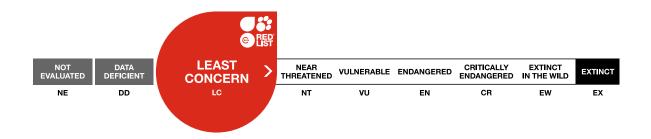
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Scope(s): Global Language: English



# Malacoraja obscura, Brazilian Soft Skate

Assessment by: Pollom, R., Charvet, P., Chiaramonte, G.E., Herman, K., Paesch, L. & Rincon, G.



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If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with feedback so that we can correct or extend the information provided.

### **Taxonomy**

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Rajiformes	Rajidae

Scientific Name: Malacoraja obscura Carvalho, Gomes & Gadig, 2005

Common Name(s):

• English: Brazilian Soft Skate

#### **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.

#### **Assessment Information**

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2020

Date Assessed: July 1, 2019

#### Justification:

The Brazilian Soft Skate (*Malacoraja obscura*) is a small (to 68 cm total length) skate that has a very restricted range in the Southwest Atlantic Ocean from central Espírito Santo and northern Rio de Janeiro states in Brazil. It inhabits the continental slope at depths of 808–1,105 m. Although Extent of Occurrence cannot be calculated because the species is only known from two localities, it is suspected to be about 30,000 km² (if the species is assumed to inhabit the steep slope between the two known localities). Area of Occupancy is estimated at 3,680 km² (calculated based on including the known depth range of the species between the two known localities). This skate inhabits waters currently beyond the reach of fisheries, and there are no other known threats. Therefore, the population is suspected to be stable and the Brazilian Soft Skate is assessed as Least Concern.

#### **Previously Published Red List Assessments**

2007 – Data Deficient (DD) https://dx.doi.org/10.2305/IUCN.UK.2007.RLTS.T63133A12621585.en

# **Geographic Range**

#### Range Description:

The Brazilian Soft Skate has a very restricted range in the Southwest Atlantic from central Espírito Santo and northern Rio de Janeiro states, Brazil (Carvalho *et al.* 2006). Although Extent of Occurrence (EOO) cannot be calculated because the species is only known from two localities, it is suspected to be about 30,000 km² (if the species is assumed to inhabit the continental slope between the two known localities). Area of Occupancy (AOO) is estimated at 3,680 km² (calculated based on the known depth

range of the species between the two known localities).

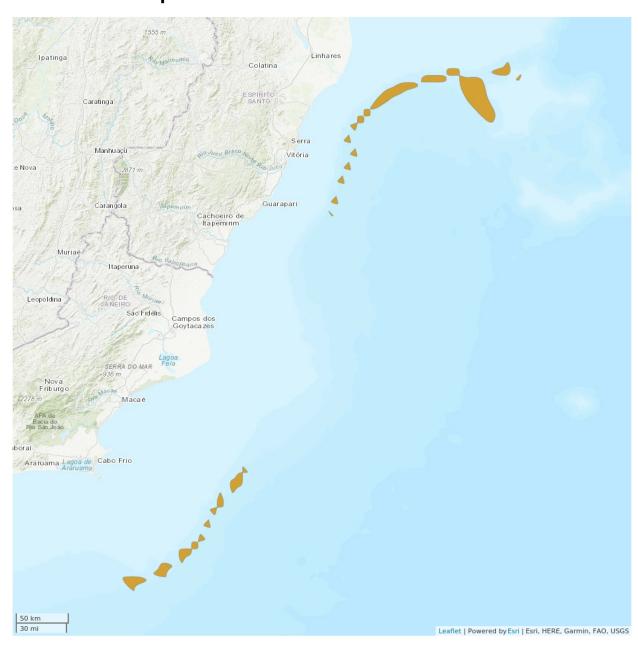
**Country Occurrence:** 

Native, Extant (resident): Brazil

**FAO Marine Fishing Areas:** 

Native: Atlantic - southwest

# **Distribution Map**





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.

# **Population**

This species has a depth range beyond the current reach of fisheries, and there are no other known threats. The population is suspected to be stable.

**Current Population Trend: Stable** 

### Habitat and Ecology (see Appendix for additional information)

The Brazilian Soft Skate is demersal on the continental slope at depths of 808–1,105 m. It reaches a maximum size of 68 cm total length (Carvalho *et al.* 2006, Weigmann 2016). As in other skates, reproduction is oviparous (Last *et al.* 2016). Little else is known about its biology.

Systems: Marine

### Use and Trade (see Appendix for additional information)

This species is not known to be utilized or traded and is beyond the current reach of fisheries.

#### **Threats**

This skate inhabits waters that are suspected to currently be beyond the reach of fisheries (Rincon *et al.* 2017). Given the restricted range and possible low reproductive potential of this deep-water species, together with increasing international demand for skate products, any bycatch would be of concern and bycatch levels should be monitored. Any expansion of fishing activity to greater depths may increase the risk to this species.

## **Conservation Actions** (see Appendix for additional information)

There are no species-specific protections or management measures in place for this skate. Further research is needed on distribution, life history and ecology, and population size and trend. Any expansion of fisheries to greater depths should be monitored to ensure there is no increased risk to this species.

#### **Credits**

Assessor(s): Pollom, R., Charvet, P., Chiaramonte, G.E., Herman, K., Paesch, L. & Rincon, G.

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

Contributor(s): Valenti, S.V.

Facilitator(s) and

Kyne, P.M., Pollom, R., Charvet, P. & Dulvy, N.K.

Compiler(s):

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

## **Bibliography**

Carvalho, M.R. de., Gomes, U.L. and Gadig, O.B.F. 2006. Description of a new species of skate of the genus *Malacoraja* Stehmann, 1970: the first species from the southwestern Atlantic Ocean, with notes on generic monophyly and composition (Chondrichthyes: Rajidae). *Neotropical Ichthyology* 3(2): 239-258.

IUCN. 2020. The IUCN Red List of Threatened Species. Version 2020-3. Available at: <a href="www.iucnredlist.org">www.iucnredlist.org</a>. (Accessed: 10 December 2020).

Last, P., White, W., de Carvalho, M., Séret, B., Stehmann, M. and Naylor, G. 2016. *Rays of the World*. CSIRO Publishing, Clayton.

Rincon, G., Mazzoleni, R.C., Palmeira, A.R.O. and Lessa, R.P.T. 2017. Deep-water sharks, rays, and chimaeras of Brazil. In: Rodrigues-Filho, L.F. and De Luna Sales, J.B. (eds), *Chondrichthyes: Multidisciplinary Approach*, pp. 83–112. IntechOpen, London, UK.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. *Journal of Fish Biology* 88(3): 837-1037.

#### Citation

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#### **External Resources**

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

# **Appendix**

### **Habitats**

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

Habitat	Season	Suitability	Major Importance?
11. Marine Deep Benthic -> 11.1. Marine Deep Benthic - Continental Slope/Bathyl Zone (200-4,000m)	-	-	-

# **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: No		
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		

### **Research Needed**

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

#### **Research Needed**

1. Research -> 1.2. Population size, distribution & trends

#### **Research Needed**

1. Research -> 1.3. Life history & ecology

## **Additional Data Fields**

#### Distribution

Estimated area of occupancy (AOO) (km²): 3680

Estimated extent of occurrence (EOO) (km²): 30000

Lower depth limit (m): 1,105

Upper depth limit (m): 808

# The IUCN Red List Partnership



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