

Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures

MALIN HEAD & LOUGH SWILLY ISRA

European Atlantic Region

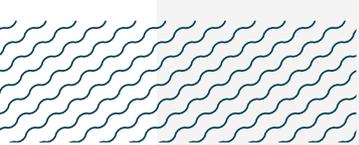
SUMMARY

Malin Head & Lough Swilly is located along the northern coast of Ireland. The area surrounds the northernmost tip of the island, encompassing the estuarine area of Lough Swilly and extending offshore to the open water of the Malin Sea. The habitat ranges from coastal lagoons and estuarine habitat to open waters. This area overlaps with the Trawbeaga Ramsar Site. Within this area there are: **threatened species** (e.g., Basking Shark *Cetorhinus maximus*); and **undefined aggregations** (e.g., Thornback Skate *Raja clavata*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C5 - Undefined Aggregations

—	—
IRELAND	
—	—
0-60 metres	
—	—
2,731.7 km²	
—	—





DESCRIPTION OF HABITAT

Malin Head & Lough Swilly is located along the northern coast of Ireland. The area lies on the Inishowen Peninsula in County Donegal, at the most northerly tip of the island. The coastal waters surrounding Malin Head (Cionn Mhálanna) are part of a dynamic and diverse marine environment shaped by the interaction of Atlantic swells, complex coastal topography, and variable seabed features. This nearshore zone includes rocky headlands, intertidal reefs, sandy bays, and subtidal habitats, and it transitions gradually from the terrestrial environment into the broader shelf sea. The seabed comprises primarily coarse sediments, gravels, and exposed bedrock, with finer sands and muddy substrates found in more sheltered areas, especially in inlets like Lough Swilly (Connor et al. 2004). The bathymetry varies but is generally relatively shallow, with depths ranging from 5–50 m before deepening further offshore (Marine Institute 2020). Lough Swilly, a large estuarine glacial fjord-like inlet southeast of Malin Head, extends >30 km inland. The inner lough supports extensive mudflats and sandy benthic habitats, while the outer reaches contain rocky subtidal areas and moderate current flows (JNCC 2004). The bathymetry of the lough includes deeper central channels (to 40 m) bordered by shallower flanks.

This coastal zone is subject to strong tidal currents, particularly around headlands and narrow inlets. The interaction of tidal flows with the complex coastline and seabed topography can generate localised fronts and eddies, which contribute to mixing and nutrient transport (Pingree & Griffiths 1978). Kelp forests are common along rocky sections of the coast (Smale et al. 2013).

This area overlaps with the Trawbeaga Ramsar Site (Wetland of International Importance; Ramsar 2025).

This Important Shark and Ray Area is benthic and pelagic and is delineated from surface waters (0 m) to a depth of 60 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A – VULNERABILITY

Two Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. These are the Critically Endangered Tope (Walker et al. 2020) and the Endangered Basking Shark (Rigby et al. 2021).

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Malin Head & Lough Swilly is an important area for undefined aggregations of two shark and one ray species.

Basking Sharks are regularly and predictably observed in the area forming aggregations. Out of 290 citizen science sightings reported from this area to the Irish Basking Shark Group (IBSG) between 2003–2024, 111 (38.2%) were of aggregations (mean = 9.4 individuals; max = 45 individuals), with 91 (31.3%) of these aggregations being reported between 2010–2024 (IBSG unpubl. data 2025). Most of these aggregations (98%) occur between May–August. Although not quantified, many observed individuals are reported as actively feeding on the surface (E Johnston pers. comm. 2025), suggesting that this aggregation is likely for feeding purposes.

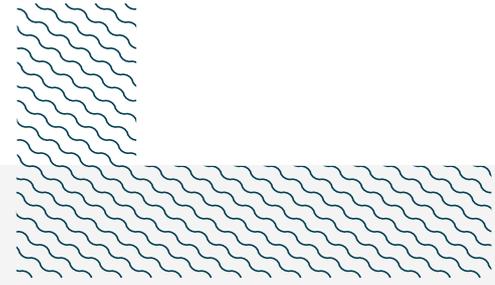
The following tagging data for Tope and Thornback Skates were from individuals caught on rod-and-line by sport fishers, uniquely tagged with conventional tags, and released. The data were reported

to Inland Fisheries Ireland's (IFI) Marine Sportfish Tagging Programme. Trips were either from shore or from a boat and ranged from 2–8 hours per day. Reports are limited to successful trips (where at least one shark or ray was captured and tagged). Catch is reported as the number of individuals of a species per angling trip in one day and aggregations refer to trips in which >3 individuals of the same species were caught. The angling season spans April–October with peak aggregations of both species recorded between June–August annually.

Of 3,388 Tope reported around the Irish coast between 2010–2024, one quarter (23%; n = 768) were recorded in this area. Tope were recorded on 174 tagging trips by 18 sport fishers without chumming the water. High catch rates were recorded on 73 days with a mean catch of 6.3 individuals (maximum = 25) per trip. These were primarily reported between May–August 2010–2015 and 2021, suggesting a boreal summer seasonality to this aggregating behaviour. Records of more than seven Tope per trip were reported on 23 separate dates between 2010–2015 with peak activity in June of those years (IFI 2023; IFI 2025). Tope were predominantly male (1:0.05 M:F) and considered mature based on their size (mean total length [TL] = 142 ± 17 cm standard deviation). The size-at-maturity for males is 120–170 cm TL (Ebert et al. 2021). The dominance of mature males in these catches, and observations from fishers of animals, suggest seasonal aggregations in this area, with Tope known to form aggregations separated by sex and size (Cameron et al. 2025). This area is targeted for Tope by anglers each year, which can be seen in angling blogs, forums, and social media pages. Tope are seen in large numbers within the area annually, with local anglers reporting catches of 20 or 30 individuals a day in summer months.

Of 479 Thornback Skates reported around the Irish coast between 2010–2015, approximately one third (28%; n = 132) were recorded in this area. Thornback Skates were recorded on 46 tagging trips by six sport fishers. High catch rates were reported on 14 occasions with a mean group size of 5.8 individuals (maximum = 18) per trip in June–September 2010–2013. The sex ratio of males to females was 1:0.7 (M:F) and both sexes were on average below the minimum length-at-maturity (female mean TL = 66 ± 12 cm; male mean TL = 59 ± 8 cm). Males mature at 60–77 cm TL and females mature at 60–85 cm TL (Last et al. 2016). Thornback Skates are known to be a philopatric species, with one tagging study in the east Atlantic finding the majority of tagged individuals moved no further than 50–60 km from the release site over a period of several years (Walker et al. 1997). This area is a known hotspot for Thornback Skate fishing within Irish waters. Footage of recreational anglers show multiple Thornback Skate being caught sequentially, suggesting aggregating behaviours. There are also reports of anglers catching up to 30 Thornback Skates within a few hours.

Further information is needed to understand the nature and function of these aggregations.



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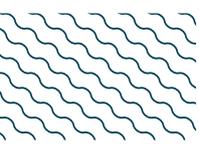
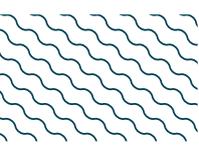
QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met									
				A	B	C1	C2	C3	C4	C5	D1	D2	
SHARKS													
<i>Cetorhinus maximus</i>	Basking Shark	EN	0-1,264	X							X		
<i>Galeorhinus galeus</i>	Tope	CR	0-1,100	X							X		
RAYs													
<i>Raja clavata</i>	Thornback Skate	NT	0-1,020								X		

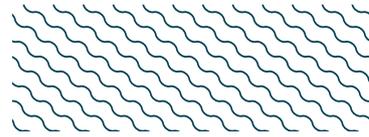
SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Lamna nasus</i>	Porbeagle	VU
<i>Mustelus asterias</i>	Starry Smoothhound	NT
<i>Prionace glauca</i>	Blue Shark	NT
<i>Scyliorhinus stellaris</i>	Nursehound	VU
<i>Squalus acanthias</i>	Spiny Dogfish	CR
RAYS		
<i>Dipturus batis</i>	Common Blue Skate	CR
<i>Dipturus intermedius</i>	Flapper Skate	CR
<i>Raja montagui</i>	Spotted Skate	LC

IUCN Red List of Threatened Species Categories are available by searching species names at www.iucnredlist.org Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.



SUPPORTING INFORMATION



There are additional indications that this is an important reproductive purposes and for aggregations of two shark species.

Adult female Porbeagle are observed regularly and predictably in Malin Head & Lough Swilly in March–April every year, when anglers fish in the area (J Bortoluzzi unpubl. data 2022). In 2022, two large female Porbeagles measuring 244 and 280 cm TL were caught and tagged in this area (Bortoluzzi et al. 2024). Both females had a distended cloaca, which is a sign of likely recent pupping (J Bortoluzzi unpubl. data 2022). In recent years, some captures of Porbeagle in the area include one female weighing 300 lbs and another weighing 400–500 lbs. It is suspected that this is an important reproductive area for Porbeagle, but further information is required to confirm this.

Blue Sharks were recorded on 50 tagging trips by 14 sport fishers between July–October 2010–2015 (IFI 2023; IFI unpubl. data 2025). Blue Sharks in the area were predominantly female (1:0.08 F:M) and mature (female mean = 176 ± 29 cm TL; male mean = 177 ± 13 cm TL). The size-at-maturity for males is 140–177 cm TL and for females is 170–45 cm TL (Ebert et al. 2021). Inland Fisheries Ireland has reported that Blue Sharks typically occur in large aggregations which are often size and sex segregated (IFI 2025). As these captured individuals are almost all mature females, it is suspected that these are sex separated aggregations. Sex separated aggregating behaviours have been further observed in this species in the Atlantic and Indian oceans (Litvinov 2006; Coelho et al. 2018). Chumming is occasionally performed to attract Blue Sharks to angling vessels in this area. As such, further information is required to understand if this area is naturally important for Blue Shark aggregations.



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