

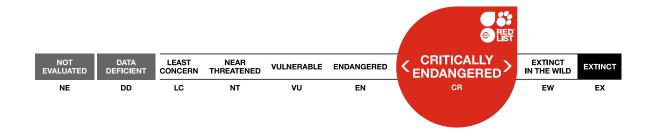
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Scope(s): Global Language: English



Myliobatis ridens, Shortnose Eagle Ray

Assessment by: Pollom, R., Barreto, R., Charvet, P., Chiaramonte, G.E., Cuevas, J.M., Herman, K., Montealegre-Quijano, S., Motta, F., Paesch, L. & Rincon, G.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Myliobatiformes	Myliobatidae

Scientific Name: Myliobatis ridens Ruocco, Lucifora, Díaz de Astarloa, Mabragaña & Delpiani, 2012

Common Name(s):

• English: Shortnose Eagle Ray

Taxonomic Source(s):

Eschmeyer, W.N., Fricke, R. and Van der Laan, R. (eds). 2016. Catalog of Fishes: genera, species, references. Updated 29 September 2016. Available at: http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp. (Accessed: 29 September 2016).

Assessment Information

Red List Category & Criteria: Critically Endangered A2bd ver 3.1

Year Published: 2020

Date Assessed: July 1, 2019

Justification:

The Shortnose Eagle Ray (*Myliobatis ridens*) is a medium-sized (to 70 cm disc width) ray that occurs in the Southwest Atlantic from Santa Catarina, Brazil, to Buenos Aires Province, Argentina. It inhabits inshore bays and estuaries at depths of 5–47 m. It is captured in intense and largely unmanaged artisanal gillnet and beach seine fisheries throughout much of its geographic range. The meat from this species may be consumed or sold locally or discarded. In Rio Grande do Sul, beach seine and drifting gillnet fisheries are intense and capture this species in relatively high numbers. Eagle rays, in general, declined in that state by 91% in research trawls between 1974 and 2005. Gillnets are used in Argentina to target elasmobranchs, including eagle rays, and it is suspected that declines have occurred there due to overfishing. Overall, due to the level of intense and largely unmanaged fisheries that operate throughout its range, its lack of refuge at depth, its unproductive life history, and noted declines in eagle rays in general, it is suspected that the Shortnose Eagle Ray has undergone a population reduction of >80% over the past three generations (18 years), and it is assessed as Critically Endangered A2bd.

Geographic Range

Range Description:

The Shortnose Eagle Ray occurs in the Southwest Atlantic from Santa Catarina, Brazil, to Buenos Aires Province, Argentina (Last *et al.* 2016).

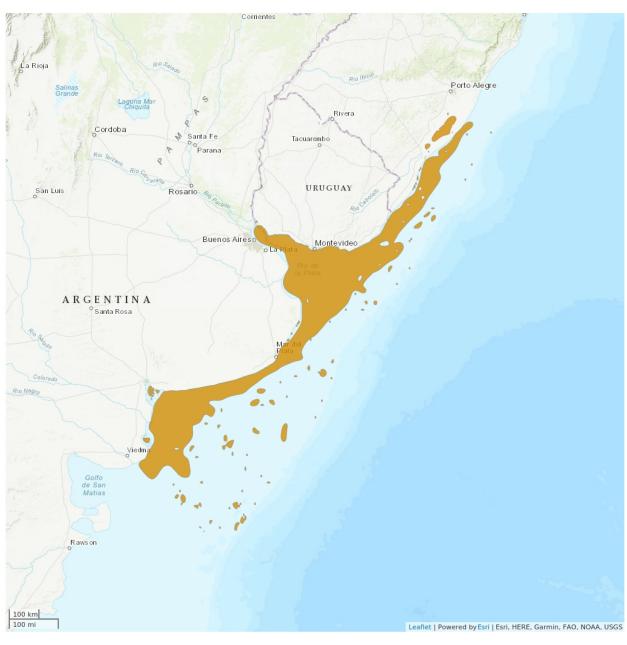
Country Occurrence:

Native, Extant (resident): Argentina; Brazil; 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

This species is fished throughout its range and there is evidence of steep declines in eagle ray catches. Eagle rays, in general, declined in Santa Catarina state by 91% in research trawls between 1974 and 2005 (Ferreira *et al.* 2010), equivalent to a >75% reduction for this species if scaled over three generations (18 years). A decline in landings of 60% is reported since the 1980s from this state (R. Baretto unpubl. data 2018). Gillnets are still prevalent in the Rio del Plata, and it is suspected that population reduction has occurred there due to overfishing. Overall, due to the level of intense and largely unmanaged fisheries that operate throughout its range, its lack of refuge at depth, its relatively unproductive life history, and noted declines in landings of eagle rays in general in several parts of its range, it is suspected that the Shortnose Eagle Ray has undergone a population reduction of >80% over the past three generations (18 years).

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

The Shortnose Eagle Ray inhabits the continental shelf and inshore bays and estuaries at depths of 5–47 m (Last *et al.* 2016, Weigmann 2016). It reaches a maximum size of 70 cm disc width (DW) and both sexes mature at 50–66 cm DW (Araújo *et al.* 2016, Last *et al.* 2016). Reproduction is viviparous. Generation length is suspected to be ~6 years, based on information available for the larger (to 180 cm TL) Bat Ray (*Myliobatis californicus*), which has an age-at-maturity of 5 years, a maximum age of 24 years, and thus a generation length of 14.5 years (Martin and Cailliet 1988).

Systems: Marine

Use and Trade

The meat from this species may be consumed or sold locally or discarded (Velasco and Oddone 2015, Silveira *et al.* 2018).

Threats (see Appendix for additional information)

The Shortnose Eagle Ray is captured in artisanal gillnet and beach seine fisheries, which are intense across much of its range. In Rio Grande do Sul, Brazil, beach seine and drifting gillnet fisheries are intense and capture this species in relatively high numbers (Araújo *et al.* 2018). Artisanal vessels fishing in Uruguayan waters increased from 269 vessels in 1975 to 905 vessels in 1996, and after a restructuring in 1997 the number of vessels increased from 393 to 795 in 2010 (Lorenzo *et al.* 2015). This is thought to be an underestimate, as many artisanal vessels are not registered. Gillnets are prevalent in Argentina and have been known to target elasmobranchs, and eagle rays are captured there (Jaureguizar *et al.* 2015). Overall, this eagle ray is subjected to intense and largely unmanaged fishing pressure across its range, it has no refuge at depth, and it exhibits a relatively unproductive life history.

Conservation Actions (see Appendix for additional information)

This species is listed in the Brazilian Ordinance of Ministry of the Environment No. 445, which restricts all harvest and trade of species listed as Endangered or Critically Endangered on the Brazilian National Red List (Feitosa *et al.* 2018, Vooren *et al.* 2018). This legislation came into force in December 2014, however, it was suspended for all of 2015 and the first half of 2016 due to pressure from the fishing

industry (Begossi *et al.* 2017). The ordinance faces increasing industry pressure, including a court challenge to suspend the legislation again, by the Secretaria Nacional de Aquicultura e Pesca (SAP), who brought forward their contention that the Brazilian National Red List was designed specifically for terrestrial species (Spautz 2019). There are no species-specific protections in place in Uruguay or Argentina. To conserve the population and permit recovery, a suite of measures will be required which will need to include species protection, spatial management, bycatch mitigation, and harvest management, all of which will be dependent on effective enforcement. Further research is needed on life history, population size and trends, and use and trade, and species-specific monitoring is needed in both commercial and artisanal fisheries.

Credits

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Compiler(s):

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

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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 -> 9.1. Marine Neritic - Pelagic	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
9. Marine Neritic -> 9.10. Marine Neritic - Estuaries	Resident	Suitable	Yes

Use and Trade

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

End Use	Local	National	International
Food - human	Yes	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 -> 5.4.1. Intentional use: (subsistence/small scale) [harvest]	Ongoing	Majority (50- 90%)	Slow, significant declines	Medium impact: 6
	Stresses:	2. Species Stresses -> 2.1. Species mortality		rtality
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	Majority (50- 90%)	Slow, significant declines	Medium impact: 6
	Stresses:	2. Species Stresses -> 2.1. Species mortality		rtality
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.4. Unintentional effects: (large scale) [harvest]	Ongoing	Majority (50- 90%)	Slow, significant declines	Medium impact: 6
	Stresses:	2. Species Stress	ses -> 2.1. Species mo	rtality

Conservation Actions in Place

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

Conservation Action in Place	
In-place research and monitoring	

Conservation	Action	in Dlace
Conservation	ACLION	in Place

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: Yes

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

- 1. Land/water protection -> 1.1. Site/area protection
- 3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
- 3. Species management -> 3.1. Species management -> 3.1.2. Trade management
- 3. Species management -> 3.2. Species recovery
- 5. Law & policy -> 5.1. Legislation -> 5.1.2. National level
- 5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.2. National level

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

Research Needed

- 1. Research -> 1.4. Harvest, use & livelihoods
- 2. Conservation Planning -> 2.1. Species Action/Recovery Plan
- 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): 47
Upper depth limit (m): 5
Habitats and Ecology
Generation Length (years): 6

The IUCN Red List Partnership



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<u>Programme</u>, the <u>IUCN Species Survival Commission</u> (SSC) and <u>The IUCN Red List Partnership</u>.

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