

Scope(s): Global Language: English



Bathyraja papilionifera, Atlantic Butterfly Skate

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Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|----------|----------|----------------|------------|-----------------|
| Animalia | Chordata | Chondrichthyes | Rajiformes | Arhynchobatidae |

Scientific Name: Bathyraja papilionifera Stehmann, 1985

Synonym(s):

• Bathyraja papilonifera Stehmann, 1985 [orth. error]

Common Name(s):

• English: Atlantic Butterfly Skate, Whitemouth 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 03 August 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 Atlantic Butterfly Skate (*Bathyraja papilionifera*) is a medium-sized (to 150 cm total length) deepwater skate that occurs in the Southwest Atlantic from Uruguay to southern Patagonia, Argentina, and the Falkland Islands (Malvinas). It inhabits continental and insular slopes at depths of 637–2,000 m. This species is captured incidentally on longline and rarely in deep-water demersal trawl fisheries. Although such fisheries are intense in some parts of its range, this species is largely beyond depths at which fishing currently occurs and thus has refuge. There are no other known potential threats and the population is suspected to be stable. Therefore, the Atlantic Butterfly 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.T63112A12609541.en

Geographic Range

Range Description:

The Atlantic Butterfly Skate occurs in the Southwest Atlantic from Uruguay to southern Patagonia, Argentina, and the Falkland Islands (Malvinas) (Last *et al.* 2016).

Country Occurrence:

Native, Extant (resident): Argentina; Falkland Islands (Malvinas); Uruguay

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

Although fisheries interact with this species, it has refuge at depth and there are no other known potential threats. The population is suspected to be stable.

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

The Atlantic Butterfly Skate is demersal on continental and insular slopes at depths of 637–2,000 m (Weigmann 2016). It reaches a maximum size of 150 cm total length (TL); females mature at 122 cm TL and males at 130 cm TL (Last *et al.* 2016). The oldest aged individual was 16 years old (Bücker 2006). Reproduction is oviparous (Last *et al.* 2016).

Systems: Marine

Use and Trade

Skates are often utilized for food and are sold locally or exported to Asian markets (Dent and Clarke 2015), and this species is likely included where caught.

Threats (see Appendix for additional information)

This skate is captured incidentally on longlines and rarely in demersal deep-water trawl fisheries (Agnew *et al.* 2000, Last *et al.* 2016). Although such fisheries are intense in some parts of its range, this species is largely beyond depths at which fishing occurs and thus has refuge. There are no other known potential threats.

Conservation Actions (see Appendix for additional information)

There are no species-specific protections or conservation measures in place for this skate. Further research is needed on life history and population size and trends, and species-specific monitoring should be undertaken in longline and trawl fisheries.

Credits

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

Compiler(s):

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

Bibliography

Agnew, D.J., Nolan, C.P., Beddington, J.R. and Baranowski, R. 2000. Approaches to the assessment and management of multispecies skate and ray fisheries using the Falkland Islands fishery as an example. *Canadian Journal of Fisheries and Aquatic Science* 57: 429-440.

Bücker, A. 2006. Age and growth of skates of the genus *Bathyraja* in Argentina. Faculty for Biology and Chemistry, University of Bremen.

Dent, F. and Clarke, S. 2015. State of the global market for shark products. FAO Fisheries and Aquaculture Technical Paper No. 590. Food and Agriculture Organization of the United Nations (FAO), Rome, Italy. 187 pp.

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

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.

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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) | - | - | - |

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 -> 5.4.4. Unintentional effects: (large scale) [harvest] | Ongoing | Minority (50%) | No decline | Low impact: 4 |
| | Stresses: | 2. Species Stress | es -> 2.1. Species mo | 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 | |
| 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 | |

Conservation Action in Place

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): 2,000

Upper depth limit (m): 637

The IUCN Red List Partnership



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