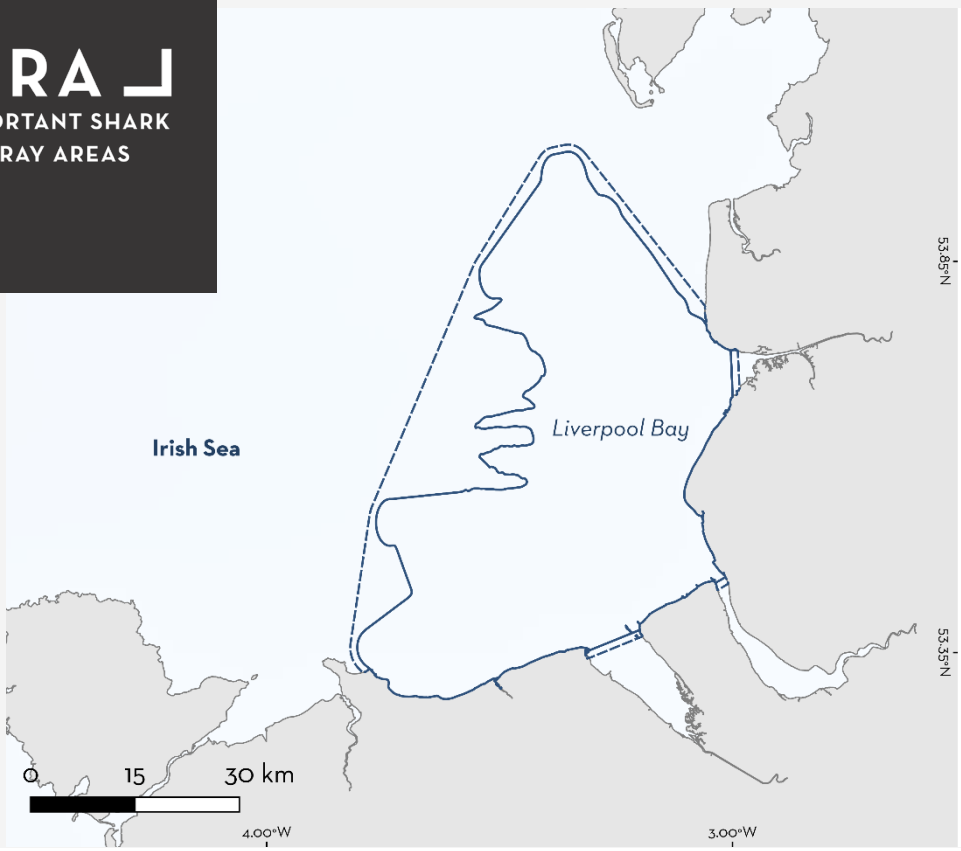
ISRA
IMPORTANT SHARK AND RAY AREAS




*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*

## LIVERPOOL BAY ISRA

**European Atlantic Region**

## SUMMARY

Liverpool Bay is situated on the west coast of the United Kingdom of Great Britain and Northern Ireland, in the southeastern Irish Sea. The area is characterised by sandy and muddy-sandy substrates and is influenced by multiple estuaries. Within this area there are: **reproductive areas** (Thornback Skate *Raja clavata*).

## CRITERIA

**Sub-criterion C1 – Reproductive Areas**

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

**10–45 metres**

**2,183.5 km²**

## DESCRIPTION OF HABITAT

Liverpool Bay is located along the western coast of the United Kingdom of Great Britain of Northern Ireland, in the southeastern Irish Sea. The area extends approximately from Llandudno (North Wales) to Blackpool, extending north-westwards to the area outside Morecambe Bay. It is characterised by shallow nearshore waters with sandy and muddy-sandy substrates. The area is influenced by the Dee, Mersey, and Ribble estuaries due to freshwater input and variation in nutrients (Eagle 1973). The area is also influenced by large tidal currents (Polton et al. 2011).

This Important Shark and Ray Area is benthic and subsurface and is delineated from 10–45 m based on the depth range of Qualifying Species in the area.

# ISRA CRITERIA

## SUB-CRITERION C1 – REPRODUCTIVE AREAS

Liverpool Bay is an important reproductive area for one ray species.

Early life stages of Thornback Skate are regularly and predictably observed, year-to-year, in this area (Ellis et al. 2005, 2012, 2015, 2024a, 2024b; AFBI 2009). Data from the United Kingdom beam trawl survey of the Irish Sea (2010–2024) were analysed (ICES 2025). Overall, 1,697 neonate/young-of-the-year (YOY) Thornback Skates (measuring ~≤29 cm total length [TL]) were caught at 11 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). The number of neonate/YOY Thornback Skates caught in Liverpool Bay was greater than in adjacent surveyed areas. Neonate/YOY Thornback Skates were recorded in 2010 (n = 117), 2011 (n = 109), 2012 (n = 119), 2013 (n = 230), 2014 (n = 78), 2015 (n = 105), 2016 (n = 135), 2017 (n = 101), 2018 (n = 194), 2019 (n = 156), 2021 (n = 64), 2022 (n = 83), 2023 (n = 108), and 2024 (n = 98). During this period, the number of years that neonate/YOY Thornback Skate were recorded ranged 11–14 years across stations.

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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 |
| RAYS | | | | | | | | | | | | |
| *Raja clavata* | Thornback Skate | NT | 0–1,020 | X | | X | | | | | | |

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