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Discopyge castelloi, Castello's Apron Numbfish

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Torpediniformes	Narcinidae

Scientific Name: Discopyge castelloi Menni, Rincón & García, 2008

Common Name(s):

• English: Castello's Apron Numbfish

Taxonomic Source(s):

Fricke, R., Eschmeyer, W.N. and Van der Laan, R. (eds). 2020. Eschmeyer's Catalog of Fishes: genera,species,references.Updated14September2020.Availableat:http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp.

Assessment Information

Red List Category & Criteria:	Data Deficient <u>ver 3.1</u>		
Year Published:	2020		
Date Assessed:	July 1, 2019		

Justification:

Castello's Apron Numbfish (*Discopyge castelloi*) is a small (to at least 31 cm total length) ray that occurs in the Southwest Atlantic from Necochea, Buenos Aires, to Camarones, Chubut, Argentina. It inhabits the inner continental shelf at depths of 35–56 m. Its depth range suggests that it is exposed to commercial and artisanal demersal trawl fisheries. Commercial fishing began in Argentina in the late 1800s, became industrialized after World War II, and increased rapidly in the 1980s. By 1992 there were over 300 coastal trawlers. This number increased to over 400 in 2015, and the number of fishing trips undertaken by that fleet nearly doubled from over 7,600 to nearly 14,000 over that time frame. The overall number of fishing vessels in operation in Argentina has grown from under 300 in 1990 to nearly 1,000 in 2015. This species has however been caught only rarely, and may have either a low catchability or a depth range deeper than is currently known. Further research is needed on distribution, life history, population size and trend, and threats. Since it is unknown whether fishing is causing a population reduction, there is currently inadequate information available to assess Castello's Apron Numbfish beyond Data Deficient.

Geographic Range

Range Description:

Castello's Apron Numbfish occurs in the Southwest Atlantic and is endemic to Argentina ranging from Necochea (Buenos Aires) to Camarones (Chubut) (Menni *et al.* 2008).

Country Occurrence:

Native, Extant (resident): Argentina

FAO Marine Fishing Areas:

Native: Atlantic - southwest

Distribution Map



Legend EXTANT (RESIDENT)

Compiled by: IUCN SSC Shark Specialist Group 2018





Population

This species is known from very few specimens and there are no data regarding population trend. **Current Population Trend:** Unknown

Habitat and Ecology (see Appendix for additional information)

Castello's Apron Numbfish is benthic on the inner continental shelf at depths of 35–56 m (Weigmann 2016). It reaches a maximum known size of 31 cm total length (TL) and is born at 9–10 cm TL (Last *et al.* 2016). Little else is known of its biology.

Systems: Marine

Use and Trade (see Appendix for additional information)

This species is not known to be utilized or traded. Other numbfishes are typically not consumed and are discarded where caught.

Threats (see Appendix for additional information)

The depth range of this numbfish suggests that it is exposed to commercial and artisanal demersal trawl and gillnet fisheries. Commercial fishing began in Argentina in the late 1800s, became industrialized after World War II (Mateo 2006), and increased rapidly in the 1980s (Watson *et al.* 2006). By 1992 there were over 300 coastal trawlers. This number increased to over 400 in 2015, and the number of fishing trips undertaken by that fleet nearly doubled from over 7,600 to nearly 14,000 over that time frame. The overall number of fishing vessels in operation in Argentina has grown from under 300 in 1990 to nearly 1,000 in 2015 (Dirección Nacional de Planificación Pesquera 2016). This numbfish has been caught only rarely, and may have either a low catchability or a depth range deeper than is currently known.

Conservation Actions (see Appendix for additional information)

There are no species-specific protections or conservation measures in place for this species. Further research is needed on distribution, life history and population size and trend. Coastal fisheries should be monitored for bycatch at the species level.

Credits

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

Bibliography

Dirección Nacional de Planificación Pesquera. 2016. Archivos de desembarques de la Pesca Marítima. Subsecretaría de Pesca y Acuicultura. Buenos Aires, Argentina Available at: <u>https://www.agroindustria.gob.ar/sitio/areas/pesca_maritima/desembarques/</u>.

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Watson, R., Revenga, C. and Kura, Y. 2006. Fishing gear associated with global marine catches II. Trends in trawling and dredging. *Fisheries Research* 79: 103-111.

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.

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 -> 9.2. Marine Neritic - Subtidal Rock and Rocky Reefs	Resident	Suitable	Yes
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

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	Majority (50- 90%)	Unknown	Unknown
	Stresses:	2. Species Stress	es -> 2.1. Species moi	rtality
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.4. Unintentional effects: (large scale) [harvest]	Ongoing	Majority (50- 90%)	Unknown	Unknown
	Stresses:	2. Species Stress	es -> 2.1. Species moi	rtality

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

Conservation Action in Place		
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 -> 1.5. Threats	
3. Monitoring -> 3.1. Population trends	

Additional Data Fields

Distribution
Lower depth limit (m): 56
Upper depth limit (m): 35

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