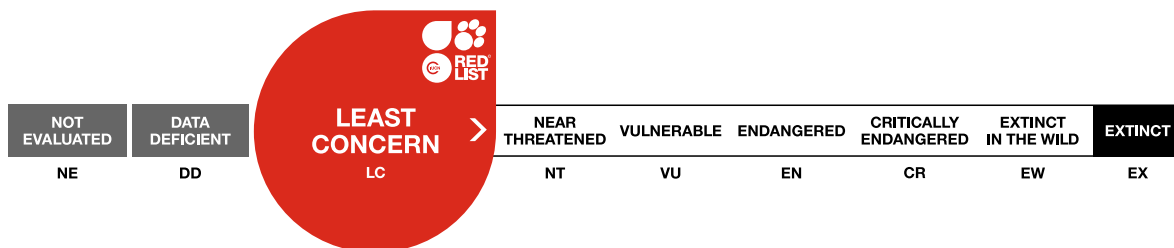


Zebrias annularis, Annular Sole

Assessment by: Nair, R., Munroe, T.A. & Weerts, S.P.



View on www.iucnredlist.org

Citation: Nair, R., Munroe, T.A. & Weerts, S.P. 2020. *Zebrias annularis*. *The IUCN Red List of Threatened Species* 2020: e.T158878136A158881459. <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T158878136A158881459.en>

Copyright: © 2020 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale, reposting or other commercial purposes is prohibited without prior written permission from the copyright holder. For further details see [Terms of Use](#).

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](#).

If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with [feedback](#) so that we can correct or extend the information provided.

Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Pleuronectiformes	Soleidae

Scientific Name: *Zebrias annularis* (Fowler, 1934)

Synonym(s):

- *Brachirus annularis* Fowler, 1934

Common Name(s):

- English: Annular Sole

Taxonomic Source(s):

Fricke, R., Eschmeyer, W.N. and Van der Laan, R. (eds). 2019. Eschmeyer's Catalog of Fishes: genera, species, references. Updated 03 September 2019. Available at: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>.

Taxonomic Notes:

The taxonomic status of this species and *Zebrias maculosus* needs to be investigated (T. Munroe and R. Nair pers. comm. 2019). At present, both nominal species are considered valid (Eschmeyer *et al.* 2019).

Assessment Information

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

Year Published: 2020

Date Assessed: August 13, 2019

Justification:

This small-sized, deep-water species is widely distributed in the Indo-West Pacific. It is not targeted but infrequently taken in demersal trawl bycatch. Limited information is available regarding its population size or trends and potential threats. However, it is relatively widely distributed and occurs in deep-water habitats; therefore, it is listed as Least Concern.

Geographic Range

Range Description:

This species was described from the vicinity of Taiwan (Fowler 1934, Shao *et al.* 2008, Ho and Shao 2011). It has also been reported from southern India (Nair 2006, Biju Kumar and Deepthi 2009, Biju Kumar *et al.* 2013, Joshi *et al.* 2016); northwestern Australia (Sainsbury *et al.* 1985, Hutchins 2001); Viet Nam (Vi *et al.* 2015), the Philippines (Nakabo 2002) and Japan (Gonzales *et al.* 1994). It has been reported from 150-271 m (Nakabo 2002, Ho and Shao 2011). Further work is needed to clarify the distribution of this species.

Country Occurrence:

Native, Extant (resident): Australia; China; India; Japan; Sri Lanka; Taiwan, Province of China; Viet Nam

FAO Marine Fishing Areas:

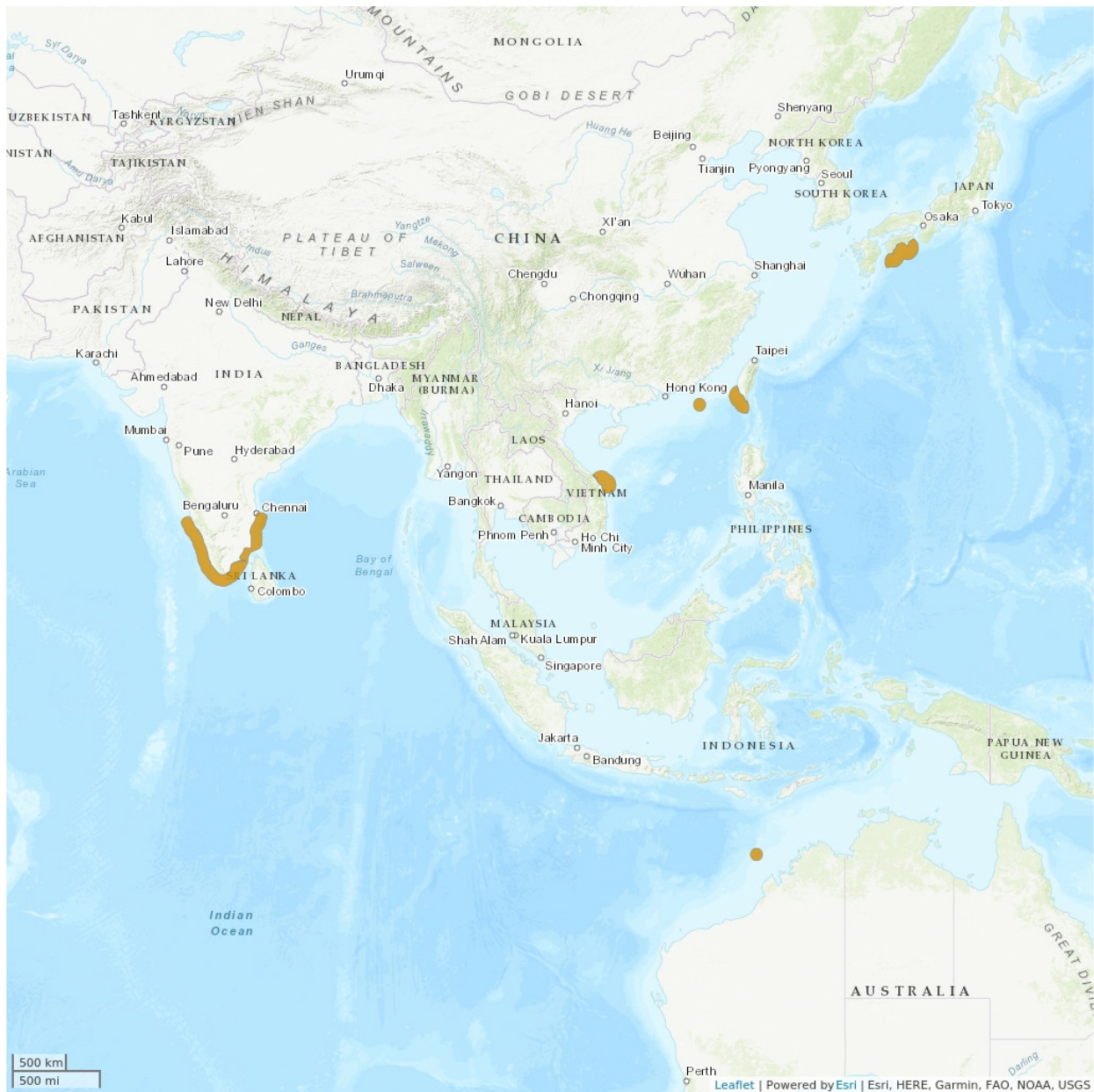
Native: Indian Ocean - eastern

Native: Indian Ocean - western

Native: Pacific - northwest

Native: Pacific - western central

Distribution Map



Legend

■ EXTANT (RESIDENT)

Compiled by:

IUCN Marine Biodiversity Unit/GMSA 2020



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



Population

Population data are limited.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

This demersal, marine species inhabits the sandy and muddy substrates of the middle and outer continental shelf. The maximum standard length is 13 cm (Biju Kumar and Deepthi 2009).

Systems: Marine

Use and Trade

This species is not utilized.

Threats

It is infrequently collected as trawl by-catch and discarded (Biju Kumar and Deepthi 2009, Biju Kumar *et al.* 2013). It is rare in catches (Naomi *et al.* 2011).

Conservation Actions (see Appendix for additional information)

There are no species-specific conservation measures.

Credits

Assessor(s): Nair, R., Munroe, T.A. & Weerts, S.P.

Reviewer(s): Ralph, G.

Bibliography

- Biju Kumar, A.B. and Deepthi, G.R. 2009. Diversity of flatfish along the kerala coast of India, with notes on two rare species. *Indian Journal of Fisheries*. 56(3): 211-14.
- Bijukumar, A., Deepthi, G.R. and Padmakumaran, N. 2013. Proximate composition of fish in the trawl by-catch and discards of Kerala, south-west coast of India. *Journal of Aquatic Biology and Fisheries* 1 & 2: 106-116.
- Fowler, H.W. 1934. Descriptions of new fishes obtained from 1907 to 1910, chiefly in the Philippine Islands and adjacent seas. *Proceedings of the Academy of Natural Sciences of Philadelphia* 85: 233-367.
- Gonzales, B.J., Okamura, O., Nakamura, K. and Miyahara, H. 1994. New record of the Annular Sole, *Synaptura annularis* (Soleidae, Pleuronectiformes) from Japan. *Japanese Journal of Ichthyology* 40(4): 491-494.
- Ho, H.-C. and Shao, K.-T. 2011. Annotated checklist and type catalog of fish genera and species described from Taiwan. *Zootaxa* 2957: 1-74.
- Hutchins, J.B. 2001. Checklist of the fishes of Western Australia. *Records of the Western Australian Museum Supplement* 63: 9-50.
- IUCN. 2020. The IUCN Red List of Threatened Species. Version 2020-2. Available at: www.iucnredlist.org. (Accessed: 13 June 2020).
- Joshi, K.K., Sreeram, M.P., Zacharia, P.U., Abdussamad, E.M., Varghese, M., Habeeb Mohammed, O.M.M.J., Jayabalan, K., Kanthan, K.P., Kannan, K., Sreekumar, K.M. and George, G. 2016. Check list of fishes of the Gulf of Mannar ecosystem, Tamil Nadu, India. *Journal of the Marine Biological Association of India* 58(1): 34-54.
- Nair, R.J. 2006. First record of the annular sole, *Synaptura annularis* (Fowler, 1933) (Pleuronectiformes: Soleidae) from India. *Journal of the Marine Biological Association of India* 48(1): 118-120.
- Nakabo, T. 2002. *Fishes of Japan with pictorial keys to the species, English edition II*. Tokai University Press, Tokyo.
- Naomi, T.S., George, R.M., Sreeram, M.P., Sanil, N.K., Balachandran, K., Thomas, V.J. and Geetha, P.M. 2011. Finfish diversity in the trawl fisheries of southern Kerala. *Marine Fisheries Information Service* 207.
- Sainsbury, K.J., Kailola, P.J. and Leyland, G.G. 1985. *Continental shelf fishes of northern and north-western Australia. An illustrated Guide*. CSIRO Division of Fisheries Research, Canberra, Australia.
- Shao, K-T., Ho, H-C., Lin, P-L., Lee, P-F., Lee, M-Y., Tsai, C-Y., Liao, Y-C., Lin, Y-C., Chen, J-P. and Yeh, H-M. 2008. A checklist of the fishes of southern Taiwan, northern South China Sea. *The Raffles Bulletin of Zoology Supplement* No. 19: 233-271.
- Vi, N.T.T., Thøo, L.T.T., Nø, B.T.N. and Quang, V.V. 2015. Initial study on fish fauna in the Thu bong estuary of Quang Nam Province. *Journal of Marine Science and Technology* 15(1): 55-66.

Citation

Nair, R., Munroe, T.A. & Weerts, S.P. 2020. *Zebrias annularis*. *The IUCN Red List of Threatened Species* 2020: e.T158878136A158881459. <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T158878136A158881459.en>

Disclaimer

To make use of this information, please check the [Terms of Use](#).

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 -> 9.5. Marine Neritic - Subtidal Sandy-Mud	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	Yes	Yes	Yes

Conservation Actions in Place

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

Conservation Action in Place
In-place land/water protection
Occurs in at least one protected area: Yes

Additional Data Fields

Distribution
Lower depth limit (m): 271
Upper depth limit (m): 150

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](#).