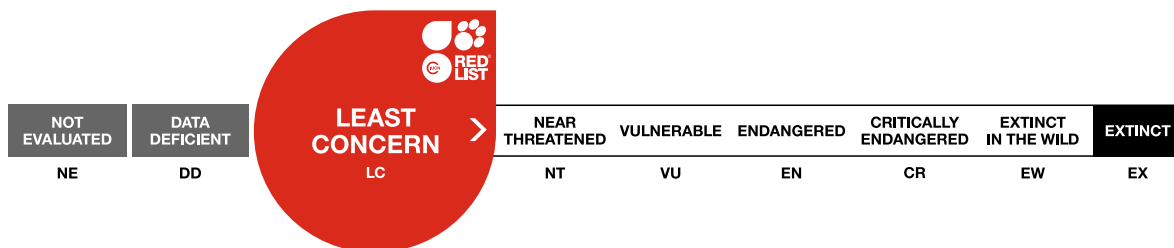


Hydrolagus mirabilis, Large-eyed Rabbitfish

Assessment by: Finucci, B.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Chimaeriformes	Chimaeridae

Scientific Name: *Hydrolagus mirabilis* (Collett, 1904)

Synonym(s):

- *Chimaera mirabilis* Collett, 1904

Regional Assessments:

- Europe

Common Name(s):

- English: Large-eyed Rabbitfish
- Spanish; Castilian: Quimera Ojón

Taxonomic Source(s):

Collett, R. 1904. Diagnoses of four hitherto undescribed fishes from the depths south of the Faroe Islands. *Forhandlinger i Videnskabs-selskabet i Christiania* 1–7.

Assessment Information

Red List Category & Criteria: Least Concern [ver 3.1](#)

Year Published: 2020

Date Assessed: September 2, 2019

Justification:

The Large-eyed Rabbitfish (*Hydrolagus mirabilis*) is a medium-sized deep-water chimaera (to at least 80 cm total length) known from a widespread distribution in the Atlantic Ocean, as well as the Mediterranean Sea. It has been recorded from the continental slope at depths of 450–1,933 m, and generally >800 m. The Large-eyed Rabbitfish is not targeted commercially, but is recorded as bycatch in deep-water trawl, longline, and gillnet fisheries. Data from the Northeast Atlantic shows official landings for chimaeras have more than doubled from 2006–2014, which may be an outcome of increased retention to replace the zero-total allowable catch (TAC) for deep-water sharks for International Council for the Exploration of the Sea (ICES) member countries. The species occurs in deep water outside of most fishing activities, and regional management implementations, including gear restrictions and fisheries closures may offer some refuge from fishing for the species. At this time, there is nothing to suspect or infer global population reduction, and the Large-eyed Rabbitfish is assessed as Least Concern.

Previously Published Red List Assessments

2007 – Near Threatened (NT)

<https://dx.doi.org/10.2305/IUCN.UK.2007.RLTS.T63104A12604542.en>

Geographic Range

Range Description:

The Large-eyed Rabbitfish is thought to have a widespread distribution across the North, Central, and Southeast Atlantic Ocean, as well as the Mediterranean Sea (Ebert and Stehmann 2013, Hassan 2013).

Country Occurrence:

Native, Extant (resident): Angola; Canada; Colombia; Costa Rica; Denmark; Faroe Islands; France; Gambia; Greenland; Guyana; Honduras; Iceland; Ireland; Mauritania; Mexico; Morocco; Namibia; Panama; Portugal; Saint Pierre and Miquelon; Senegal; Spain (Canary Is.); Suriname; Syrian Arab Republic; Trinidad and Tobago; United Kingdom; United States; Venezuela, Bolivarian Republic of; Western Sahara

Native, Presence Uncertain: Brazil; Gabon; Guinea-Bissau

FAO Marine Fishing Areas:

Native: Atlantic - southeast

Native: Atlantic - southwest

Native: Mediterranean and Black Sea

Native: Atlantic - western central

Native: Atlantic - eastern central

Native: Atlantic - northeast

Native: Atlantic - northwest

Distribution Map

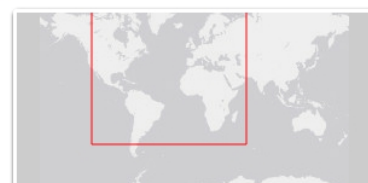
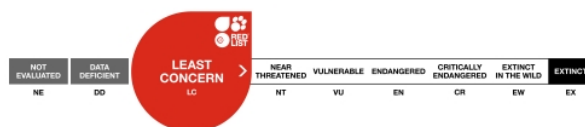


Legend

■ 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.

Population

No data are available on population size, trends, and structure of the Large-eyed Rabbitfish. In the Northeast Atlantic, the species segregates by sex and size (Holt *et al.* 2013). Global population trend is suspected to be stable based on refuge in deep water outside of most current fishing activities.

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

The Large-eyed Rabbitfish has been recorded from the continental slope at depths of 450–1,933 m, generally below 800 m (Ebert and Stehmann 2013). It reaches a maximum size of at least 80 cm total length (TL)/35 cm body length (BDL). Nothing else known of its biology, but like other chimaeras, it is oviparous.

Systems: Marine

Use and Trade (see Appendix for additional information)

This species is not known to be utilized.

Threats (see Appendix for additional information)

The Large-eyed Rabbitfish is not targeted commercially, but is recorded as bycatch in deep-water trawl, longline, and gillnet fisheries (Fossen *et al.* 2008, Menezes *et al.* 2009). The species has also been reported from demersal gillnets during a gillnet retrieval survey of Rockall Trough and Porcupine Bank (Rihan *et al.* 2005) and has been taken in considerable quantities in exploratory trawl surveys off Northwest Africa (26–33°N) (Pajuelo *et al.* 2016). In anglerfish gillnet fisheries to the northwest and west of Rockall, the species accounted for nearly 30% of total sampled catch, of which all was discarded (DEFRA 2007). Data from the Northeast Atlantic shows no trends in estimated landings of chimaera (Rabbitfish, *Chimaera monstrosa*, and *Hydrolagus* spp.) since 1991, however, from 2006–2014, official landings have more than doubled (ICES 2017). This increase may be an outcome of increased retention of chimaeras to replace the zero-total allowable catch (TAC) for deep-water sharks for International Council for the Exploration of the Sea (ICES) member countries, which were previously used to extract squalene (ICES 2017). Segregation by sex and maturity stage (Holt *et al.* 2013) may lead in differential mortality of the sexes and/or size classes.

Conservation Actions (see Appendix for additional information)

There are no species-specific measures in place for the Large-eyed Rabbitfish. The General Fisheries Commission for the Mediterranean (GFCM) banned bottom trawling below depths of 1,000 m in the Mediterranean Sea in 2005. The North East Atlantic Fisheries Commission (NEAFC) has implemented management measures including banning the use of gill, entangling, and trammel nets in depths >200 m, fisheries closures along the Mid-Atlantic Ridge and Rockall Hatton Bank, and prohibited targeting of deep-water chondrichthyans, including chimaeras (NEAFC 2017). These management implementations may offer some refuge from fishing for the species. Further information is required on the distribution, ecology, and life history of the Large-eyed Rabbitfish, as well as interactions with fisheries.

Credits

Assessor(s): Finucci, B.

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

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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?
11. Marine Deep Benthic -> 11.1. Marine Deep Benthic - Continental Slope/Bathyl Zone (200-4,000m)	-	-	-

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%)	Unknown	Unknown
	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
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

Conservation Action in Place
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
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.2. Harvest level trends

Additional Data Fields

Distribution
Lower depth limit (m): 1,933
Upper depth limit (m): 450

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