

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

#### **CILICIAN BASIN ISRA**

#### Mediterranean and Black Seas Region

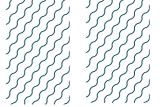
### SUMMARY

Cilician Basin is located in waters straddling Cyprus and Türkiye. The Mid-Mediterranean Jet is the major water circulation feature in the area. It is also influenced by eddies as well as the Cilician Current and the Asia Minor Current. The substrate of the area is muddy. It overlaps with the North-East Levantine Sea Ecologically or Biologically Significant Marine Area. Within the area there are: **threatened species** (Angular Roughshark *Oxynotus centrina*) and **reproductive areas** (e.g., Longnosed Skate *Dipturus oxyrinchus*).

### CRITERIA

Criterion A – Vulnerability; Sub-criterion C1 – Reproductive Areas





# DESCRIPTION OF HABITAT

Cilician Basin is located between Cyprus and southern Türkiye in the Levantine (Ediger et al. 2002; Pazi & Kucuksezgin 2006). A single trough is formed between the Mersin Shelf and the Cilician Basin (Ediger et al. 2002). The Mid-Mediterranean Jet is the major water circulation feature in the area (Robinson et al. 1991). The area is also influenced by eddies as well as the Cilician Current and the Asia Minor Current (Deliceirmak & Salihoğlu 2020). Upwellings are present year-round and vary in location across the basin and have seasonal fluctuations in intensity (Pazi & Kucuksezgin 2006; Deliceirmak & Salihoğlu 2020). This causes the direction of the water circulation to change spatialtemporally. These oceanic and physical features make the Cilician Basin a highly complex area (Deliceirmak & Salihoğlu 2020). The area is characterised by muddy substrates.

The area overlaps with the North-East Levantine Sea Ecologically or Biologically Significant Marine Area (CBD 2023).

This Important Shark and Ray Area is benthopelagic and is delineated from 150 m to 450 m based on the distribution of the Qualifying Species within the area.

### **ISRA CRITERIA**

#### **CRITERION A - VULNERABILITY**

One Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species<sup>™</sup>. The Angular Roughshark is assessed as Endangered (Finucci et al. 2021).

### SUB-CRITERION C1 - REPRODUCTIVE AREAS

Cilician Basin is as an important reproductive area for one shark and one ray species.

Four Angular Roughshark neonates were caught in the boreal spring of 2015 in trawl fisheries (Başusta et al. 2017). Neonates were defined based on their size (<20 cm TL), which was similar to the reported size-at-birth for this species (<21-25 cm TL; Ebert et al. 2021). In addition, neonates were observed within the area during 2016, 2017, and in recent years according to catches in trawlers (N. Başusta unpubl. data 2023). One pregnant female was also caught (Başusta et al. 2015). Reports of neonates for this species are scarce (Capapé et al. 1999), so catches of these individuals within the area highlights its importance.

Between 2012–2016, neonates and young-of-the year (n =  $\sim$ 100) Longnose Skates were reported within the area (Başusta et al. 2017, Başusta & Başusta 2019a, Başusta & Ozel 2022). Neonates were defined based on their size (12-19 cm TL) and band patterns in vertebrae (defined as age 0). The reported size-at-birth for the species is  $\sim$ 17 cm TL (Last et al. 2016).

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# QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				Α	В	Cı	C2	C3	C4	C5	Dı	D2
SHARKS							L			L		
Oxynotus centrina	Angular Roughshark	EN	35-805	Х		Х						
RAYS												
Dipturus oxyrinchus	Longnosed Skate	NT	70-1,230			Х						

# SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category			
SHARKS					
Dalatias licha	Kitefin Shark	VU			
Etmopterus spinax	Velvet Belly Lanternshark	VU			
Galeus melastomus	Blackmouth Catshark	LC			
Heptranchias perlo	Sharpnose Sevengill Shark	NT			
Isurus oxyrinchus	Shortfin Mako	EN			
Scyliorhinus canicula	Smallspotted Catshark	LC			
Squatina aculeata	Sawback Angelshark	CR			
RAYS		I			
Raja clavata	Thornback Skate	NT			

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 Cilician Basin is an important area for reproductive purposes of four shark and one ray species. Additional evidence is needed to confirm the importance of this area compared with others within the region.

Small juvenile and neonate Velvet Belly Lanternshark (Başusta 2015; Başusta et al. 2017) have been reported in the area, but more evidence is needed to support the presence of an important reproductive area compared with other areas within the region.

A pregnant female Blackmouth Catshark was reported in 2015, along with juveniles of the species (Başusta 2015; Başusta & Başusta 2016; Başusta et al. 2017). However, more information is needed to confirm the regular presence of this species.

In 2015, four Sharpnose Sevengill Shark neonates were incidentally caught by fisheries operating trawls within the region (Başusta 2015; Başusta et al. 2017). These individuals measured  $\sim$ 25 cm total length (TL), which is similar to the reported size-at-birth for the species (26–27 cm TL; Ebert et al. 2021).

Pregnant females with egg cases and neonates of Smallspotted Catshark were reported in 2015 as bycatch from trawlers (Özcan & Başusta 2016, 2018).

Egg cases and seven neonate/young-of-the-year Thornback Skate were reported within the area in spring of 2015 (Başusta et al. 2017; Başusta & Başusta 2019b). Individuals measured 9.5–19.5 TL, which is similar to the reported size-at-birth for the species (10–13 cm TL; Last et al. 2016). However, more information is needed to confirm the regular presence of these life stages.

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