

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

BRISTOL CHANNEL ISRA
European Atlantic Region

SUMMARY

Bristol Channel is located on the west coast of England and Wales, United Kingdom of Great Britain and Northern Ireland. The area includes estuarine systems and is characterised by muddy and sandy substrates. It is influenced by the mix of saltwater from the Celtic Sea and freshwater from numerous river inputs. The area encompasses the Lundy Island No Take Zone. Within this area there are: **reproductive areas** (e.g., Starry Smoothhound *Mustelus asterias*).

CRITERIA

Sub-criterion C1 - Reproductive Areas

— —
UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
 — —

0-65 metres
 — —

3,051.9 km²
 — —





DESCRIPTION OF HABITAT

Bristol Channel is located on the west coast of England and Wales, in the United Kingdom of Great Britain and Northern Ireland. It includes estuarine systems, and is connected to the Celtic Sea, separating the United Kingdom of Great Britain and Northern Ireland and Ireland. The area encompasses Lundy Island. The area is characterised by muddy and sandy substrates (Collins 1987).

The area is influenced by the mix of saltwater from the Celtic Sea and freshwater from numerous river inputs. It is also influenced by some of the largest tidal ranges in the world (South Wales Sports 2025).

This area overlaps with the Lundy Island No Take Zone (IUCN 2009).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to a depth of 65 m based on the bathymetry of the area.

ISRA CRITERIA

SUB-CRITERION C1 – REPRODUCTIVE AREAS

Bristol Channel is an important reproductive area for one shark and three ray species.

Early life stages of Starry Smoothhound, Blonde Skate, Thornback Skate, and Small-eyed Skate are regularly and predictably observed, year-to-year, at one fixed survey station, and other surveys, in this area (ICES 2025). Data from the Bristol Channel and Irish Sea beam trawl survey (BTS) (2010–2024) were analysed (ICES 2025) which uses a four-metre beam. The size threshold for young-of-the-year (YOY) individuals of each species was supported by analysis of catch data from across the United Kingdom of Great Britain and Northern Ireland (J Ellis & S McCully Phillips unpubl. data 2025).

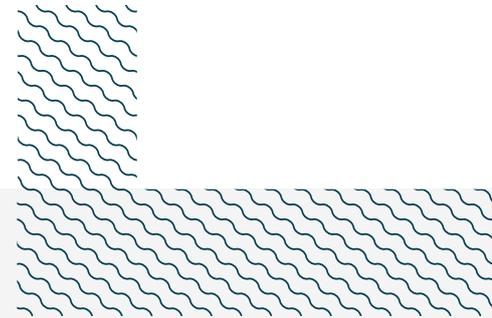
A total of 1,530 Starry Smoothhounds were recorded across all survey years of the BTS in this area. Of these, more than half ($n = 883$, 57.7%) were neonate/young-of-the-year (YOY) measuring ≤ 41 cm total length (TL). The size-at-birth of this species is 28–32 cm TL (Ebert et al. 2021). Neonate/YOY Starry Smoothhounds were reported in 2010 ($n = 45$), 2011 ($n = 49$), 2012 ($n = 61$), 2013 ($n = 101$), 2014 ($n = 55$), 2015 ($n = 47$), 2016 ($n = 166$), 2017 ($n = 73$), 2018 ($n = 77$), 2019 ($n = 96$), 2020 ($n = 33$), 2021 ($n = 22$), 2022 ($n = 22$), 2023 ($n = 10$), and 2024 ($n = 26$). Overall, 408 neonate Starry Smoothhounds were caught in this area in 2010 ($n = 23$), 2011 ($n = 22$), 2012 ($n = 34$), 2013 ($n = 65$), 2014 ($n = 14$), 2015 ($n = 23$), 2016 ($n = 97$), 2017 ($n = 19$), 2018 ($n = 49$), 2019 ($n = 28$), 2020 ($n = 4$), 2021 ($n = 12$), 2022 ($n = 8$), 2023 ($n = 1$), and 2024 ($n = 9$). This is the largest known hotspot for early life stages of this species within the United Kingdom of Great Britain and Northern Ireland.

A total of 528 Blonde Skates were recorded across all survey years of the BTS in this area. Of these, more than half ($n = 302$, 57.2%) were neonate/YOY measuring ≤ 34 cm TL. The size-at-birth of this species is 16–18 cm TL (Last et al. 2016). Neonate/YOY Blonde Skates were reported in 2010 ($n = 11$), 2011 ($n = 13$), 2012 ($n = 12$), 2013 ($n = 24$), 2014 ($n = 29$), 2015 ($n = 9$), 2016 ($n = 30$), 2017 ($n = 22$), 2018 ($n = 33$), 2019 ($n = 16$), 2020 ($n = 23$), 2021 ($n = 25$), 2022 ($n = 26$), 2023 ($n = 21$), and 2024 ($n = 8$). This is one of the only known hotspots for early life stages of this species within the United Kingdom of Great Britain and Northern Ireland.

A total of 1,757 Thornback Skates were recorded across all survey years of the BTS in this area. Of these, nearly one third ($n = 538$, 30.6%) were neonate/YOY measuring ≤ 30 cm TL. The size-at-birth

of this species is 10–13 cm TL (Last et al. 2016), with individuals up to 30 cm TL being considered neonate/YOY in other regions (Alkusaairy 2019). Neonate/YOY Thornback Skates were reported in 2010 (n = 26), 2011 (n = 17), 2012 (n = 16), 2013 (n = 46), 2014 (n = 28), 2015 (n = 29), 2016 (n = 56), 2017 (n = 24), 2018 (n = 45), 2019 (n = 34), 2020 (n = 52), 2021 (n = 44), 2022 (n = 48), 2023 (n = 20), and 2024 (n = 53). Overall, 45 neonate Thornback Skates were caught in this area in 2010 (n = 1), 2011 (n = 2), 2012 (n = 5), 2013 (n = 1), 2014 (n = 1), 2015 (n = 2), 2016 (n = 3), 2017 (n = 2), 2018 (n = 4), 2019 (n = 2), 2020 (n = 6), 2021 (n = 3), 2022 (n = 8), 2023 (n = 2), and 2024 (n = 3). This is one of the largest known hotspots for early life stages of this species within the United Kingdom of Great Britain and Northern Ireland.

A total of 605 Small-eyed Skates were recorded across all survey years of the BTS in this area. Of these, nearly half (n = 287, 47.4%) were YOY measuring ≤ 31 cm TL. The size-at-birth of this species is 10–13 cm TL (Last et al. 2016). The smallest size-at-maturity of the species ranges from 66–73 cm TL in this part of the region (McCully et al. 2012). YOY Small-eyed Skates were reported in 2010 (n = 10), 2011 (n = 17), 2012 (n = 10), 2013 (n = 4), 2014 (n = 3), 2015 (n = 14), 2016 (n = 13), 2017 (n = 24), 2018 (n = 15), 2019 (n = 16), 2020 (n = 36), 2021 (n = 27), 2022 (n = 37), 2023 (n = 35), and 2024 (n = 26). This is the largest known hotspot for early life stages of this species within the United Kingdom of Great Britain and Northern Ireland.



Acknowledgments

Sophy McCully Phillips (Centre for the Environment, Fisheries and Aquaculture Science [Cefas]), Jim Ellis (Centre for the Environment, Fisheries and Aquaculture Science [Cefas]), Joana Silva (Centre for the Environment, Fisheries and Aquaculture Science [Cefas]), Harriet Allen (Shark Trust), Ali Hood (Shark Trust), and Ryan Charles (IUCN SSC Shark Specialist Group - ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2025 ISRA Region O2 – European Atlantic workshop for their contributions to this process.

This factsheet has undergone review by the ISRA Independent Review Panel prior to its publication.

This project was funded by the Shark Conservation Fund, a philanthropic collaborative pooling expertise and resources to meet the threats facing the world's sharks and rays. The Shark Conservation Fund is a project of Rockefeller Philanthropy Advisors.

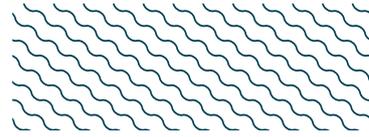
Suggested citation

IUCN SSC Shark Specialist Group. 2025. Bristol Channel ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

QUALIFYING SPECIES

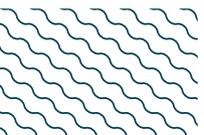
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met							
				A	B	C1	C2	C3	C4	C5	D1
SHARKS											
<i>Mustelus asterias</i>	Starry Smoothhound	NT	0-199			X					
RAYS											
<i>Raja brachyura</i>	Blonde Skate	NT	0-900			X					
<i>Raja clavata</i>	Thornback Skate	NT	0-1,020			X					
<i>Raja microocellata</i>	Small-eyed Skate	NT	0-100			X					

SUPPORTING SPECIES



Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Galeorhinus galeus</i>	Tope	CR
<i>Scyliorhinus canicula</i>	Smallspotted Catshark	LC
<i>Scyliorhinus stellaris</i>	Nursehound	VU

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.





REFERENCES

Alkusaury H. 2019. The study of catches composition (quantitative and qualitative) of chondrichthyes, and reproductive biology and diet of *Dipturus oxyrinchus* in Syrian marine waters. Unpublished PhD Thesis, Tishreen University, Latakia, Syria.

Collins M. 1987. Sediment transport in the Bristol Channel: a review. *Proceedings of the Geologists' Association* 98: 367-383. [https://doi.org/10.1016/S0016-7878\(87\)80076-7](https://doi.org/10.1016/S0016-7878(87)80076-7)

Ebert DA, Dando M, Fowler S. 2021. *Sharks of the world: A complete guide*. Princeton: Princeton University Press.

ICES. 2025. ICES Database on Trawl Surveys (DATRAS). Copenhagen, Denmark: ICES. Available at: <https://datras.ices.dk> Accessed May 2025.

IUCN. 2009. Lundy Island No Take Zone. Available at: https://iucn.org/sites/default/files/import/downloads/marine_protected_areas_lundy.pdf Accessed August 2025.

Last PR, White WT, de Carvalho MR, Séret B, Stehmann MFW, Naylor GJP. 2016. *Rays of the world*. Clayton South: CSIRO Publishing.

McCully SR, Scott F, Ellis JR. 2012. Lengths at maturity and conversion factors for skates (Rajidae) around the British Isles, with an analysis of data in the literature. *ICES Journal of Marine Science* 69: 1812-1822. <https://doi.org/10.1093/icesjms/fss150>

South Wales Sports. 2025. Bristol Channel Tides. Available at: https://www.southwalesports.co.uk/Marine_Information/Marine_Information/Bristol_Channel_Tides/ Accessed August 2025.