

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

AULNE & ELORN ESTUARIES ISRA

European Atlantic Region

SUMMARY

Aulne & Elorn Estuaries is located in the roadstead of Brest in northwestern France. This split area encompasses two estuarine sites in a large bay that is connected to the Atlantic Ocean by a narrow strait. It is strongly influenced by large tides and by freshwater and sediment input from the rivers, resulting in a variable salinity gradient. The habitat is characterised by mud and seagrass. Within this area there are: **undefined aggregations** (Starry Smoothhound *Mustelus asterias*).

CRITERIA

Sub-criterion C5 - Undefined Aggregations

FRANCE

0-30 metres

17.89 km²





DESCRIPTION OF HABITAT

Aulne & Elorn Estuaries is located in the roadstead of Brest in northwestern France. This split area encompasses two estuaries that drain into a large bay (roadstead of Brest) that is connected to the Atlantic Ocean by a ~2 km wide strait (the *Goulet*). The two estuaries are located ~15 km apart from each other. The Aulne River is the third largest coastal river in Brittany and is used by migrating fish species including Allis Shad *Alosa alosa*, European Eel *Anguilla anguilla*, Sea Lamprey *Petromyzon marinus*, Atlantic Salmon *Salmo salar*, and Sea Trout *Salmo trutta* (Acolas et al. 2006). The habitat is characterised by mud and seagrass.

The area is strongly influenced by tides that exchange approximately one third of the bay's water with each tidal cycle and tidal currents reaching up to 9 m s⁻¹ during spring tides (Gregoire et al. 2016). It is also influenced by nutrient-rich freshwater and sediment input from the rivers (Acolas et al. 2006). This leads to a temporally varying salinity gradient in this area.

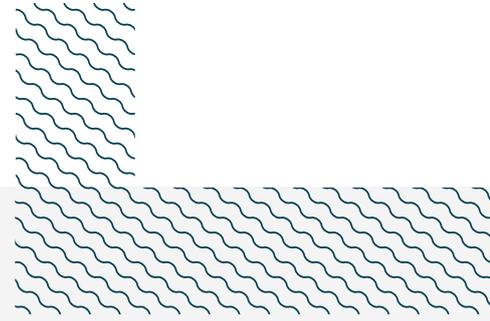
This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 30 m based on the bathymetry of the area.

ISRA CRITERIA

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Aulne & Elorn Estuaries is an important area for undefined aggregations of one shark species.

Starry Smoothhound seasonally aggregate in this area (Association Pour l'Etude et la Conservation des Sélaciens – APECS unpubl. data 2025). Local ecological knowledge from anglers operating in the roadstead of Brest initially indicated that there are large aggregations of the species in this area (APECS unpubl. data 2025). From 2021–2024, more than 1,100 Starry Smoothhounds were captured, tagged, and released by anglers as part of the 'MUSTELUS' project (APECS 2025). Daily captures are often high. For instance, during a single day of tagging with 33 anglers in September 2024, 298 individual females were tagged and released within eight hours, highlighting that this is an important aggregation area. Overall, captures were made between May and the beginning of November and almost all sharks (99.7%) were large females with a mean size of 97 cm total length (TL; range = 66–123 cm TL). The size-at-maturity for females is 83–96 cm TL (Ebert et al. 2021), indicating that many were mature. Opportunistic dissections of a few dead specimens showed the presence of early-stage embryos in August and September (APECS 2025). Considering the one-year gestation period for the species (Ebert et al. 2021) and the seasonal captures in this area, this location may be important during early gestation. Recaptures of tagged Starry Smoothhounds showed that they leave the area during the boreal winter, with recaptures as far away as southern Ireland and the eastern English Channel (APECS 2025). Starry Smoothhounds and related species are known for their aggregation behaviour. For example, large female Starry Smoothhounds seasonally aggregate near Holyhead in Wales (Farrell et al. 2010), and juvenile Common Smoothhounds seasonally aggregate at specific sites in the Canary Islands (Espino et al. 2022). Further information is needed to understand the nature and function of the aggregations in the area.



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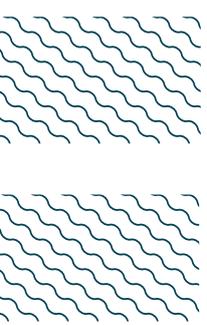
QUALIFYING SPECIES

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
SHARKS											
<i>Mustelus asterias</i>	Starry Smoothhound	NT	0-199							X	

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
<i>Raja clavata</i>	Thornback Skate	NT

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.





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