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Bathyraja scaphiops, Cuphead Skate

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Rajiformes	Arhynchobatidae

Scientific Name: Bathyraja scaphiops (Norman, 1937)

Synonym(s):

• Raja scaphiops Norman, 1937

Common Name(s):

- English: Cuphead Skate
- Spanish; Castilian: Raya Nariguda Manchada, Raya Picuda

Taxonomic Source(s):

Fricke, R., Eschmeyer, W.N. and Van der Laan, R. (eds). 2020. Eschmeyer's Catalog of Fishes: genera,species,references.Updated03August2020.Availableat:http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp.http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp.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 Cuphead Skate (Bathyraja scaphiops) is a medium-sized (to 117 cm total length) skate that occurs in the Southwest Atlantic from off Rio Grande do Sul, Brazil to Tierra del Fuego, Argentina and the Falkland Islands (Malvinas). It inhabits continental and insular shelves and slopes at depths of 30-925 m. It is targeted or captured as utilized bycatch in demersal trawl fisheries, including the southern Brazil otter trawl fishery, the Patagonian scallop and hake fisheries, and the Falkland Islands (Malvinas) targeted multi-species skate fishery. At the northern extent of its range in southern Brazil, it is captured in the otter trawl fishery which is intense; reductions in the population are suspected there but there are no data. In the Argentina-Uruguay Common Fishing Zone (AUCFZ), this species was captured frequently in commercial trawls between 1984 and 2009. On the shelf edge off Argentina between Buenos Aires and northern Santa Cruz, this species was present in 9% of research trawls in the area trawled by the Patagonian scallop fishery in 2010. In the Falkland Islands (Malvinas), this species made up an average of 3.5% of the catch in the multi-species skate fishery between 1993 and 2013, with no clear trend in catch-per-unit-effort over that time frame. Overall, although this species is subjected to substantial fishing pressure, it has remained common in catches and it may have refuge over rough substrates that are untrawlable. Although fisheries are likely leading to some reduction in population size, the level is not suspected to approach the thresholds for a threatened assessment. Therefore, the Cuphead Skate is assessed as Least Concern.

Previously Published Red List Assessments

2007 – Near Threatened (NT) https://dx.doi.org/10.2305/IUCN.UK.2007.RLTS.T63145A12623029.en

Geographic Range

Range Description:

The Cuphead Skate occurs in the Southwest Atlantic from off Rio Grande do Sul, Brazil to Tierra del Fuego, Argentina and the Falkland Islands (Malvinas) (Last *et al.* 2016). Reports from the Southeast Pacific (e.g, Sielfeld and Vargas 1999) are erroneous.

Country Occurrence:

Native, Extant (resident): Argentina; Brazil; Falkland Islands (Malvinas); 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 may do not imply any official endorsement, acceptance or opinion by IUCN.

Population

At the northern extent of its range in southern Brazil, it is captured in the otter trawl fishery which is intense; reductions in the population are suspected there but there are no data. In the Argentina-Uruguay Common Fishing Zone (AUCFZ), this species was captured frequently in commercial trawls between 1984 and 2009 (Paesch *et al.* 2014). On the shelf edge off Argentina between Buenos Aires and northern Santa Cruz, this species was present in 9% of research trawls in the area trawled by the Patagonian scallop fishery in 2010 (Schejter *et al.* 2012). In the Falkland Islands (Malvinas), this species made up an average of 3.5% of the catch in the multi-species skate fishery between 1993 and 2013, with no clear trend in catch-per-unit-effort (CPUE) over that time frame (Wakeford *et al.* 2005, Winter *et al.* 2015). Overall, although this species is subjected to substantial fishing pressure, it has remained common in catches and it may have refuge over rough substrates that are untrawlable. Although fisheries are likely leading to some reduction in population size, it is not suspected to approach the thresholds for a threatened assessment.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

The Cuphead Skate is demersal on continental and insular shelves and slopes at depths of 30–925 m (Weigmann 2016). It reaches a reach a maximum size of 117 cm total length (TL); females mature at 64–78 cm TL and males at 68–69 cm TL (Scenna 2011). As in other skates, reproduction is oviparous (Last *et al.* 2016). Maximum age is estimated at ~9 years (Bücker 2006).

Systems: Marine

Use and Trade

This skate is taken as utilized bycatch where it is caught. It is targeted in the multi-species skate fishery off the Falkland Islands (Malvinas) and is sold locally or exported to Asian markets.

Threats (see Appendix for additional information)

The Cuphead Skate is captured in demersal trawl fisheries, including the southern Brazil otter trawl fishery (Rincon *et al.* 2017), the Patagonian scallop and hake fisheries (Schejter *et al.* 2012, Crespi-Abril *et al.* 2013) and the Falkland Islands (Malvinas) targeted multi-species skate fishery (Arkhipkin *et al.* 2012). Its continued frequent capture in fisheries with no evidence of declines in abundance suggests that it may be able to withstand some fishing pressure. It may also have refuge over rocky untrawlable substrates (Arkhipkin *et al.* 2012).

Conservation Actions (see Appendix for additional information)

There are no species-specific protections or conservation measures in place for the Cuphead Skate. In the Falkland Islands (Malvinas), the multi-species skate fishery is managed through effort control and requires that bycatch be reported, but not to the species level. Vessels fishing under general finfish licences are prohibited from targeting skates, although a small bycatch (below 10%) is allowed (J. Pompert unpubl. data 2018). Further research is needed on life history and population size and trends, and species-specific monitoring should be undertaken in all commercial fisheries.

Credits

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

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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?
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
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	No	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 -> 5.4.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	Minority (50%)	No decline	Low impact: 4
	Stresses:	2. Species Stress	es -> 2.1. Species m	ortality
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.4. Unintentional effects: (large scale) [harvest]	Ongoing	Minority (50%)	No decline	Low impact: 4
	Stresses:	2. Species Stress	es -> 2.1. Species m	ortality

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

Conservation Action in Place
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
- 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): 925

Upper depth limit (m): 30

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