

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

## THE TRABZON-RIZE ISRA

### Mediterranean and Black Seas Region

## SUMMARY

The Trabzon-Rize is located in the southeastern Black Sea of Türkiye. The area is characterised by mud and sand-gravel substrates, with the discharge of several rivers contributing terrestrial nutrients to coastal waters. The area overlaps with two Ecologically or Biologically Significant Marine Areas (Trabzon-Arsin and Trabzon-Surmene). Within the area there are: **reproductive areas** (Thornback Skate *Raja clavata*).

## CRITERIA

Sub-criterion C1 - Reproductive Areas

| -            | - |  |  |  |  |
|--------------|---|--|--|--|--|
| TÜRKIYE      |   |  |  |  |  |
| -            | - |  |  |  |  |
| 0–120 metres |   |  |  |  |  |
| -            | - |  |  |  |  |
| 258.5 km²    |   |  |  |  |  |
| -            | - |  |  |  |  |



## DESCRIPTION OF HABITAT

The Trabzon-Rize is located in the southeastern Black Sea of Türkiye. The area is characterised by mud and sand-gravel substrates (Alkan et al. 2022). The area has many large and small rivers that input terrestrial nutrients into coastal waters (Alkan et al. 2022). The highest surface water temperatures are recorded in the boreal summer (~26°C) and the lowest in winter (~9.4°C) when primary productivity is higher (Alkan et al. 2022). The circulation within the area is mostly influenced by rim currents on the slope and anticyclonic eddies on the shelf break.

The area overlaps with two Ecologically or Biologically Significant Marine Areas (EBSA), Trabzon-Arsin and Trabzon-Surmene (CBD 2023a, 2023b).

This Important Shark and Ray Area is delineated from the surface (0 m) to a depth of 120 m based on the distribution of the Qualifying Species within the area.

## **ISRA CRITERIA**

## SUB-CRITERION C1 - REPRODUCTIVE AREAS

The Trabzon-Rize is an important reproductive area for one ray species.

Based on catches recorded from benthic trawls, female Thornback Skates containing egg cases were recorded between May and December during 2002-2003 (Demirhan et al. 2005) and from July to October in 2009 (n = 2; Saglam & Ak 2012). In addition, based on their body size, neonates have been reported across multiple years. During 2009 (n = 15) and 2011-2013, neonates measuring 12.5-15 cm total length (TL), close to the reported size-at-birth for the species (~10-13 cm TL; Last et al. 2016), were captured with turbot gillnets and beam trawlers, confirming the regular presence of this life-stage in the area (Bilgin & Onay 2020).



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# QUALIFYING SPECIES

| Scientific Name | Common Name     | IUCN Red List<br>Category | Global<br>Depth<br>Range (m) | ISRA Criteria/Sub-criteria Met |   |    |    |    |    |    |    |    |
|-----------------|-----------------|---------------------------|------------------------------|--------------------------------|---|----|----|----|----|----|----|----|
|                 |                 |                           |                              | Α                              | В | Cı | C2 | C3 | C4 | C5 | Dı | D2 |
| RAYS            |                 |                           |                              |                                |   |    |    |    |    |    |    |    |
| Raja clavata    | Thornback Skate | NT                        | 0-1,020                      |                                |   | X  |    |    |    |    |    |    |



## SUPPORTING SPECIES

| Scientific Name    | Common Name     | IUCN Red List<br>Category |  |  |  |  |
|--------------------|-----------------|---------------------------|--|--|--|--|
| SHARKS             |                 |                           |  |  |  |  |
| Squalus acanthias  | Spiny Dogfish   | VU                        |  |  |  |  |
| RAYS               |                 |                           |  |  |  |  |
| Dasyatis pastinaca | Common Stingray | VU                        |  |  |  |  |

IUCN Red List of Threatened Species Categories are available by searching species names at <u>www.iucnredlist.org</u> 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 The Trabzon-Rize is an important reproductive area for Spiny Dogfish. Between 2002-2004, females (n = 17) carrying terminal embryos with sizes (mean = 25.8  $\pm$  2.1 cm TL) within the range of the reported size-at-birth for the species (18-33 cm TL; Ebert et al. 2021) were recorded in catches from longlines and purse seines within the area (Demirhan & Seyhan 2006, 2007a, 2007b). Pregnant females were caught between 50-60 m depths during summer (Demirhan & Seyhan 2006). They were also reported from this area prior to 2000, when 103 of 160 females caught by experimental benthic trawls carried embryos with an average size of 17 cm TL (Avsar 2001). More evidence is needed to confirm the contemporary importance of this area and its importance relative to other areas.

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