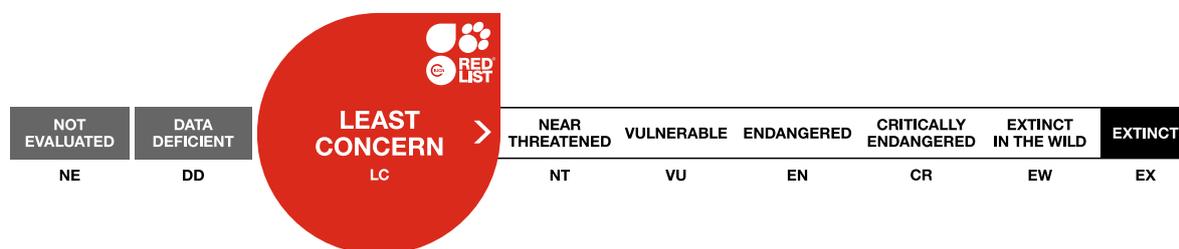


Amblyraja doellojuradoi, Southern Thorny Skate

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



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Rajiformes	Rajidae

Scientific Name: *Amblyraja doellojuradoi* (Pozzi, 1935)

Synonym(s):

- *Raja doellojuradoi* Pozzi, 1935

Common Name(s):

- English: Southern Thorny Skate
- Spanish; Castilian: Raya, Raya Erizo

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 8, 2019

Justification:

The Southern Thorny Skate (*Amblyraja doellojuradoi*) is a small (to 69 cm total length) deepwater skate that occurs in the Southeast Atlantic Ocean from Uruguay to Southern Argentina and the Burdwood Bank, including the Falkland Islands (Malvinas). It is demersal on the mid- and outer continental shelf and upper slope at depths of 50–1,000 m. This skate is captured as bycatch in demersal trawl fisheries and possibly on longlines targeting hake, squid, and Patagonian Toothfish (*Dissostichus eleginoides*), and is increasingly retained for human consumption. It has some refuge at depth and is not suspected to be undergoing a reduction in population size at this time. Therefore, the Southern Thorny Skate is assessed as Least Concern.

Previously Published Red List Assessments

2007 – Least Concern (LC)

<https://dx.doi.org/10.2305/IUCN.UK.2007.RLTS.T63122A12615746.en>

Geographic Range

Range Description:

The Southern Thorny Skate occurs in the Southwest Atlantic Ocean from Uruguay to Southern Argentina

and the Burdwood Bank, including the Falkland Islands (Malvinas) (Menni and Stehmann 2000). It has also been recorded once in the Southeast Pacific Ocean off Chile from a survey in 'Patagonian waters' (Bigelow and Schroeder 1965), however this capture may have been incorrectly ascribed to Chile.

Country Occurrence:

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

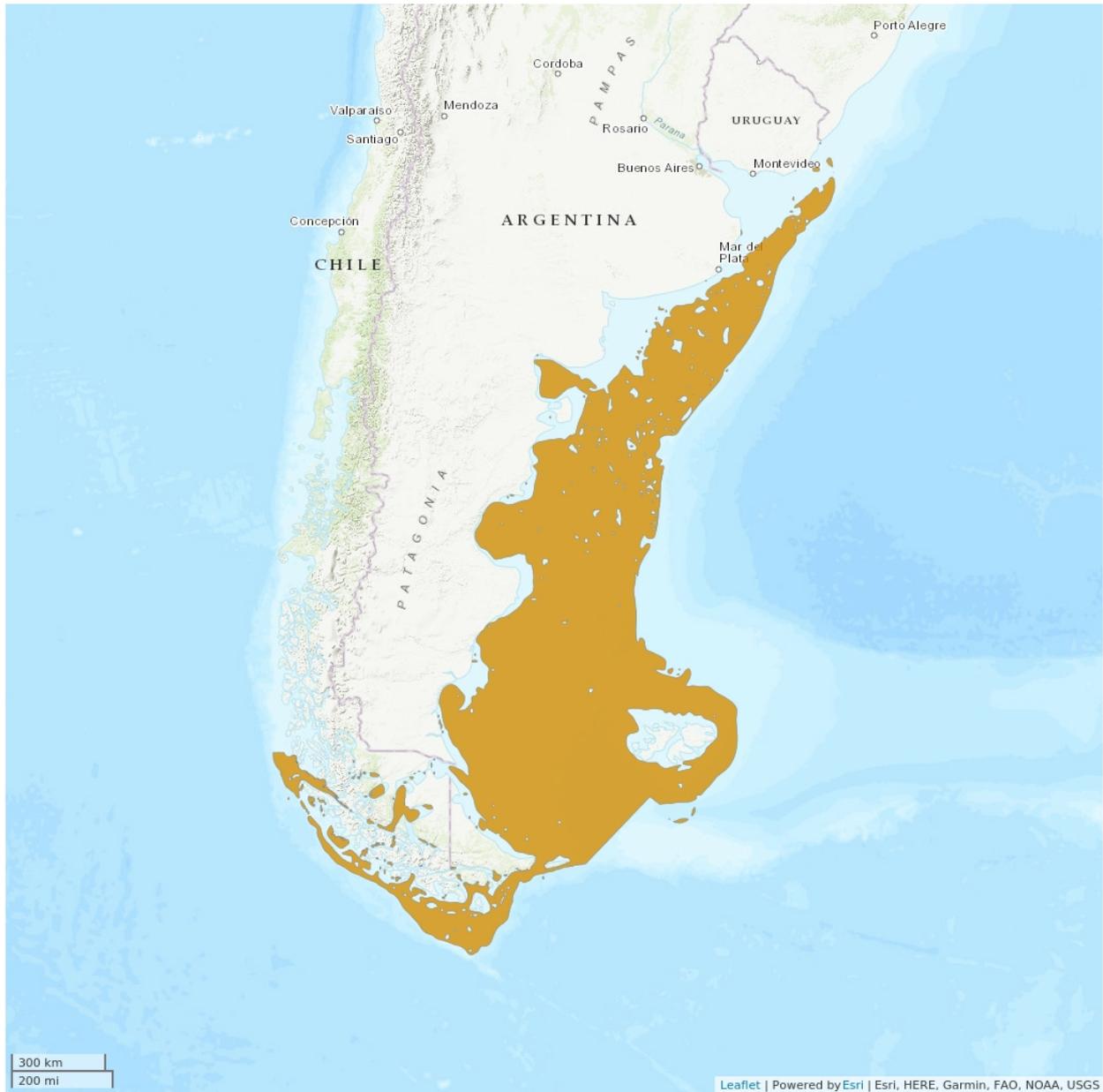
Native, Presence Uncertain: Chile

FAO Marine Fishing Areas:

Native: Atlantic - southwest

Native: Pacific - southeast

Distribution Map



Legend

■ EXTANT (RESIDENT)

Compiled by:

IUCN SSC Shark Specialist Group 2019



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



Population

There are no global population size estimates for this skate. Species-specific catch time-series for Argentinian skate fisheries are unavailable, but overall skate landings were <1,000 t prior to 1994, rising to >15,000 t in 2001, reaching a peak of 28,038 t in 2007 and dropping to 17,793 t in 2017 (G. Chiaramonte, unpubl. data 2019). In the Falkland Islands (Malvinas), catch-per-unit-effort (CPUE) (kg/hr) increased between 1992 and 2001 (Wakeford *et al.* 2005). The global population trend of the Southern Thorny Skate is suspected to be stable based on levels of fishing effort in its range and refuge in deep water outside of current fishing activities.

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

The Southern Thorny Skate is demersal on the mid- and outer continental shelf and upper slope at depths of 50–1,000 m (Last *et al.* 2016). It reaches a maximum size of 69 cm total length (TL) (Last *et al.* 2016); females mature at 41.1 cm TL and males at 44.8 cm TL (Delpiani 2016). As in other skates, reproduction is oviparous; an annual reproductive cycle is suspected and size at hatch is 9 cm TL (Last *et al.* 2016). The mouth of the Mar del Plata Canyon is a possible nursery area (Vazquez *et al.* 2016). They move to deeper waters in winter and inshore in the summer (Arkhipkin *et al.* 2012).

Systems: Marine

Use and Trade

This skate is increasingly retained when captured as bycatch (Delpiani 2016). It is suspected to be used for human consumption, and may enter the Korean skate wing market.

Threats (see Appendix for additional information)

This skate is captured as bycatch in demersal trawl fisheries and is increasingly retained for human consumption (Delpiani 2016). There are no species-specific data to determine the proportion of the demersal skate catch that is made up of this species.

In Argentina, this species is caught infrequently in the Argentine Hake (*Merluccius hubbsi*) trawl fishery (Crespi-Abril *et al.* 2013), and was present as bycatch in over 36% of Argentine Scallop (*Zygochlamys patagonica*) trawls (Schejter *et al.* 2012). Both of these fisheries typically do not operate much deeper than 200 m.

In the Falkland Islands (Malvinas), this skate is captured in the multi-species targeted skate fishery, which is not managed at the species level and operates to a depth of about 400 m (Wakeford *et al.* 2005, Winter *et al.* 2015). It is also likely caught there in the trawl and longline gear targeting Patagonian Toothfish (*Dissostichus eleginoides*), which operate to over 2,000 m depth (Laptikhovsky and Brickle 2005).

Overall, although this skate is captured as bycatch or targeted with other skates in several fisheries that lack adequate management, it is suspected to have substantial refuge at depth in most of its range where fishing mortality is not suspected to be high.

Conservation Actions (see Appendix for additional information)

There are no species-specific management or conservation measures in place for this skate. In the Argentina-Uruguay Common Fishing Zone (AUCFZ), it is managed with the group 'offshore skates' through a total allowable catch (CTMFM 2018). In Argentina, there are theoretically total allowable catches (TACs), minimum sizes and overall annual quotas for skates, however, little attention is paid to these and there is no regular monitoring by authorities. 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 target skate fishery there is managed, but not at the species level (Winter *et al.* 2015). Further research is needed on life history, population size and trends, and threats. Bycatch should be monitored at the species level for all fisheries.

Credits

Assessor(s): Pollom, R., Dulvy, N.K., Acuña, E., Bustamante, C., Chiaramonte, G.E., Cuevas, J.M., Herman, K., Paesch, L., Pompert, J. & Velez-Zuazo, X.

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

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

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Citation

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External Resources

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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 -> 5.4.2. Intentional use: (large scale) [harvest]	Ongoing	Minority (50%)	Negligible declines	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%)	Negligible declines	Low impact: 4
	Stresses:	2. Species Stresses -> 2.1. Species mortality		

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

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
3. Monitoring -> 3.3. Trade trends

Additional Data Fields

Distribution
Lower depth limit (m): 1,000
Upper depth limit (m): 50

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