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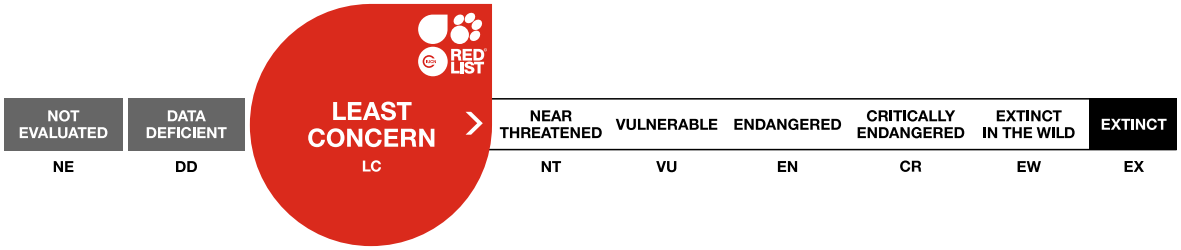
Scope(s): Global
Language: English

Bathyraja meridionalis, Darkbelly Skate

Assessment by: Pollom, R., Dulvy, N.K., Acuña, E., Bustamante, C., Cuevas, J.M., Chiaramonte, G.E., Herman, K., Pompert, J. & Velez-Zuazo, X.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Rajiformes	Arhynchobatidae

Scientific Name: *Bathyraja meridionalis* Stehmann, 1987

Common Name(s):

- English: Darkbelly Skate

Taxonomic Source(s):

Fricke, R., W.N. Eschmeyer and R. Van der Laan (eds.). 2020. Eschmeyer's catalog of fishes: Genera, species, references. Available at: http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp. (Accessed: March 2020).

Assessment Information

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2020

Date Assessed: February 7, 2019

Justification:

The Darkbelly Skate (*Bathyraja meridionalis*) is a large (to 158 cm total length) that occurs in the Southeast Pacific Ocean off Magallanes Province, Chile, in the Southwest Atlantic Ocean from Buenos Aires to Tierra del Fuego, Argentina and westward to the Falkland Islands (Malvinas), and in the Antarctic Atlantic Ocean around the Shag Rocks and South Georgia. It is demersal on continental and insular shelves and slopes at depths of 65–2,240 m, and is captured in demersal trawl and longline fisheries targeting skates, Patagonian Toothfish, and other finfishes. It has substantial refuge at depth and its population is suspected to be stable. Therefore, the Darkbelly Skate is assessed as Least Concern.

Previously Published Red List Assessments

2009 – Data Deficient (DD)
https://dx.doi.org/10.2305/IUCN.UK.2009-2.RLTS.T161619A5466024.en

Geographic Range

Range Description:

The Darkbelly Skate occurs in the Southwest Atlantic Ocean from Buenos Aires to Tierra del Fuego, Argentina and eastwards to the Falkland Islands (Malvinas), the Shag Rocks, and South Georgia. It occurs in the Southeast Pacific Ocean off Magallanes Province, Chile (Last *et al.* 2016).

Country Occurrence:

Native, Extant (resident): Argentina; Chile; Falkland Islands (Malvinas); South Georgia and the South

Sandwich Islands (South Georgia)

FAO Marine Fishing Areas:

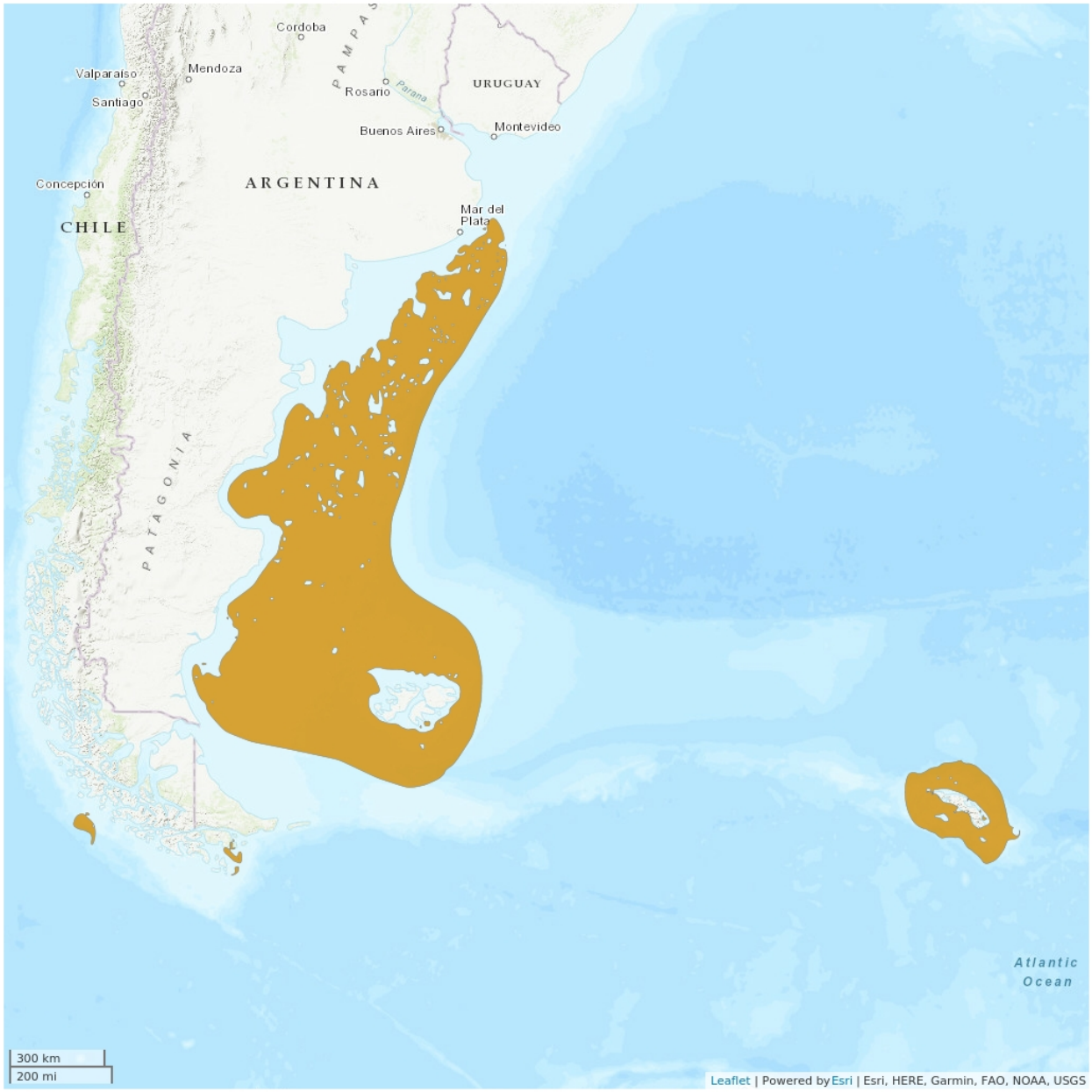
Native: Pacific - southeast

Native: Atlantic - Antarctic

Native: Atlantic - southwest

https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T161619A124516249.en

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 estimates of population size for this skate. Although it is known to be captured in inadequately managed fisheries, much of its depth range is currently not fished. There is no evidence for a reduction in population size and the trend is suspected to be stable.

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

The Darkbelly Skate is demersal on continental and insular shelves and slopes at depths of 65–2,240 m (Last *et al.* 2016). It reaches a maximum size of 150 cm total length (TL); females mature at 140 cm TL and males at 132–140 cm TL (Last *et al.* 2016). As in other skates, reproduction is oviparous.

Systems: Marine

Use and Trade

In the Southwest Atlantic, skates larger than ~30 cm disc width are typically utilized or exported for human consumption (Laptikhovsky 2004). In the Southeast Pacific, this species is not known to be utilized and is discarded dead in Chile. Korean buyers there prefer long-nosed skates (*Dipturus* spp.) rather than *Bathyraja* spp.

Threats (see Appendix for additional information)

This skate is captured in demersal trawl and longline fisheries. In the Falkland Islands (Malvinas), it is caught in the target skate trawl fishery, which does not have species-specific management measures in place, but operates no deeper than 400 m (Winter *et al.* 2015). It is caught in longline fisheries that target Patagonian Toothfish (*Dissostichus eleginoides*) (Endicott 2010), which operate across the southern portion of its range at depths of 1,200 to 1,800 m (CCAMLR 2019a). Most of this species' depth range lies outside that of fisheries operations.

Conservation Actions (see Appendix for additional information)

There are no species-specific protections or conservation measures in place for this skate. It is managed collectively with all other skates and rays that are caught in longline and trawl fisheries operating within the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) Convention Sub-Area 48.3. Fisheries are regulated by a multi-species bycatch limit of 116 t for all "skates and rays" and species-specific bycatch is recorded. Additionally, a move-on-rule is applied if a total of 1 t of any skate/ray species is caught in one haul and vessels are not permitted to fish within 5 nm of the location for at least 5 days (CCAMLR 2019b). Fishing is only permitted below 500 m in CCAMLR waters, offering the species some refuge there in the shallow part of its depth range. When possible, all skates must be released alive, and may only be retained if hauled dead. In the Falkland Islands (Malvinas), vessels fishing under general finfish licences are prohibited from targeting skates, although a small bycatch (below 10%) is allowed. The longline fishery targeting Patagonian Toothfish in the same region releases all skates after manually removing hooks (J. Pompert unpubl. data 2020). Further research is needed on life history, population size and trend, and threats. All fisheries should be monitored for bycatch at the species level.

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Credits

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

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Winter, A., Pompert, J., Arkhipkin, A. and Brewin, P.E. 2015. Interannual variability in the skate assemblage on the South Patagonian shelf and slope. *Journal of Fish Biology* 87(6): 1449–1468.

Citation

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Disclaimer

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 -> 9.3. 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	No

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 -> 5.4.2. Intentional use: (large scale) [harvest]	Ongoing	Minority (50%)	No decline	Low impact: 4
	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	Minority (50%)	No decline	Low impact: 4
	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	Minority (50%)	No decline	Low impact: 4
	Stresses:	2. Species Stresses -> 2.1. Species mortality		

Conservation Actions in Place

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

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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

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
1. Research -> 1.5. Threats
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.2. Harvest level trends

Additional Data Fields

Distribution
Lower depth limit (m): 2,240
Upper depth limit (m): 65

Population
Population severely fragmented: Unknown

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.