

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

## NORMANO-BRETON GULF ISRA

### European Atlantic Region

#### SUMMARY

Normano-Breton Gulf is located in northern France and the eastern Channel Islands of the United Kingdom of Great Britain and Northern Ireland. This area is shallow and is influenced by a large tidal amplitude and strong tidal currents. The habitat is mainly characterised by soft substrates of sandy-mud and coarse sediments, and by rocky plateaus and reefs. The area overlaps with the Les Écréhous & Les Dirouilles, Jersey Ramsar Site. Within this area there are: **reproductive areas** (e.g., Blonde Skate *Raja brachyura*).

#### CRITERIA

##### Sub-criterion C1 - Reproductive Areas

— —  
**FRANCE,**  
**UNITED**  
**KINGDOM OF**  
**GREAT**  
**BRITAIN AND**  
**NORTHERN**  
**IRELAND**  
 — —

**0-75 metres**  
 — —

**1,703.6 km<sup>2</sup>**  
 — —





## DESCRIPTION OF HABITAT

Normano-Breton Gulf is located in northern France and the eastern Channel Islands of the United Kingdom of Great Britain and Northern Ireland. This split area includes one part extending from the northwestern tip of the Cotentin Peninsula to north of Jersey Island and another part stretching along the coast of the southwestern Cotentin Peninsula. The rugged seabed and shallow depth of the area, combined with its complex hydrodynamics result in a natural mosaic of marine habitats. It is characterised by sandy-mud and coarse sediment substrates for the most part, dotted with areas of rocky reefs, eelgrass beds (*Zostera* spp.), kelp forests, benches of marine worms (e.g., *Lanice* spp.), and biogenic Hermelles reefs (Furgerot et al. 2019). The area is also punctuated by islands and rocky plateaus.

These plateaus and reefs, mainly concentrated around the Anglo-Norman archipelagos and Chausey, influence the circulation and direction of the tidal currents. The Alderney Race between the Cotentin Peninsula and Alderney Island has the strongest currents in Europe, driven by tidal fluctuations which reach 12 m on average in Mount Saint Michel Bay (Furgerot et al. 2019). The area is also influenced by freshwater and sediment inputs from the Sélune, Sée, and Couesnon rivers.

This area overlaps with the Les Écréhous & Les Dirouilles, Jersey Ramsar Site (Wetland of International Importance; Ramsar 2025).

This Important Shark and Ray Area is benthic and is delineated from inshore and surface waters (0 m) to 75 m based on the bathymetry of the area.

## ISRA CRITERIA

### SUB-CRITERION C<sub>1</sub> – REPRODUCTIVE AREAS

Normano-Breton Gulf is an important reproductive area for two ray species.

Blonde Skate and Undulate Skate neonates and young-of-the-year (YOY) regularly occur in this area according to data collected from fisheries surveys. Data were compiled from the French fisheries on-board observer program (ObsMer; IFREMER SIH 2022) and from the International Council for the Exploration of the Sea (ICES) Database on Trawls Surveys (campaigns: BTS, BTS-VIII, EVHOE, FR-CGFS, IE-IAMS, IE-IGFS, NIGFS, NS-IBTS, PT-IBTS, SCOWCGFS, SP-NORTH, SWC-IBTS) (ICES 2025) between 2010–2021. These surveys and observations span over a wide region from northern Spain to Scotland. Effort was not higher within this area compared to outside of it, considering the gear suitable for catching Blonde Skate and Undulate Skate neonates and YOY. The fishing methods capturing these species included mostly benthic trawl (i.e., 61% of Blonde Skate catches and 53% of Undulate Skate catches). In this area, an average of 16 benthic trawl hauls are sampled each year.

Blonde Skate neonates and YOY were defined as being <21 cm total length (TL), considering a size-at-birth of 18 cm TL for the species and a slow growth coefficient of 0.12 (Last et al. 2016; Ellis et al. 2023). Neonates and YOY (n = 71) were captured in 11 of the 12 years (2010–2021) within this area. They comprised 13.4% of the total captures for the species, which is high considering that small skates are rarely captured. This area had more records of neonate and YOY Blonde Skates than other parts of the region (IFREMER SIH 2022; ICES 2025), highlighting its importance for the early life stages of the species. Additionally, egg cases observed during beach surveys throughout France from 2005–2017 were counted and identified to species (APECS unpubl. data 2025). Normano-Breton Gulf was the hotspot for Blonde Skate egg cases, with a mean of up to ~150 eggs per survey on some beaches in this area (APECS unpubl. data 2025).

Undulate Skate neonates and YOY were defined as being  $\leq 16$  cm TL, considering a size-at-birth of 14 cm TL and a slow growth coefficient of 0.13 (Last et al. 2016; Ellis et al. 2023). Neonates and YOY ( $n = 39$ ) were captured in 9 of the 12 survey years (2010–2021) within this area and comprised 1.3% of the total captures for the species, which is considered high since small skates are rarely captured. This area had the most records of neonate and YOY Undulate Skates compared to other parts of the region (IFREMER SIH 2022; ICES 2025), highlighting its importance for the early life stages of the species. Additionally, egg cases observed during beach surveys throughout France from 2005–2017 were counted and identified to species (APECS unpubl. data 2025). Normano-Breton Gulf was one of three hotspots for Undulate Skate egg cases, with a mean of up to ~300 eggs per survey on multiple beaches in this area (APECS unpubl. data 2025).

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## Suggested citation

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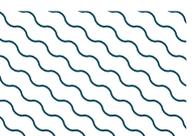
## QUALIFYING SPECIES

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
<b>RAYS</b>												
<i>Raja brachyura</i>	Blonde Skate	NT	0-900			X						
<i>Raja undulata</i>	Undulate Skate	NT	0-200			X						

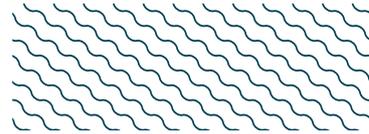
## SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
<b>SHARKS</b>		
<i>Cetorhinus maximus</i>	Basking Shark	EN
<i>Galeorhinus galeus</i>	Tope	CR
<i>Lamna nasus</i>	Porbeagle	VU
<i>Mustelus asterias</i>	Starry Smoothhound	NT
<i>Scyliorhinus canicula</i>	Smallspotted Catshark	LC
<i>Scyliorhinus stellaris</i>	Nursehound	VU
<b>RAYS</b>		
<i>Raja clavata</i>	Thornback Skate	NT
<i>Raja microocellata</i>	Small-eyed Skate	NT
<i>Raja montagui</i>	Spotted Skate	LC
<i>Torpedo marmorata</i>	Marbled Torpedo Ray	VU

*IUCN Red List of Threatened Species Categories are available by searching species names at [www.iucnredlist.org](http://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 Normano-Breton Gulf may also be an important feeding area for one ray species.

Thornback Skates captured in commercial trawls in 2016 and 2017 in this area and surrounding areas of the English Channel were analysed for stomach contents (present or empty), the prey were identified, and the index of relative importance (%IRI) calculated for a subset of individuals (Biton-Porsmoguer 2020; S Biton-Porsmoguer unpubl. data 2025). A higher proportion of individuals with non-empty stomachs was observed inside the area (69%; n = 25 of 36) than outside the area (19%; n = 8 of 42). Importantly, the state of digestion of prey items showed that prey were recently eaten (S Biton-Porsmoguer pers. obs. 2025), indicating that Normano-Breton Gulf may be an important feeding area for this species. The diet of 42 Thornback Skates with non-empty stomachs was then analysed, including 11 individuals from this area (Biton-Porsmoguer 2020). All individuals were mature with a size of >75 cm TL. The size-at-maturity for the species is 60-85 cm TL (Last et al. 2016). The diet of this species is strongly dominated by crustaceans (%IRI = 46) and fishes (%IRI = 36) (Biton-Porsmoguer 2020; S Biton-Porsmoguer unpubl. data 2025).



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