

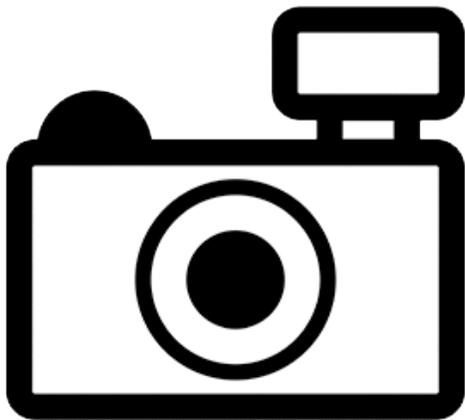
***Barbodes tras* (a fish, no common name)**

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, February 2013

Revised, March 2019

Web Version, 8/20/2019



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2019):

“Asia: endemic to Lake Lanao, Mindanao, Philippines”

Status in the United States

Barbodes tras has not been reported in the wild or in trade in the United States.

Means of Introductions in the United States

Barbodes tras has not been reported in the wild in the United States.

Remarks

According to World Conservation Monitoring Centre (1996), *Barbodes tras* is listed as critically endangered and has possibly gone extinct.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From Fricke et al. (2019):

“**Current status:** Valid as *Barbodes tras* Herre 1926.”

From ITIS (2019):

“Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Actinopterygii
Class Teleostei
Superorder Ostariophysi
Order Cypriniformes
Superfamily Cyprinoidea
Family Cyprinidae
[Genus *Barbodes*]
Species *Barbodes tras* Herre, 1926”

Size, Weight, and Age Range

From Froese and Pauly (2019):

“Max length : 12.6 cm SL male/unsexed; [Herre 1926]”

Environment

From Froese and Pauly (2019):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2019):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2019):

“Asia: endemic to Lake Lanao, Mindanao, Philippines”

Introduced

Barbodes tras has not been reported as introduced anywhere outside of their native range.

Means of Introduction Outside the United States

Barbodes tras has not been reported as introduced anywhere outside of their native range.

Short Description

From Froese and Pauly (2019):

“Dorsal spines (total): 4; Dorsal soft rays (total): 18; Anal spines: 3; Anal soft rays: 6. Preserved color dusky gray dorsally, whitish below; snout bluish black; dorsal rays dusky, caudal yellow, other fins colorless. Very large and broad head; large snout with 3 bony humps near its tip; large mouth. 13 scales between nape and dorsal; 3 scales between ventral and lateral line. Minute white tubercles on snout and top of head.”

Biology

No information was found on the biology of *Barbodes tras*.

Human Uses

No information was found on human uses.

Diseases

No information was found regarding diseases. **No OIE-reportable diseases (OIE 2019) were found to be associated with *Barbodes tras*.**

Threat to Humans

From Froese and Pauly (2019):

“Harmless”

3 Impacts of Introductions

Barbodes tras has not been reported as introduced anywhere outside of its native range. Therefore there is no information on impacts of introductions.

4 Global Distribution



Figure 1. Known global distribution of *Barbodes tras*. Locations in Mindanao, Philippines. Map from GBIF Secretariat (2019).

5 Distribution Within the United States

Barbodes tras has not been reported anywhere within the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for the contiguous United States was consistently low across all States. There are no areas of medium or high match. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for contiguous United States was 0.000, low (scores between 0.000 and 0.005, inclusive, are classified as low). All States received low individual Climate 6 scores.

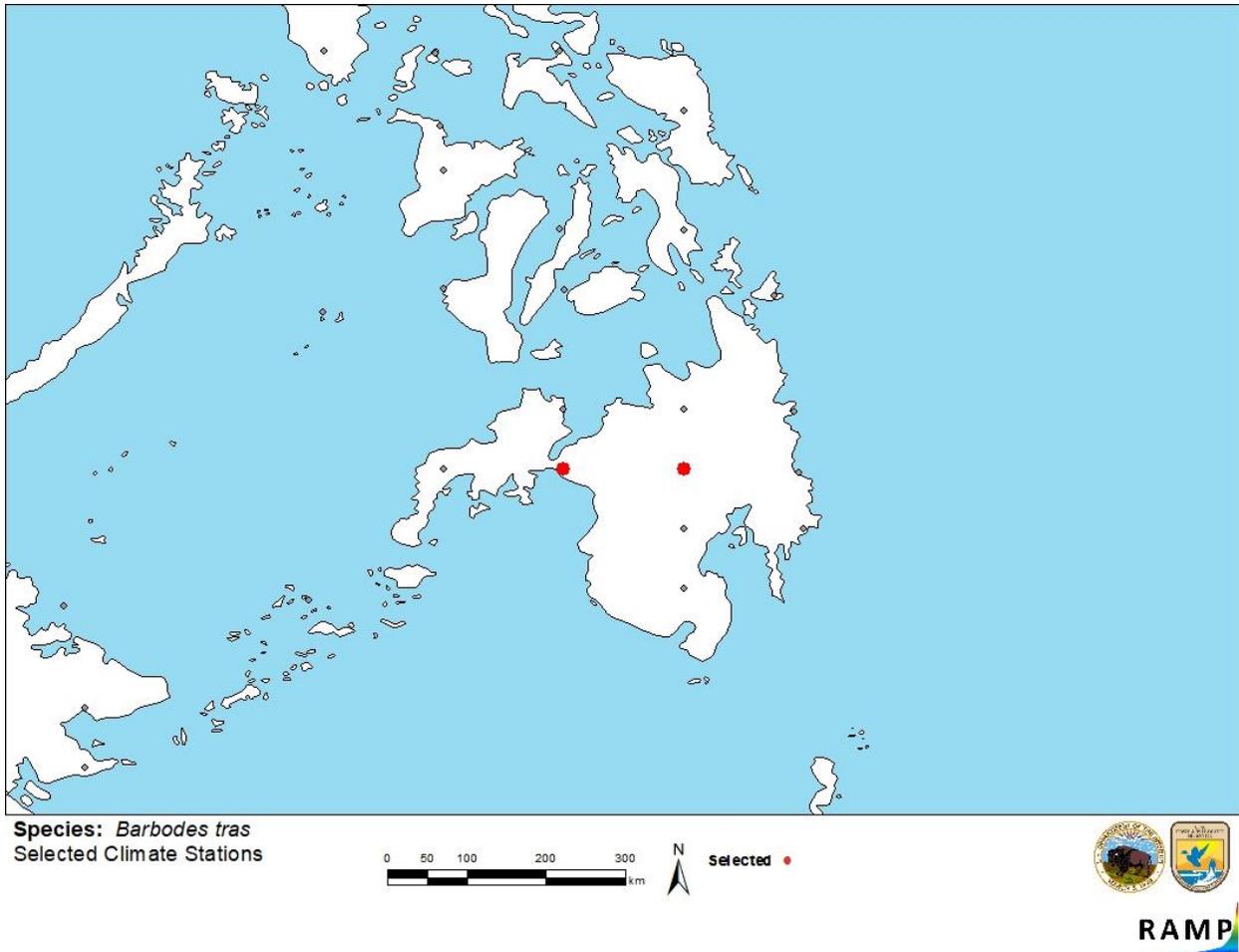


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in Mindanao, Philippines selected as source locations (red) and non-source locations (gray) *Barbodes tras* climate matching. Source locations from GBIF Secretariat (2019). Selected source locations are within 100 km of one or more species occurrences, and do not necessarily represent the locations of occurrences themselves.

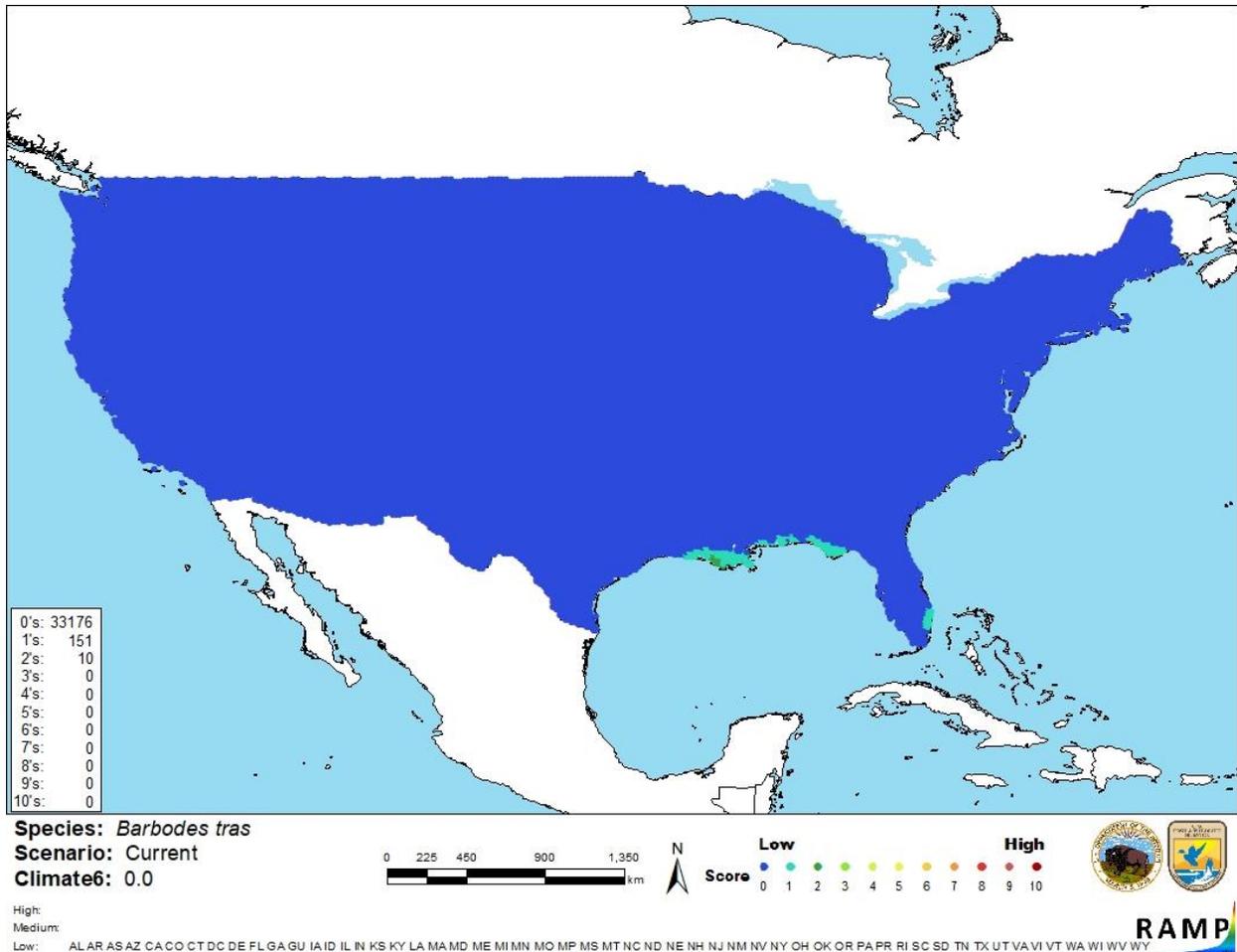


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Barbodes tras* in the contiguous United States based on source locations reported by GBIF Secretariat (2019). 0 = Lowest match, 10 = Highest match.

The High, Medium, and Low Climate match Categories are based on the following table:

Climate 6: Proportion of (Sum of Climate Scores 6-10) / (Sum of total Climate Scores)	Climate Match Category
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

7 Certainty of Assessment

Limited information is available for *Barbodes tras* and it has not been introduced anywhere outside of its native range. The certainty of assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Barbodes tras is a fish endemic to Lake Lanao in Mindanao, Philippines. This species is listed as critically endangered and could possibly have gone extinct. *B. tras* has not been introduced anywhere outside of its native range nor is it found in trade. The history of invasiveness is uncertain. The climate match for the contiguous United States is low, with no areas of medium or high match and all States receiving low individual climate scores. The certainty of assessment is low. The overall risk assessment category for *Barbodes tras* is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 3): Uncertain**
- **Climate Match (Sec. 6): Low**
- **Certainty of Assessment (Sec. 7): Low**
- **Remarks/Important additional information: No additional information.**
- **Overall Risk Assessment Category: Uncertain**

9 References

Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 10.

Fricke, R., W. N. Eschmeyer, and R. van der Laan, editors. 2019. Eschmeyer's catalog of fishes: genera, species, references. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (February 2019).

Froese, R., and D. Pauly, editors. 2019. *Barbodes tras* Herre, 1926. FishBase. Available: <https://www.fishbase.de/summary/Barbodes-tras.html>. (March 2019).

GBIF Secretariat. 2019. GBIF backbone taxonomy: *Barbodes tras* Herre, 1926. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/2363826>. (March 2019).

ITIS (Integrated Taxonomic Information System). 2019. *Barbodes tras* Herre, 1926. Integrated Taxonomic Information System. Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=639552#null. (March 2019).

OIE (World Organisation for Animal Health). 2019. OIE-listed diseases, infections and infestations in force in 2019. Available: <http://www.oie.int/animal-health-in-the-world/oie-listed-diseases-2019/>. (March 2019).

Sanders, S., C. Castiglione, and M. Hoff. 2018. Risk assessment mapping program: RAMP, version 3.1. U.S. Fish and Wildlife Service.

World Conservation Monitoring Centre. 1996. *Barbodes tras*. The IUCN Red List of Threatened Species 2015: e.T18901A8674967. Available: <https://www.iucnredlist.org/species/18901/8674967>. (March 2019).

10 References Quoted But Not Accessed

Note: The following references are cited within quoted text within this ERSS, but were not accessed for its preparation. They are included here to provide the reader with more information.

Herre, A. W. C. T. 1926. Two new fishes from Lake Lanao. *Philippine Journal of Science* 29(4):499–503.