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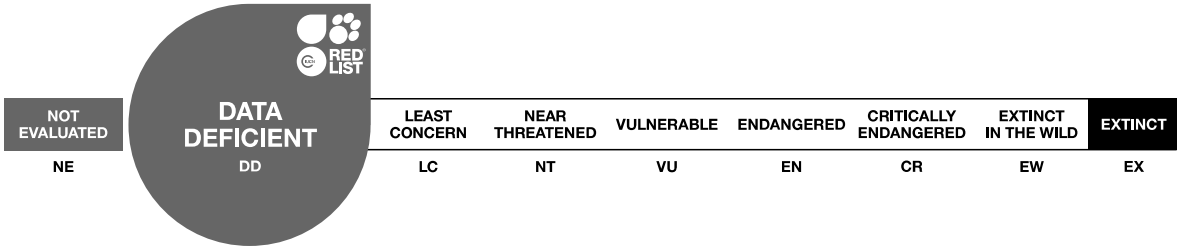
Scyliorhinus haeckelii, Freckled Catshark

Assessment by: Pollom, R., Barreto, R., Charvet, P., Chiaramonte, G.E., Cuevas, J.M., Herman, K., Montealegre-Quijano, S., Motta, F., Paesch, L. & Rincon, G.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Carcharhiniformes	Scyliorhinidae

Scientific Name: *Scyliorhinus haeckelii* (Miranda Ribeiro, 1907)

Synonym(s):

- *Catulus haeckelii* Miranda Ribeiro, 1907
- *Scyliorhinus besnardi* Springer & Sadowsky, 1970
- *Scyliorhinus retifer* ssp. *besnardi* Springer & Sadowsky, 1970

Common Name(s):

- English: Freckled Catshark
- Portuguese: Cação Lagarto

Taxonomic Source(s):

Fricke, R., Eschmeyer, W.N. and Van der Laan, R. (eds). 2020. Eschmeyer's Catalog of Fishes: genera, species, references. Updated 14 September 2020. Available at: http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp.

Taxonomic Notes:

Soares *et al*. (2016) redescribed *Scyliorhinus haekelii*, placing *S. besnardi* Springer & Sadowsky, 1970 as a synonym. Species of *Scyliorhinus* were further reviewed and redescribed by Soares and De Carvalho (2019), who recognised 16 valid species. Soares and De Carvalho (2019) also revised the geographic distribution of *S. haeckelii*, restricting its range to the southwestern Atlantic from southern Bahia, Brazil, to northern Argentina.

Assessment Information

Red List Category & Criteria: Data Deficient ver 3.1

Year Published: 2020

Date Assessed: July 1, 2019

Justification:

The Freckled Catshark (*Scyliorhinus haeckelii*) is a small (to 57 cm total length) shark that occurs in the Southwest Atlantic from Bahia, Brazil to northern Argentina. It inhabits the continental shelf and upper slope at depths of 37–402 m, and is often associated with deep-water reefs. This catshark is captured in artisanal and commercial trawl, gillnet, and longline fisheries, and is increasingly retained and sometimes targeted. Fishing pressure is present across its range and is intense in some places, however there are very few data on its catchability and level of interaction with fisheries. Association with deepsea corals indicates that it may have some refuge from trawls over untrawlable areas. Since it is unknown if fishing is causing a population reduction, there is currently inadequate information available to assess the Freckled Catshark beyond Data Deficient.

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Geographic Range

Range Description:

The Freckled Catshark occurs in the Southwest Atlantic from Bahia, Brazil to northern Argentina (Soares and de Carvalho 2019).

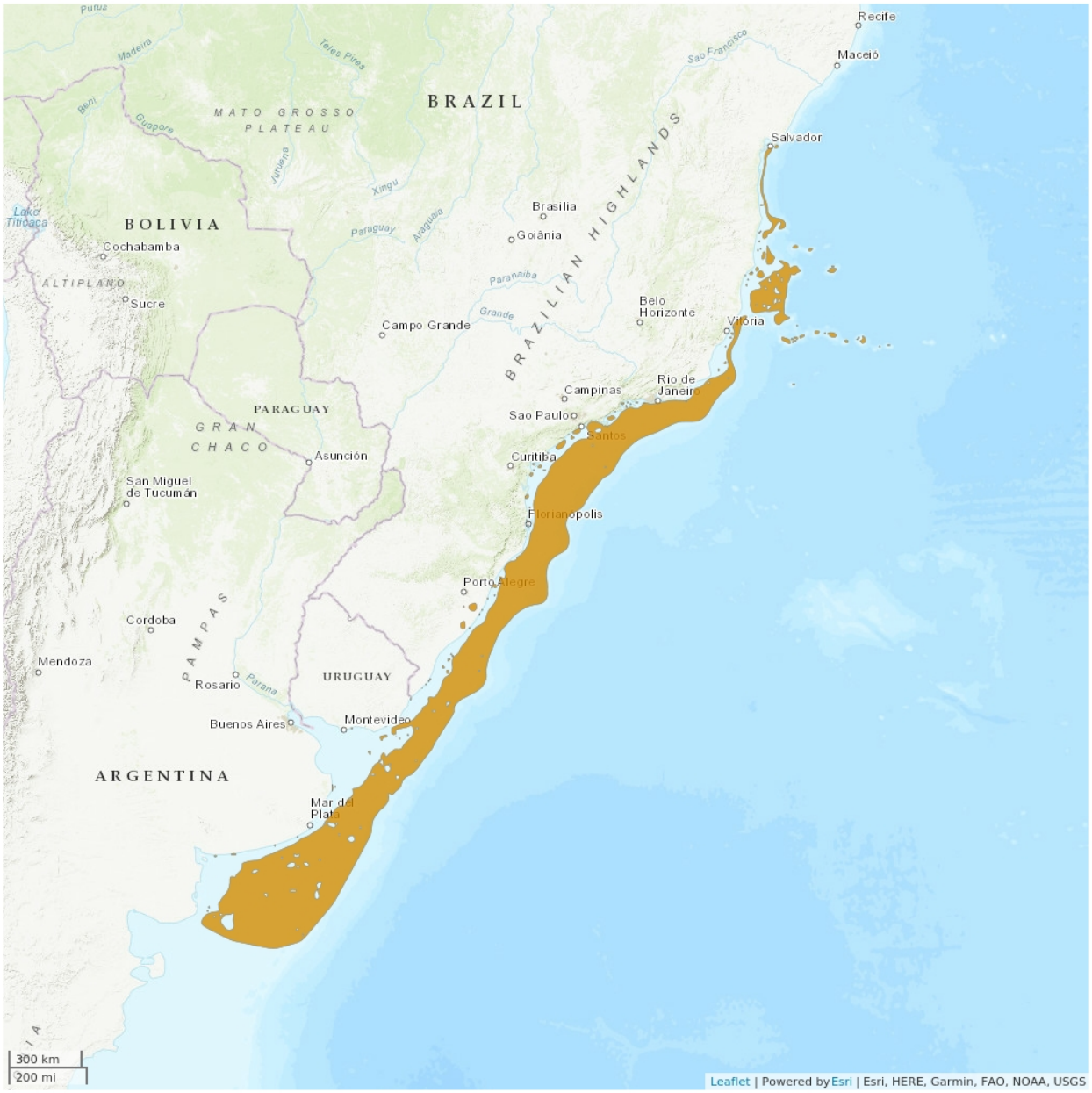
Country Occurrence:

Native, Extant (resident): Argentina; Brazil; Uruguay

FAO Marine Fishing Areas:

Native: Atlantic - southwest

Distribution Map

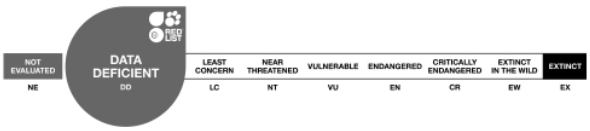


Legend

EXTANT (RESIDENT)

Compiled by:

IUCN SSC Shark Specialist Group 2018



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

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Population

There are no time-series, indices of abundance, or other information to estimate, infer, or suspect a population trend.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

The Freckled Catshark is demersal on the continental shelf and upper slope at depths of 37–402 m, and is often associated with deep-water reefs (Ebert *et al.* 2013, Soares *et al.* 2016). It reaches a maximum size of 57 cm total length (TL); females mature at 41.5 cm TL and males at 35.3 cm TL (Soares *et al*. 2016). Reproduction is oviparous and little else is known of its biology.

Systems: Marine

Use and Trade

This species is increasingly retained for its meat and is sometimes targeted when catches of other target species are low (Rincon *et al.* 2017). Shark meat imports are on the rise in Brazil (Dent and Clarke 2015), and this species may be included.

Threats (see Appendix for additional information)

This catshark is captured in artisanal and commercial trawl, gillnet, and longline fisheries, and is increasingly retained and sometimes targeted (Rincon *et al.* 2017). Fishing pressure is present across its range and is intense in some places, however there are very few data on catchability. Perez and Wahrlich (2005) reported that >4,000 individuals were caught in gillnets over one season of observation. Association with deepsea corals indicates that it may have refuge from trawls over untrawlable areas. With current data it is not possible to ascertain the level of fisheries mortality that this catshark is exposed to.

Conservation Actions (see Appendix for additional information)

There are no species-specific protections or conservation measures in place for this catshark. Further research is needed on life history and population size and trends, and fisheries should be monitored for bycatch at the species level.

Credits

Assessor(s): Pollom, R., Barreto, R., Charvet, P., Chiaramonte, G.E., Cuevas, J.M., Herman, K., Montealegre-Quijano, S., Motta, F., Paesch, L. & Rincon, G.

Reviewer(s): Dulvy, N.K. & Kyne, P.M.

Facilitator(s) and Compiler(s): Kyne, P.M., Pollom, R., Charvet, P. & Dulvy, N.K.

Authority/Authorities: IUCN SSC Shark Specialist Group (sharks and rays)

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IUCN. 2020. The IUCN Red List of Threatened Species. Version 2020-3. Available at: www.iucnredlist.org. (Accessed: 10 December 2020).

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Soares, K.D. and de Carvalho, M.R. 2019. The catshark genus *Scyliorhinus* (Chondrichthyes: Carcharhiniformes: Scyliorhinidae): taxonomy, morphology and distribution. *Zootaxa* 4601(1): 1-147.

Citation

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External Resources

For Supplementary Material, and for Images and External Links to Additional Information, please see the Red List website.

Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
9. Marine Neritic -> 9.2. Marine Neritic - Subtidal Rock and Rocky Reefs	Resident	Suitable	Yes
9. Marine Neritic -> 9.3. Marine Neritic - Subtidal Loose Rock/pebble/gravel	Resident	Suitable	Yes
9. Marine Neritic -> 9.4. Marine Neritic - Subtidal Sandy	Resident	Suitable	Yes
9. Marine Neritic -> 9.5. Marine Neritic - Subtidal Sandy-Mud	Resident	Suitable	Yes
9. Marine Neritic -> 9.6. Marine Neritic - Subtidal Muddy	Resident	Suitable	Yes
9. Marine Neritic -> 9.8. Marine Neritic - Coral Reef	Resident	Suitable	Yes
11. Marine Deep Benthic -> 11.1. Marine Deep Benthic - Continental Slope/Bathyl Zone (200-4,000m)	-	-	-

Use and Trade

(http://www.iucnredlist.org/technical-documents/classification-schemes)

End Use	Local	National	International
Food - human	Yes	Yes	Yes

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.1. Intentional use: (subsistence/small scale) [harvest]	Ongoing	Majority (50-90%)	Unknown	Unknown
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.2. Intentional use: (large scale) [harvest]	Ongoing	Majority (50-90%)	Unknown	Unknown
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	Majority (50-90%)	Unknown	Unknown
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.4. Unintentional effects: (large scale) [harvest]	Ongoing	Majority (50-90%)	Unknown	Unknown
	Stresses:	2. Species Stresses -> 2.1. Species mortality		

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Conservation Actions in Place

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Action in Place
In-place research and monitoring
Action Recovery Plan: No
Systematic monitoring scheme: No
In-place land/water protection
Conservation sites identified: No
Area based regional management plan: No
Occurs in at least one protected area: Unknown
Invasive species control or prevention: Not Applicable
In-place species management
Harvest management plan: No
Successfully reintroduced or introduced benignly: No
Subject to ex-situ conservation: No
In-place education
Subject to recent education and awareness programmes: No
Included in international legislation: No
Subject to any international management / trade controls: No

Conservation Actions Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Action Needed
3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
3. Species management -> 3.1. Species management -> 3.1.2. Trade management

Research Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Research Needed
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.3. Life history & ecology
1. Research -> 1.4. Harvest, use & livelihoods

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Research Needed
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.2. Harvest level trends
3. Monitoring -> 3.3. Trade trends

Additional Data Fields

Distribution
Lower depth limit (m): 402
Upper depth limit (m): 37

The IUCN Red List Partnership

The IUCN Red List of Threatened Species™ is produced and managed by the IUCN Global Species Programme, the IUCN Species Survival Commission (SSC) and The IUCN Red List Partnership.

The IUCN Red List Partners are: Arizona State University; BirdLife International; Botanic Gardens Conservation International; Conservation International; NatureServe; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; and Zoological Society of London.