or 'sonar'. It has a particular way of swimming with a 'rolling' movement (imagine a turning wheel); part of the back, including the dorsal fin surfaces briefly before re-entering the water giving the appearance of a rotating motion. This movement will normally be repeated three to four times, prior to a long dive. The diet of an adult harbour porpoise is made up of various pelagic and demersal fish, as well as invertebrates.

This species is generally the most common cetacean in Irish waters; despite this it can often be difficult to observe due to its small size. Harbour Porpoises are often very wary of human contact and rarely interact with boats unlike many other Irish cetacean species.

The Harbour Porpoise is protected under Annex II and IV of EC Habitats Directive, Protected species of Wildlife (Amendment) Act and OSPAR List of Threatened and Declining Species and Habitats.

Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

<http://www.eol.org/pages/328536/details>

<http://www.npws.ie/marine/marine-species>

http://www.npws.ie/sites/default/files/publications/pdf/2009_Cetaceans_CP.pdf

Common Dolphin (*Delphinus delphis*)



Source: Encyclopedia of Life. Image by [Marijke de Boer](#)



Source: Encyclopedia of Life. Image by [Donna Pomeroy](#)

IUCN European Threat Status: Least Concern
IUCN Irish Status: Good

They can reach speeds up to 45 kilometers per hour. They are also attracted to ships and like to play in their bow waves. These fast-swimming dolphins are highly active, often leaping clear of the water (breaching), and slapping their flippers on the water surface (lobtailing). They can reach speeds up to 45 kilometers per hour. They are also attracted to ships and like to play in their bow waves.

They can occur in large groups of between 10 and 500 individuals, the size of group depending on both the time of day and year. The approach of these groups can be detected from miles away, and some noises made by this species can be heard from above the surface of the water. They feed on small fish and cephalopods such as squid, and are known to use co-operative methods of hunting. They make short dives typically of between 10 seconds and 2 minutes, but dives lasting for as long as 8 minutes have been recorded.

The Common Dolphin is protected under Annex IV of EC Habitats Directive and the Protected species of Wildlife (Amendment) Act.

Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

<http://www.eol.org/pages/314276/details>

Risso's Dolphin (*Grampus griseus*)



Source: Wikimedia Commons. Image by [Mike Baird](#)



Source: Sanctuary Cruises. Image by [Michael Sack](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Unknown

Risso's dolphin has a relatively large anterior body and dorsal fin, while the posterior tapers to a relatively narrow tail. The bulbous head has a vertical crease in front. Infants are dorsally grey to brown and ventrally cream-colored, with a white anchor-shaped area between the pectorals and around the mouth. In older calves, the nonwhite areas darken to nearly black, and then lighten (except for the always dark dorsal fin). Risso's dolphins are often covered with scars. The older the dolphin, the more scratches on its body. These scars are probably caused by the teeth of other Risso's dolphins, made during fights or while playing. Squid can also leave scars, when they are caught and eaten by the animal. Older individuals appear mostly white. Most individuals have two to seven pairs of teeth, all in the lower jaw.

Length is typically 10 feet (3.0 m), although specimens may reach 13.12 feet (4.00 m). Like most dolphins, males are typically slightly larger than females. This species weighs 300–500 kilograms (660–1,100 lb), making it the largest species called "dolphin".

They are found worldwide in temperate and tropical waters, but occasionally there are reports of one swimming in the northern North Sea. Most of the information that is gathered about the species is from strandings.

The Risso's Dolphin is protected under Annex IV of EC Habitats Directive and the Protected species of Wildlife (Amendment) Act.

Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

https://en.wikipedia.org/wiki/Risso's_dolphin

<http://www.eol.org/pages/328529/details>

Bottlenose Dolphin (*Tursiops truncatus*)



Source: Encyclopedia of Life. Image by [David R](#)



Source: Encyclopedia of Life. Image by [Maris Pukitis](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Good

Everyone is familiar with the loveable dolphin known as Flipper, but most people are unaware that *Tursiops truncatus*, the common bottlenose dolphin, is only one of three bottlenosed dolphin species in the oceans today. The common bottlenosed dolphin is found in temperate and tropical waters worldwide, with sightings as far north as Norway and far south as southern Argentina. These friendly swimming mammals are found living offshore and inshore, whereas the other two species tend to occur closer to the coast in tropical areas. The species are very social and they like to travel and hunt for food in groups. One method of communal hunting is known as "fish whacking." When the bottlenose dolphins engage in "fish whacking" they strike a fish with their flukes and knock it out of the water. As the tasty treat is airborne, they plunge out of the water and catch it mid-flight. Although this not the most strategic form of hunting, it may offer some amusement for these intelligent and social mammals.

As with many mammal species, the males are considerably larger than the females and the females tend to outlive the males. Their length ranges anywhere from 6-12 ½ feet long. The average life expectancy for these mammals is about 40 to 45 years for males, and more than 50 years old for females. Females reach sexual maturity between 5 and 13 years of age, and males mature between 9 and 14. Once they are of age to reproduce, females will carry the calf for a twelve-month period. Around eighteen months of age the female will wean the calf.

The Bottlenose Dolphin is protected under Annex II and IV of EC Habitats Directive and the Protected species of Wildlife (Amendment) Act. Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

[http://http://www.npws.ie/marine/marine-species
www.eol.org/pages/15602/details](http://http://www.npws.ie/marine/marine-species/www.eol.org/pages/15602/details)

Minke Whale (*Balaenoptera acutorostrata*)



Source: Wikimedia Commons. Image by [Rui Prieto](#)



Source: Wikimedia Commons. Image by [Hans Bernhard](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Good

The Northern minke whale (*Balaenoptera acutorostrata*), is a very large cetacean, in the family of Rorquals. The Minke is a baleen whale, meaning that instead of teeth, it has long plates which hang in a row (like the teeth of a comb) from its upper jaws. Baleen plates are strong and flexible; they are made of a protein similar to human fingernails. Baleen plates are broad at the base (gumline) and taper into a fringe which forms a curtain or mat inside the whale's mouth. Baleen whales strain huge volumes of ocean water through their baleen plates to capture food: tons of krill, other zooplankton, crustaceans, and small fish.

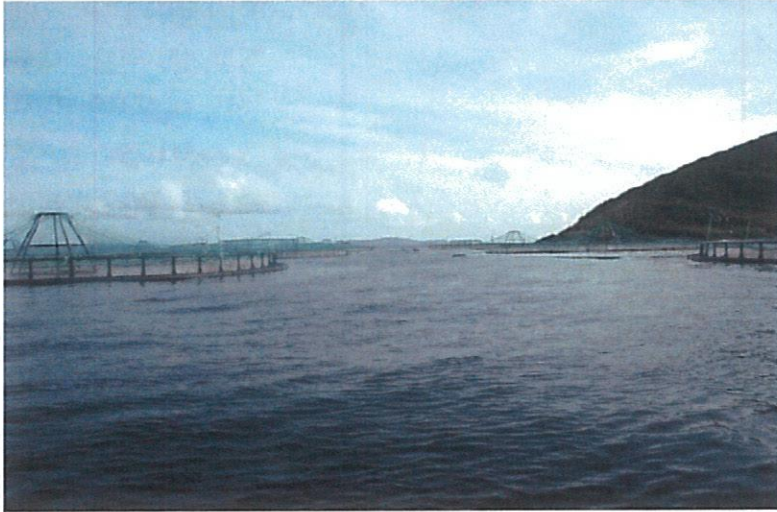
The smallest of the rorqual whales (and the second-smallest baleen whale), the minke whale is also the most abundant. Two species are now recognised, the northern hemisphere minke whale and the southern hemisphere Antarctic minke whale (*Balaenoptera bonaerensis*). Minke whales are slim in shape, with a pointed dolphin-like head, bearing a double blow-hole. The smooth skin is dark grey above, while the belly and undersides of the flippers are white, and there is often a white band on the flipper.

Although largely a solitary species, when feeding minke whales can often be seen in pairs, and on particularly good feeding grounds up to a hundred individuals may congregate. A number of feeding techniques have been observed, including trapping shoals of fish against the surface of the water. After a ten month gestation period, births occur in mid-winter, at birth the calf measures up to 2.8 metres in length. It will be weaned at four months of age, and will stay with its mother for up to two years, becoming sexually mature at seven years of age. Minke whales have an average life span of around 50 years. Minke whales are rather inquisitive and often swim by the side of boats for up to half an hour.

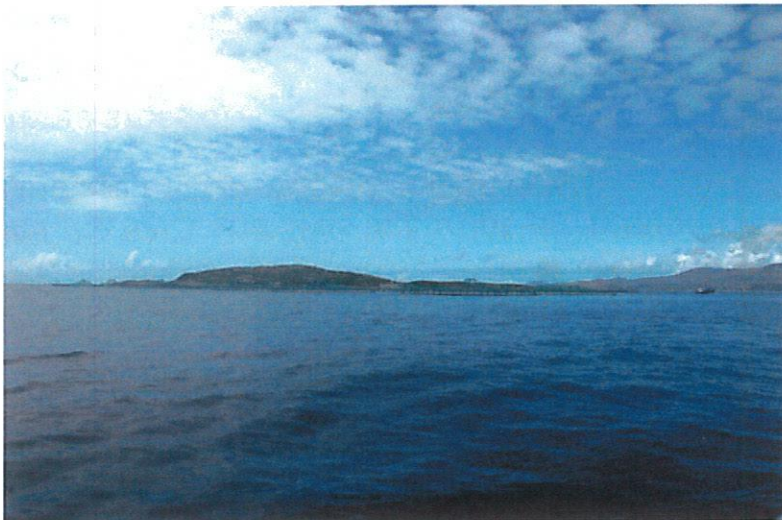
The Minke Whale is protected under Annex IV of EC Habitats Directive and the Protected species of Wildlife (Amendment) Act. Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

<http://www.eol.org/pages/328570/details>

Deenish & Inishfarnard, Kenmare Bay



Deenish Site, Kenmare Bay



Inishfarnard Site, Kenmare Bay

Information for birds, flora and fauna of local interest.

Details of some species of local significance are included for information. This list is not exhaustive, but can be used as a guide for species to be aware of and note. This guide should be used along with the site Wildlife Observation Record (TQM No. 37353) and the Interaction with Wildlife Procedure (TQM 42248). Further information can be obtained from the Environmental Assessment for Kenmare Bay (TQM No. 37412)

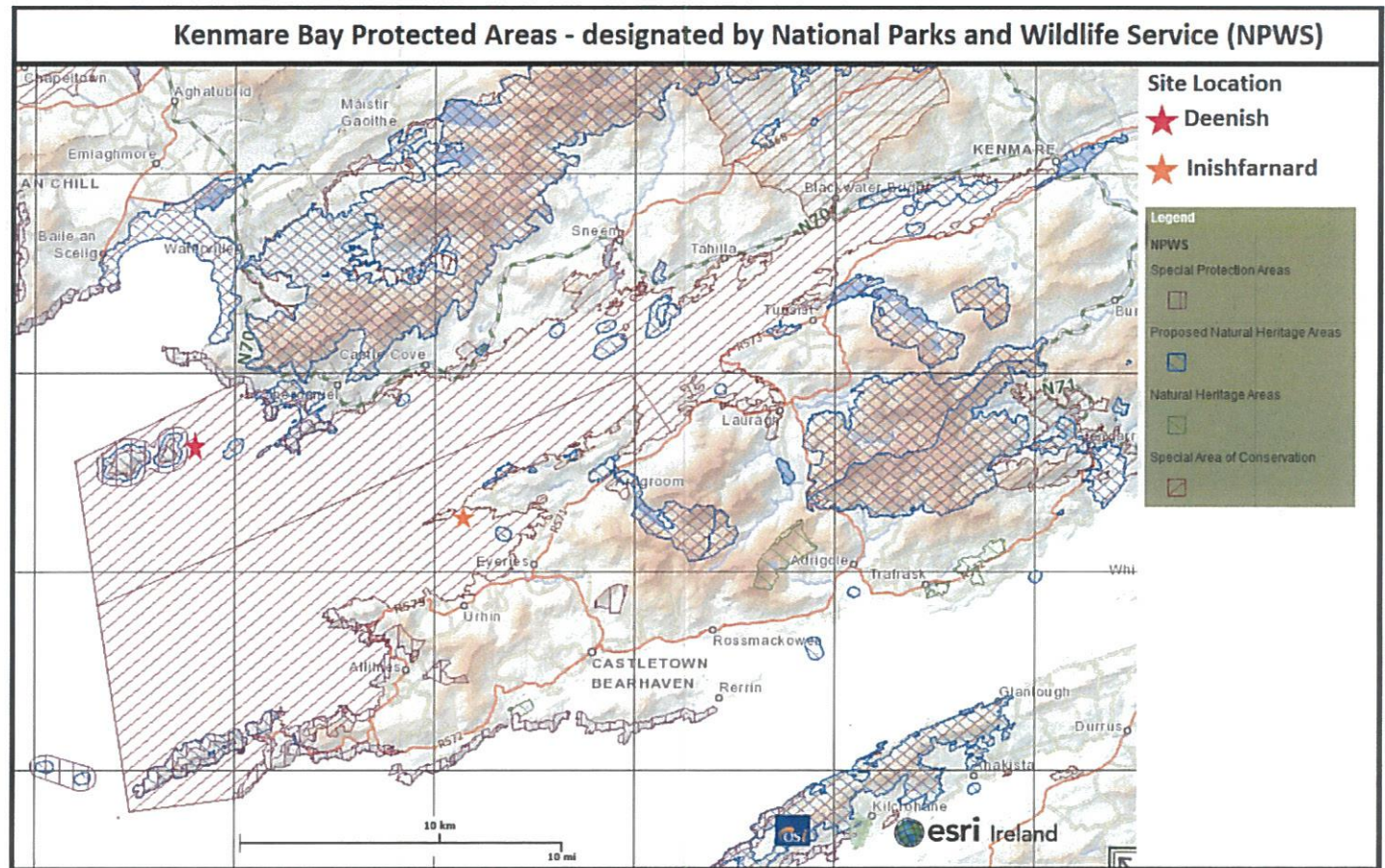
TQM no 37415

Deenish & Inishfarnard, Kenmare Bay

The National Parks and Wildlife Service (NPWS) is responsible for the designation of areas of conservation.

- Special Areas of Conservation (SACs) are areas that meet criteria set down in the EU “Habitats Directive”, 92/43/EEC.
- Special Protection Areas (SPAs) are areas designated for protection under the EU “Wild Birds Directive”, 79/409/EEC.
- All the SACs and SPAs in Europe are grouped into the “Natura 2000” network under the Habitats Directive and are fully protected in Irish law.

The three areas of conservation in Kenmare Bay which encompass MHI Farming Sites or are close to them are Kenmare Bay SAC (002158), Deenish and Scarrif SPA (004175) and the Iveragh Peninsula SPA (004154). More information can be found on the NPWS website and the maps can be viewed at <http://webgis.npws.ie/npwsviewer/>



Natterjack Toad (*Epidalea calamita*)



Source: Wikimedia Commons. Image by [Thomas Brown](#)



Source: <http://www.wildlifearticles.co.uk/chatter-about-natterjacks/>
Image by: Unknown

IUCN European Threat Status: Least Concern

IUCN Irish Status: Endangered

The chief distinguishing feature of the natterjack is the yellow stripe down its back. It has shorter hind legs than the common toad and it has a tendency to run instead of hopping or walking, which is why it is sometimes called the running toad.

In Ireland, the populations are restricted to coastal sites in County Kerry on the Dingle and Iveragh Peninsulas, mostly concentrated around Dingle Bay however there are 3 ponds at Derrynane.

Natterjack toad spawning usually begins in April, with each breeding female laying a single string of spawn. Toads are terrestrial for the remainder of the year, mainly nocturnal, sheltering in burrows in dune sand and under logs and stones during day and hibernating from October to March.

<http://eol.org/pages/1019146/details>

Sweeney, P., Sweeney, N. and Hurley C. (2013) Natterjack toad monitoring project, 2011 - 2012. Irish Wildlife Manuals, No. 67. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

Narrow Mouthed Whorl Snail (*Vertigo angustior*)



Source: animalbase.uni-goettingen.de Image by Franciso Welter Schultes

IUCN Global Threat Status: Near Threatened
IUCN Irish Status: Vulnerable

This is a species of minute land snail. The shell is pale yellow-brown in colour with many thin growth ridges and 5 whorls. The mouth of the shell has 5- 6 teeth and is thickened. Reproduction takes place mainly in late summer. This species is believed to feed on micro-fungi growing on dead and decaying plant remains.



Source: Conservation Specialist Information Systems (German website)
Image by: Vollrath Wiese, Cismar

Its habitat is maritime dune grassland and maritime or inland wetland (including fen, marsh, salt marsh and flood plain) and often marginal strips of vegetation less than 5 m wide between saltmarsh and dune, and between grassland and wetland with short herbs, mosses and Iris. It can also occur in mosses on limestone pavement. These habitats may lie where sea defence construction would take place in areas concerned about increased frequency of storm-surges at spring tides.

<http://eol.org/pages/4908989/details>

Kerry Lily & Betony



Source: Wikimedia Commons. Image by [Xemenendura](#)

Kerry Lily (*Simethis planifolia*)

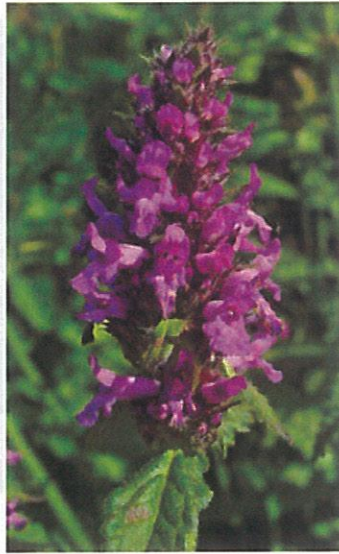
IUCN European Threat Status: Not evaluated (NE)

IUCN Irish Status: Endangered (EN)

The Kerry lily is protected under the Flora Protection Order 1999. It belongs to the lily family Asphodelaceae, it has a white flower with 6 petals which are purple-grey underneath. Its leaves are grass-like and it grows to a height of approximately 30cm. It blooms in May and June, and it is only known from three locations, occurring in the Derrynane and Lamb's Head regions of South-West Kerry and Dereenacush in West Cork.



Source: Wikimedia Commons.
Image by [Augustin Roche](#)



Source: Encyclopedia of Life
Image by [H. Zell](#)

Betony (*Stachys officinalis*)

IUCN European Threat Status: Least Concern (LC)

IUCN Irish Status: Endangered (EN)

Betony is protected under the Flora Protection Order 1999. It is a perennial grassland herb with whorls of reddish-purple flowers growing to 30 to 60 cm (1 to 2 ft) tall. Its leaves are stalked on upright stems, narrowly oval, with a heart-shaped base, with a somewhat wrinkled texture and toothed margins. It flowers in mid summer from July to September, and is found in dry grassland, meadows and open woods. It has been recorded in the past in 14 counties including Kerry however numbers are declining due to modern agricultural practices.

http://www.npws.ie/publications/redlists/Curtis_1988_PlantsRedBook.pdf

<http://eol.org/pages/579676/details>

<http://www.botanicgardens.ie/herb/research/simethis.htm>

Pink Sea Fan (*Eunicella verrucosa*)



Source: habitas.org.uk. Image by [Picton, B.E. & Morrow, C.C.](#)



Source: jncc.defre.co.uk. Image by [Paul Kay](#)

IUCN Global Threat Status: Vulnerable

IUCN Irish Status: Not evaluated

It is a slow growing and long-lived species (specimens may reach 50 years old) and if a population is entirely lost from an area, recolonisation is likely to be very slow.

This sea fan forms large colonies which branch profusely, mostly in one plane at right angles to the prevailing water currents. Found mainly on upward facing bedrock in areas where water movement (wave action or tidal streams) is moderately strong.

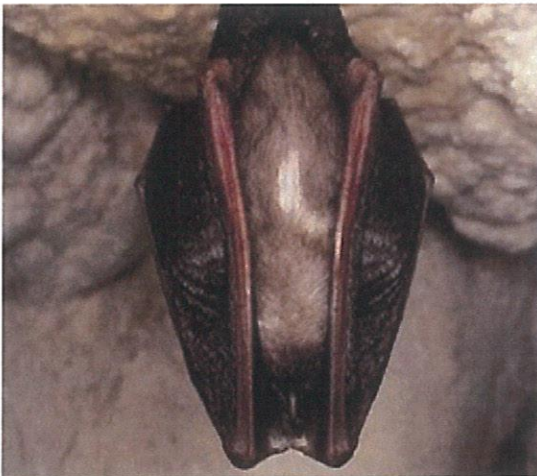
It is typically salmon pink but may be white in colour. Grows up to 300mm tall and 400mm wide. It grows very slowly (approximately 1cm/year). In Ireland substantial populations are present in Galway and Donegal bays, but this species is rare elsewhere.

<http://eol.org/pages/323135/details>

Lesser Horseshoe Bat (*Rhinolophus hipposideros*)



Source: conserveireland.com . Image by Unknown.



Source: conserveireland.com . Image by Unknown.

IUCN European Threat Status: Near Threatened
IUCN Irish Status: Least Concern

The lesser horseshoe bat is the only member of the Rhinolophidae occurring in Ireland and is protected under the Wildlife Acts (1976,2000) and Habitat Directive (1992). It has a number of flaps or folds of skin around its nostrils that form a horseshoe shape. It is the only species of bat in Ireland that will hang by its feet and wrap its wings around its body. Summer roosting sites are often in the attics of old or derelict buildings. They are faithful to a roost site and will return to the same site each year. They usually hibernate in caves, disused mines, souterrains and cellars.

The bats forage predominantly in deciduous woodland and riparian vegetation normally within a few km of their roosts (Bontadina et al., 2002, Motte & Libois, 2002 as cited in NPWS, 2009). It is confined to 6 west coast counties: Mayo, Galway, Clare, Limerick, Cork and Kerry (McAney, 1994 as cited in NPWS, 2009).

Ireland Red List No. 3: Terrestrial Mammals, NPWS, 2009.
<http://www.npws.ie/publications/redlists/RL3.pdf>

http://www.batconservationireland.org/php/bats_lesser.php

White Tailed Eagle (*Haliaeetus albicilla*)



Source: [Bird Watch Ireland](#) . Image by Valerie O'Sullivan



Source: [Bird Watch Ireland](#) . Image by Valerie O'Sullivan.

IUCN Global Threat Status: Least Concern (LC)

IUCN Irish Status: High Conservation Concern (relisted in 2014)

White tailed eagles, also known as sea eagles, have been reintroduced to Ireland in Killarney National Park in 2007 by the Golden Eagle Trust and National Parks and Wildlife. Formerly a widespread resident along all Irish coasts, they became extinct in Ireland c. 1910 due to over hunting.

On a global status they are of least concern. The European population currently has less than 10,000 breeding pairs. The species has suffered large declines due to persecution and use of pesticides, but key populations in Europe are increasing. In Ireland, several re-introduced birds have been found dead due to ingestion of poisoned baits; in Fermanagh, February 2015 and Connemara, April 2015.

Together with Mute Swan, the white tailed eagle is the largest resident bird species in Ireland. They have a wingspan of over two metres, with a body length of around 1 metre. The white tailed eagles feed on carrion, such as dead sheep and seals, as well as fish caught after a spectacular dive. Less frequently, they take medium-sized mammals, such as hares and seabirds (Fulmar) from nesting sites.

Some of the re-introduced birds have settled in the Beara peninsula and can be seen flying around Bantry Bay. The White Tailed Eagles have successfully bred in 4 location in Ireland in 2015, the closest site in Glengarriff, Co. Cork. The released birds are tracked using GPS to record their activities and coverage. Sightings can be reported on the www.goldeneagletrust.org website.

<http://www.birdwatchireland.ie/IrelandsBirds/Raptors/WhitetailedEagle/tabid/1153/Default.aspx>
<http://goldeneagletrust.org/>

Harbour Seal (*Phoca vitulina*)



Source: Wikimedia Commons. Image by [Nevit Dilmen](#)



Source: Wikimedia Commons. Image by [Wordless Symbol](#)

IUCN European Threat Status: Least Concern (LC)

IUCN Irish Status: Not evaluated

Harbour Seals, also known as common seals, live near coastlines and eat a highly varied seafood diet, depending on what is available. They can dive as deep as 450 m and stay under for almost half an hour, but six-minute dives to depths of 30-100 m are more usual. Females usually have one pup a year, and two weeks after the pup is born, mate again.

When feeding, common seals travel up to 50 km from haul-out sites to feed and may stay out at sea for days. They can dive for up to 10 minutes, and reach depths of 50 metres or more.

When hauled out it often adopts a characteristic 'head-up, tail-up' posture. The colour is variable, ranging from black-grey to sandy brown with many small spots. The top of the small head is round and the nostrils form a 'V'. Males are often darker in colour than females and have a heavier appearance.

Common seals are protected under the Wildlife Act 1976 / 2000, the EU Habitats Directive 92/43 Annex V and the Bern Convention Appendix III.

<http://eol.org/pages/328629/details>

Otter (*Lutra lutra*)



Source: Wikimedia Commons. Image by [Factumquintus](#)



Source: [burrennationalpark](#). Image by Unknown

IUCN European Threat Status: Near Threatened (NT)

IUCN Irish Status: Near Threatened (NT)

The otter's feet are webbed and it has a dense layer of underfur that traps air, keeping the skin dry. Its body is streamlined and its large lungs allow it to stay under water for several minutes. Otters are found in rivers, lakes, marshes, estuaries and around the coast. They dig burrows in the riverbank, called 'holts', where they rest during the day. Otters are territorial, solitary, and are most active at dusk or after dark. Otters usually catch bottom-dwelling fish and will eat water birds, small mammals and carrion. Coastal otters also eat crabs, molluscs and sea urchins.

Males and females breed in spring and summer. There are usually two or three cubs in each litter, which are weaned at four months. The cubs stay with their mother for up to a year before dispersing. They usually begin to breed in their third year and can live to five years of age.

Lutra lutra. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2.

www.iucnredlist.org

<http://mammals.biodiversityireland.ie/speciesinfo>

Kerry slug (*Geomalacus maculosus*)



Source: Molluscs Ireland. Image by [Dr. Roy Anderson](#)



Source: Molluscs Ireland. Image by [Dr. Roy Anderson](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Least Concern

The Kerry slug or Kerry spotted slug, scientific name *Geomalacus maculosus*, is a rare species of medium-sized to large air-breathing land slug. It is a terrestrial pulmonate gastropod mollusc in the family Arionidae, the roundback slugs.

An adult Kerry slug generally measures 7–8 cm (2.8–3.2 in) in length and is dark grey or brownish in colour, with yellowish spots. The Kerry slug was described in 1843, rather late compared to many other relatively large land gastropods that form a part of the fauna of the British Isles; this is one indication of this slug's rarity and its secretive habits.

Although the distribution of this slug species does include some wild habitats in southwestern Ireland (e.g. in County Kerry), the species is more widespread in north-west Spain and from central to northern Portugal. However, it is not found anywhere between Ireland and Spain. The species appears to require environments that have high humidity and acidic soil (soil with no calcium carbonate in it). The slug is mostly nocturnal or crepuscular, although in Ireland it is active on overcast days. It feeds on lichens, liverworts, mosses and fungi, which grow either on boulders or on tree trunks.

This rare species is officially protected by conservation laws in each of the three countries in which it occurs. However, the survival of the Kerry slug is nonetheless threatened because it lives only in completely wild, unspoiled habitat of a particular type: acidic woodlands and moorlands that support the species of lower plants on which the slug relies for food. This habitat type is itself at risk from a number of different factors, ranging from climate change to the construction of roads. Attempts have been made to establish breeding populations in captivity, to help ensure the survival of this slug species, but with only limited success.

<http://www.habitas.org.uk/molluscireland/species.asp?ID=86>

http://en.wikipedia.org/wiki/Geomalacus_maculosus

Herring Gull (*Larus argentatus*)



Source: Wikimedia Commons. Image by [M. Vierhaus](#)



Source: Wikimedia Commons. Image by Jeje42

IUCN European Threat Status: Secure

Irish Conservation Status: High Conservation Concern

The Herring Gull is a large (23-26 inches) seagull and is most easily identified by black-tipped wings, pale yellow eye, pink legs, and yellow bill with red spot on the lower half. Winter and immature gulls of many species are hard to identify as these birds may be splotched or streaked with brown on the head and breast. Male and female Herring Gulls are similar to one another in all seasons. Juvenile and first year birds, do not have any plain grey adult like feathers in the upperparts and can be difficult to tell apart from immature Lesser and Greater Black-back Gulls. Herring gulls are similar to the Lesser and Great Black-backed Gulls.

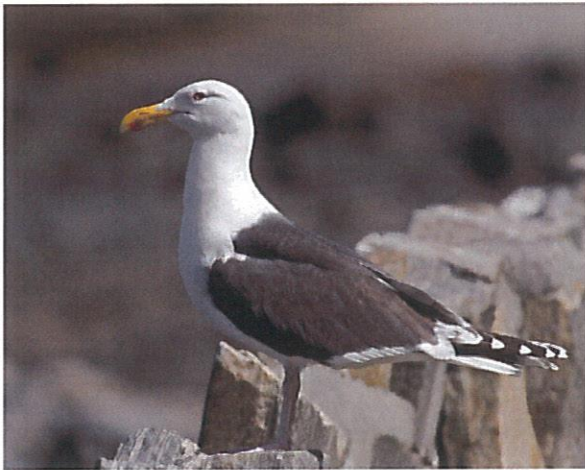
Diet: Both predator and scavenger, often feeds on the coast and follows fishing boats and uses landfill sites.

Breeding: Breeds in colonies around the coast of Ireland and also inland in Co. Donegal and Co. Galway. The biggest colony in Ireland is on Lambay island off Co. Dublin with over 1,800 nests.

<http://eol.org/pages/1049581/details>

<http://www.birdwatchireland.ie/Default.aspx?tabid=350>

Great Black-backed Gull (*Larus marinus*)



Source: Wikimedia Commons. Image by [Andreas Trepte](#)



Source: Wikimedia Commons. Image by [Andreas Trepte](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Medium Conservation Concern

Identification: A large gull and the largest widespread gull to be seen in Ireland. In adult plumage has blackish upperwings showing a broad white margin and darker wing tips showing white 'mirrors' (white at the very tips surrounded by black); the rest of the plumage is white. Has a bulky body, broad wings, dull pink legs, a very heavy bill and a thick neck. It attains adult plumage after three years when it moults into adult winter plumage.

Juvenile, first year birds and second winter birds lack blackish adult like feathers on the upperparts, having instead strongly patterned upperparts which are barred or chequered. Birds at this age can be difficult to tell apart from other large immature gulls. Great black backed gulls are similar to the herring and lesser black-backed gulls.

Diet: Fish, waste from commercial fishing, offal, and other birds, for example auks at colonies in the breeding season. Will also rob other birds of food - kleptoparasitism.

Breeding: Breeds on the ground in colonies all around the coast of Ireland. Most colonies are on well-vegetated off-shore islands, or in other areas difficult of access.

<http://www.birdwatchireland.ie/Default.aspx?tabid=353>

Arctic Tern (*Sterna paradisaea*)



Source: Wikimedia Commons. Image by [Jamumiwa](#)



Source: Wikimedia Commons. Image by [Malene Thyssen](#)

IUCN European Threat Status: Secure

Irish Conservation Status: Medium Conservation Concern

Arctic terns are summer visitors from March to September to all Irish coasts, winters off south Africa and as far south as Antarctica.

Arctic terns are usually seen over the sea. They are slender seabirds with narrow, pointed wings, long forked tails and long, pointed bills; grey above and white below, dark cap to head. Their flight is light and buoyant, and they can hover briefly over the sea before diving in. Very similar to Common Tern (with which it breeds) and told apart by plumage and structure.

Arctic Tern is smaller, with a smaller head, neck and bill and slightly narrower wings, which look forwardly placed on the body. Very short legs. Adults have a blood red bill, usually with no dark tip. The underparts are greyer than Common Tern and there is some contrast with the cheek. The wing pattern is useful in separation, Arctic terns show no dark wedge in the primaries but show a distinct trailing edge. Arctic terns have longer tail streamers, extending beyond the wing tips. Adult winter plumage, like all terns is different from breeding plumage, but is only seen in the wintering range.

<http://www.birdwatchireland.ie/IrelandsBirds/GullsTerns/ArcticTern/tabid/358/Default.aspx>

Razorbill (*Alca torda*)



Source: Wikimedia Commons. Image by [Bird Watch Ireland](#)



Source: Wikimedia Commons. Image by [Gsd97jks](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Medium Conservation Concern

Identification: A species of Auk, highly marine and only found on land in the breeding season. A black and white seabird, black above and white below, with a distinct breeding plumage. Head and neck all black in the breeding season with white on the front of the neck and face in the winter. Bill heavy, except in first winter birds. At a distance can be confused with Guillemot. Razorbill slightly smaller with blackish rather than brownish upperparts, more white on the side of the body and the bill distinctly heavier and blunter on adult birds. White 'armpit' compared to the darker 'armpit' of the Guillemot. Razorbills are similar to other Auk species.

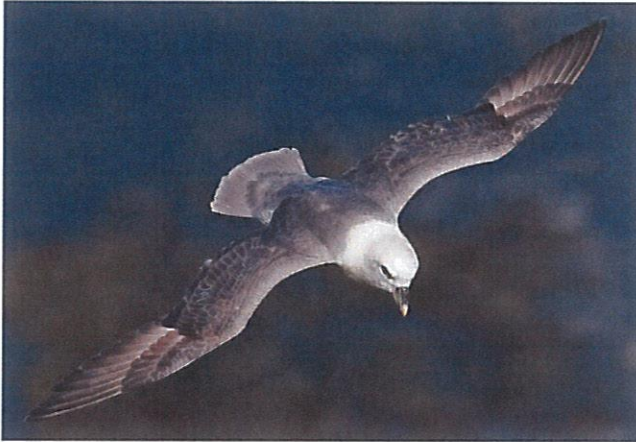
Diet: Mainly small fish, some invertebrates, caught by surface diving.

Breeding: Nests on sea cliffs. Similar in habits to Guillemot with which it will breed in mixed colonies. Returns to colonies in March and April and departs by August. Will also use more secluded nest sites, fissures in the cliffs and also in crevices, where it is more difficult to see, except when birds stand outside of their nest sites.

Where to See: With over 3000 birds, Great Saltee island, off County Wexford, is the most accessible of the islands on which to view this species. However, the species can be seen from the mainland. The Cliffs of Moher, with over 7000 birds, in County Clare are well known. Horn Head, with over 6000 Razorbills, in County Donegal is another spectacular place to view Auks. Razorbills winter in large bays around Ireland including Bantry Bay, Kenmare Bay, Clew Bay, Donegal Bay and Lough Swilly.

<http://www.birdwatchireland.ie/Default.aspx?tabid=361>

Fulmar (*Fulmarus glacialis*)



Source: Wikimedia Commons. Image by [Bogbumper](#)



Source: Wikimedia Commons. Image by [rodtuk](#)

IUCN European Threat Status: Secure

IUCN Irish Status: Low Conservation Concern

Identification: A gull-like bird with white underparts and pale grey upperparts. Has a thick neck and large head. Shows a pale primary patch on the upperwing. Does not show gull-like black tips to the primary feathers. Straight, stout bill with hooked tip and tube shaped nostrils on the upper beak, giving distinctive bill shape if seen at close range. Nostrils used to excrete salt. Flies with very stiff wings, uses long glides at sea, with series of stiff, shallow wing beats. Hangs in the wind in the fierce updrafts generated by steep cliffs, where it can even fly backwards. Cannot stand upright, so needs to launch itself from a high ledge or patters along surface of sea to become airborne.

Diet: A great variety of food taken including fish, discards from trawlers, crustaceans and whale flesh.

Breeding: A bird that has expanded its breeding range throughout Ireland over the last century, beginning in Mayo in 1911. Comes to land in the day, unlike its relatives the shearwaters and other petrels. Mainly breeds on sea cliffs, but will nest on level ground, on buildings and in burrows and crevasses. Will use both steep rocky cliffs, grassy cliffs and steep slopes above cliffs. Both incubating adults and chick use projectile vomiting as a defensive against predators, the oily stomach contents effectively fouling the plumage of other birds.

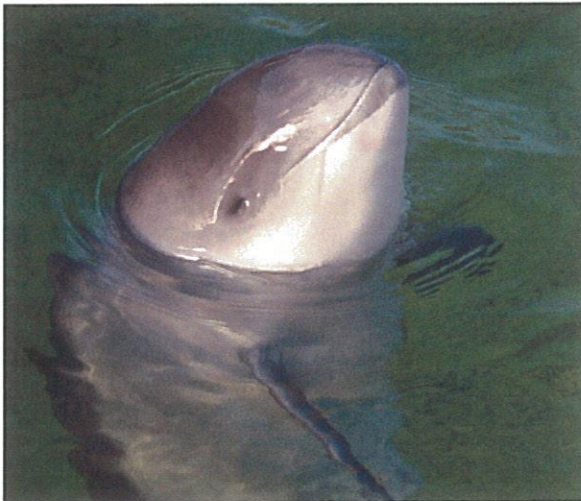
Wintering: Winters at sea, but can be seen in Irish waters throughout the year. Attends colonies in the winter sporadically, with breeding cliffs deserted one week and full the next.

<http://www.birdwatchireland.ie/IrelandsBirds/Tubenoses/Fulmar/tabid/142/Default.aspx>

Harbour Porpoise (*Phocoena phocoena*)



Source: Encyclopedia of Life. Image by [Erik Christensen](#)



Source: Wikimedia Commons. Image by [AVampireTear](#)

IUCN European Threat Status: Least Concern
IUCN Irish Status: Good

Harbour porpoises live either solitarily or in groups, normally of three to five individuals, although sometimes more. Normally individual porpoises or couples (mother and calf) are observed and high numbers can be seen during migrations. Like dolphins, the harbour porpoise orientates itself by means of echo-sounding or 'sonar'. It has a particular way of swimming with a 'rolling' movement (imagine a turning wheel); part of the back, including the dorsal fin surfaces briefly before re-entering the water giving the appearance of a rotating motion. This movement will normally be repeated three to four times, prior to a long dive. The diet of an adult harbour porpoise is made up of various pelagic and demersal fish, as well as invertebrates.

This species is generally the most common cetacean in Irish waters; despite this it can often be difficult to observe due to its small size. Harbour Porpoises are often very wary of human contact and rarely interact with boats unlike many other Irish cetacean species.

The Harbour Porpoise is protected under Annex II and IV of EC Habitats Directive, Protected species of Wildlife (Amendment) Act and OSPAR List of Threatened and Declining Species and Habitats.

Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

<http://www.eol.org/pages/328536/details>

<http://www.npws.ie/marine/marine-species>

http://www.npws.ie/sites/default/files/publications/pdf/2009_Cetaceans_CP.pdf

Common Dolphin (*Delphinus delphis*)



Source: Encyclopedia of Life. Image by [Marijke de Boer](#)



Source: Encyclopedia of Life. Image by [Donna Pomeroy](#)

IUCN European Threat Status: Least Concern
IUCN Irish Status: Good

They can reach speeds up to 45 kilometers per hour. They are also attracted to ships and like to play in their bow waves. These fast-swimming dolphins are highly active, often leaping clear of the water (breaching), and slapping their flippers on the water surface (lobtailing). They can reach speeds up to 45 kilometers per hour. They are also attracted to ships and like to play in their bow waves.

They can occur in large groups of between 10 and 500 individuals, the size of group depending on both the time of day and year. The approach of these groups can be detected from miles away, and some noises made by this species can be heard from above the surface of the water. They feed on small fish and cephalopods such as squid, and are known to use co-operative methods of hunting. They make short dives typically of between 10 seconds and 2 minutes, but dives lasting for as long as 8 minutes have been recorded.

The Common Dolphin is protected under Annex IV of EC Habitats Directive and the Protected species of Wildlife (Amendment) Act.

Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

<http://www.eol.org/pages/314276/details>

Risso's Dolphin (*Grampus griseus*)



Source: Wikimedia Commons. Image by [Mike Baird](#)



Source: Sanctuary Cruises. Image by [Michael Sack](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Unknown

Risso's dolphin has a relatively large anterior body and dorsal fin, while the posterior tapers to a relatively narrow tail. The bulbous head has a vertical crease in front. Infants are dorsally grey to brown and ventrally cream-colored, with a white anchor-shaped area between the pectorals and around the mouth. In older calves, the nonwhite areas darken to nearly black, and then lighten (except for the always dark dorsal fin). Risso's dolphins are often covered with scars. The older the dolphin, the more scratches on its body. These scars are probably caused by the teeth of other Risso's dolphins, made during fights or while playing. Squid can also leave scars, when they are caught and eaten by the animal. Older individuals appear mostly white. Most individuals have two to seven pairs of teeth, all in the lower jaw.

Length is typically 10 feet (3.0 m), although specimens may reach 13.12 feet (4.00 m). Like most dolphins, males are typically slightly larger than females. This species weighs 300–500 kilograms (660–1,100 lb), making it the largest species called "dolphin".

They are found worldwide in temperate and tropical waters, but occasionally there are reports of one swimming in the northern North Sea. Most of the information that is gathered about the species is from strandings.

The Risso's Dolphin is protected under Annex IV of EC Habitats Directive and the Protected species of Wildlife (Amendment) Act.

Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

https://en.wikipedia.org/wiki/Risso's_dolphin

<http://www.eol.org/pages/328529/details>

Bottlenose Dolphin (*Tursiops truncatus*)



Source: Encyclopedia of Life. Image by [David R](#)



Source: Encyclopedia of Life. Image by [Maris Pukitis](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Good

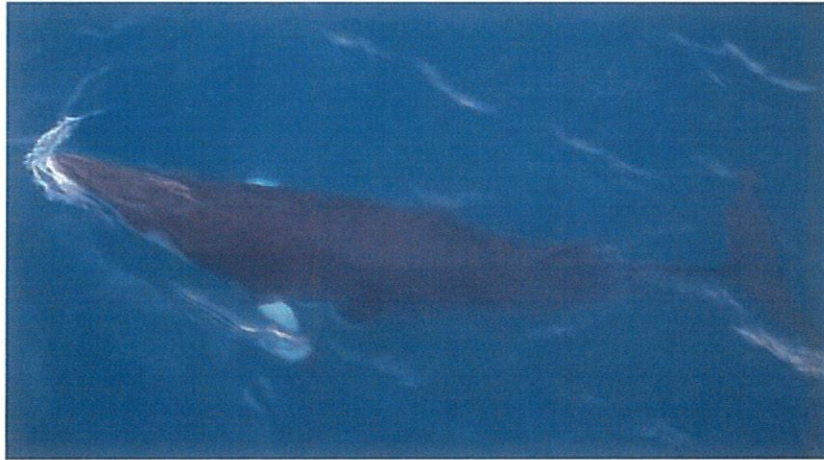
Everyone is familiar with the loveable dolphin known as Flipper, but most people are unaware that *Tursiops truncatus*, the common bottlenose dolphin, is only one of three bottlenosed dolphin species in the oceans today. The common bottlenosed dolphin is found in temperate and tropical waters worldwide, with sightings as far north as Norway and far south as southern Argentina. These friendly swimming mammals are found living offshore and inshore, whereas the other two species tend to occur closer to the coast in tropical areas. The species are very social and they like to travel and hunt for food in groups. One method of communal hunting is known as “fish whacking.” When the bottlenose dolphins engage in “fish whacking” they strike a fish with their flukes and knock it out of the water. As the tasty treat is airborne, they plunge out of the water and catch it mid-flight. Although this not the most strategic form of hunting, it may offer some amusement for these intelligent and social mammals.

As with many mammal species, the males are considerably larger than the females and the females tend to outlive the males. Their length ranges anywhere from 6-12 ½ feet long. The average life expectancy for these mammals is about 40 to 45 years for males, and more than 50 years old for females. Females reach sexual maturity between 5 and 13 years of age, and males mature between 9 and 14. Once they are of age to reproduce, females will carry the calf for a twelve-month period. Around eighteen months of age the female will wean the calf.

The Bottlenose Dolphin is protected under Annex II and IV of EC Habitats Directive and the Protected species of Wildlife (Amendment) Act. Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

<http://http://www.npws.ie/marine/marine-species>
www.eol.org/pages/15602/details

Minke Whale (*Balaenoptera acutorostrata*)



Source: Wikimedia Commons. Image by [Rui Prieto](#)



Source: Wikimedia Commons. Image by [Hans Bernhard](#)

IUCN European Threat Status: Least Concern

IUCN Irish Status: Good

The Northern minke whale (*Balaenoptera acutorostrata*), is a very large cetacean, in the family of Rorquals. The Minke is a baleen whale, meaning that instead of teeth, it has long plates which hang in a row (like the teeth of a comb) from its upper jaws. Baleen plates are strong and flexible; they are made of a protein similar to human fingernails. Baleen plates are broad at the base (gumline) and taper into a fringe which forms a curtain or mat inside the whale's mouth. Baleen whales strain huge volumes of ocean water through their baleen plates to capture food: tons of krill, other zooplankton, crustaceans, and small fish.

The smallest of the rorqual whales (and the second-smallest baleen whale), the minke whale is also the most abundant. Two species are now recognised, the northern hemisphere minke whale and the southern hemisphere Antarctic minke whale (*Balaenoptera bonaerensis*). Minke whales are slim in shape, with a pointed dolphin-like head, bearing a double blow-hole. The smooth skin is dark grey above, while the belly and undersides of the flippers are white, and there is often a white band on the flipper.

Although largely a solitary species, when feeding minke whales can often be seen in pairs, and on particularly good feeding grounds up to a hundred individuals may congregate. A number of feeding techniques have been observed, including trapping shoals of fish against the surface of the water. After a ten month gestation period, births occur in mid-winter, at birth the calf measures up to 2.8 metres in length. It will be weaned at four months of age, and will stay with its mother for up to two years, becoming sexually mature at seven years of age. Minke whales have an average life span of around 50 years. Minke whales are rather inquisitive and often swim by the side of boats for up to half an hour.

The Minke Whale is protected under Annex IV of EC Habitats Directive and the Protected species of Wildlife (Amendment) Act. Sightings of marine mammals can be reported to the Irish Whale and Dolphin Group at sightings@iwdg.ie

<http://www.eol.org/pages/328570/details>

