

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

BRIGHTON ISRA

European Atlantic Region

SUMMARY

Brighton is located on the south coast of England, United Kingdom of Great Britain and Northern Ireland. The substrate in the area is characterised by pebbles, gravel, and chalk. The area openly faces the English Channel and is influenced by prevailing southwesterly winds. 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
 — —

— —
0-15 metres
 — —

— —
336.9 km²
 — —





DESCRIPTION OF HABITAT

Brighton is located on the south coast of England, United Kingdom of Great Britain and Northern Ireland. The habitat in the area is characterised by flint pebbles, gravel, and chalk substrates (British Geological Survey 2025). The area openly faces the English Channel and is influenced by prevailing southwesterly winds.

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to a depth of 15 m based on the bathymetry of the area.

ISRA CRITERIA

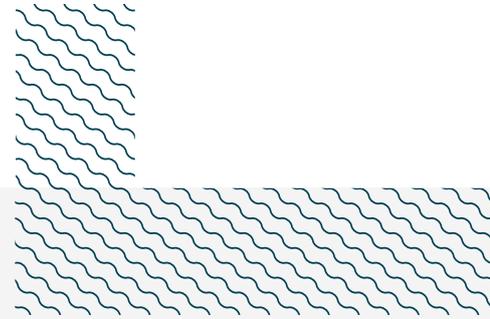
SUB-CRITERION C1 – REPRODUCTIVE AREAS

Brighton is an important reproductive area for one shark and one ray species.

Early life stages of Starry Smoothhound and Thornback Skate are regularly and predictably observed, year-to-year, in this area (Ellis et al. 2012, 2024; ICES 2025). Data from the Eastern Channel beam trawl survey (2010-2024) were analysed (ICES 2025) which uses a four-metre beam trawl to survey the southeast coast of England, usually in July. Data are available for each of the seven survey stations within this area. 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 pers. obs. 2025). Hotspots of each species in the United Kingdom of Great Britain and Northern Ireland, and sometimes adjacent jurisdictions, were identified through density plots of observed neonate/YOY individuals. This area is a hotspot for both species within the United Kingdom of Great Britain and Northern Ireland.

Overall, 39 neonate/YOY Starry Smoothhounds measuring ≤ 35 cm total length (TL) were caught in this area. These were caught at five fixed survey stations within this area. Size-at-birth for this species is reported at 28-32 cm TL (Ebert et al. 2021). Neonate/YOY Starry Smoothhounds were recorded in 2010 (n = 6), 2011 (n = 3), 2015 (n = 5), 2017 (n = 4), 2018 (n = 4), 2019 (n = 1), and 2023 (n = 16). During this period, neonate/YOY Starry Smoothhounds were recorded between 4-7 years per station. The number of neonate/YOY Starry Smoothhounds caught in Brighton was the third largest hotspot on the south coast of England and is greater than in adjacent surveyed areas.

Overall, 58 neonate/YOY Thornback Skates, measuring ≤ 24 cm TL, were caught at six fixed survey stations within this area. Size-at-birth for this species is reported at ~10-13 cm TL (Last et al. 2016), with individuals up to 30 cm TL being considered neonate/YOY in other regions (Alkusairy 2019). Neonate/YOY Thornback Skates were recorded in 2010 (n = 11), 2011 (n = 3), 2013 (n = 7), 2015 (n = 2), 2016 (n = 2), 2017 (n = 6), 2018 (n = 2), 2019 (n = 2), 2020 (n = 1), 2021 (n = 4), 2023 (n = 6), and 2024 (n = 12). During this period, the number of years that neonate/YOY Thornback Skate were recorded ranged 3-9 years across stations. The number of neonate/YOY Thornback Skate caught in Brighton was the third largest hotspot on the south coast of England and is greater than in adjacent surveyed areas.



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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					
RAYS											
<i>Raja clavata</i>	Thornback Skate	NT	0-1,020			X					

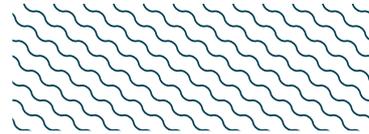
SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
<i>Raja undulata</i>	Undulate 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.



SUPPORTING INFORMATION



There are additional indications that this area is important for reproductive purposes of one ray species.

Overall, 26 immature Undulate Skates (measuring ≤ 35 cm TL) were caught at six fixed survey stations within this area. Size-at-birth for this species is reported at 14 cm TL (Last et al. 2016). This is a large-bodied, lesser-known species with a patchy distribution in this region (Ellis et al. 2012). Immature Undulate Skates were recorded in 2010 (n = 1), 2011 (n = 1), 2012 (n = 2), 2013 (n = 2), 2014 (n = 2), 2015 (n = 2), 2016 (n = 1), 2017 (n = 1), 2021 (n = 3), 2023 (n = 8), and 2024 (n = 3). During this period, the number of years that neonate/YOY Undulate Skate were recorded ranged 2-8 years across stations. The number of immature Undulate Skates caught in Brighton was greater than in adjacent surveyed areas. This is one of the only known locations with regular and predictable observations of this species at early life stages in the United Kingdom of Great Britain and Northern Ireland.



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