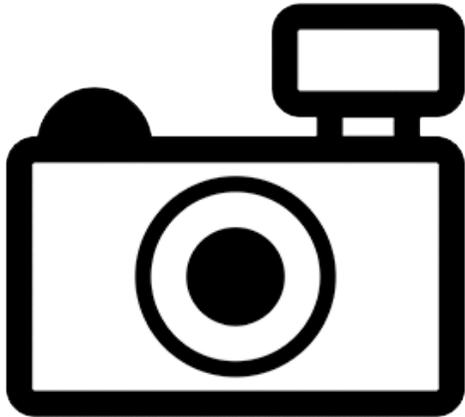


Parmicka Sunierova (*Barbonymus sunieri*) (a fish)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, April 2015
Revised, October 2017
Web Version, 8/29/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2015):

“Asia: Northeastern Borneo”

Sulaiman and Mayden (2012) list *Barbonymus sunieri* as endemic to Kalimantan (Indonesia) on the island of Borneo.

Status in the United States

No records of *Barbonymus sunieri* in the wild or in trade in the United States were found.

Means of Introductions in the United States

No records of *Barbonymus sunieri* in the United States were found.

Remarks

According to Eschmeyer et al. (2017) the accepted name for this species is *Barbonymus sunieri*. Most databases have yet to incorporate this change and still use the synonym *Barbodes sunieri*. Information searches were conducted using both names.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

According to Eschmeyer et al. (2017), *Barbonymus sunieri* (Weber & de Beaufort 1916) is the valid name for this species. It was originally described as *Puntius sunieri* and has also been known as *Barbodes sunieri*.

From ITIS (2015):

“Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Osteichthyes
Class Actinopterygii
Subclass Neopterygii
Infraclass Teleostei
Superorder Ostariophysi
Order Cypriniformes
Superfamily Cyprinidea
Family Cyprinidae
Genus *Barbodes*
Species *Barbodes sunieri* (Weber and de Beaufort, 1916)”

Size, Weight, and Age Range

From Froese and Pauly (2015):

“Max length: 28.7 cm TL male/unsexed; [Kottelat et al. 1993]”

Environment

From Froese and Pauly (2015):

“Freshwater; benthopelagic”

Climate/Range

From Froese and Pauly (2015):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2015):

“Asia: Northeastern Borneo”

Sulaiman and Mayden (2012) list *Barbonymus sunieri* as endemic to Kalimantan (Indonesia) on the island of Borneo.

Introduced

No records of *Barbonymus sunieri* introductions were found.

Means of Introduction Outside the United States

No records of *Barbonymus sunieri* introductions were found.

Short Description

A description of *Barbonymus sunieri* was not found.

Biology

Information on the biology of *Barbonymus sunieri* was not found.

Human Uses

Information on human uses of *Barbonymus sunieri* was not found.

Diseases

Information on parasites and pathogens of *Barbonymus sunieri* was not found.

Threat to Humans

From Froese and Pauly (2015):

“Harmless”

3 Impacts of Introductions

No records of *Barbonymus sunieri* introductions were found.

4 Global Distribution



Figure 1. Known global distribution of *Barbonymus sunieri*. Locations on in Indonesia and Malaysia on the island of Borneo. Map from GBIF Secretariat (2017).

5 Distribution Within the United States

No records of *Barbonymus sunieri* in the United States were found.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Barbonymus sunieri* was low across the contiguous United States. The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low, and no states had an individually high climate match.

RAMP directly incorporates information from GBIF. As of the time of assessment GBIF Secretariat (2017) had yet to update the species' valid name to *Barbonymus sunieri*, therefore the following figures (Figures 2, 3) are labeled with the name *Barbodes sunieri*.

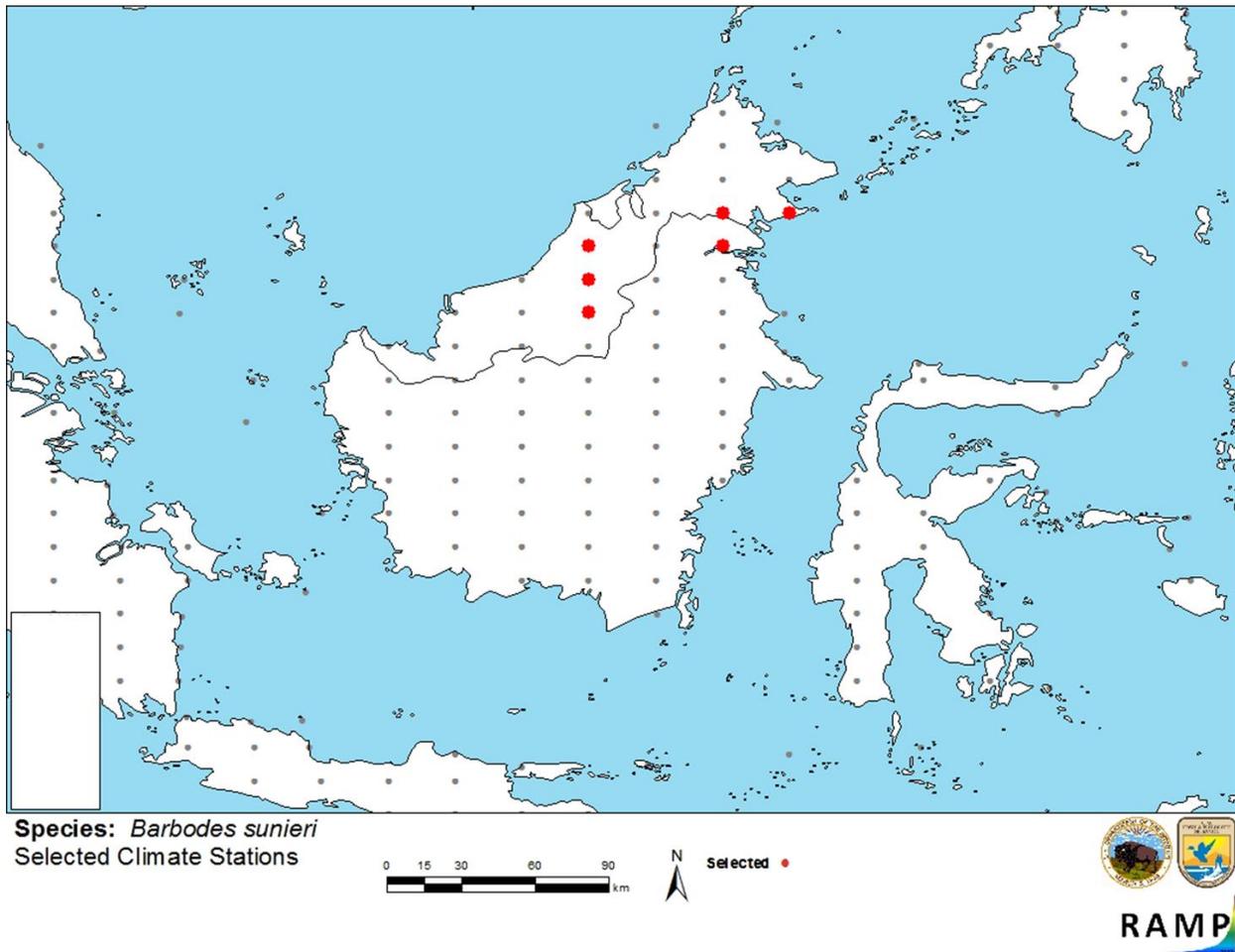


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations on the island of Borneo selected as source locations (red; Malaysia, Indonesia) and non-source locations (gray) for *Barbonymus sunieri* climate matching. Source locations from GBIF Secretariat (2017).

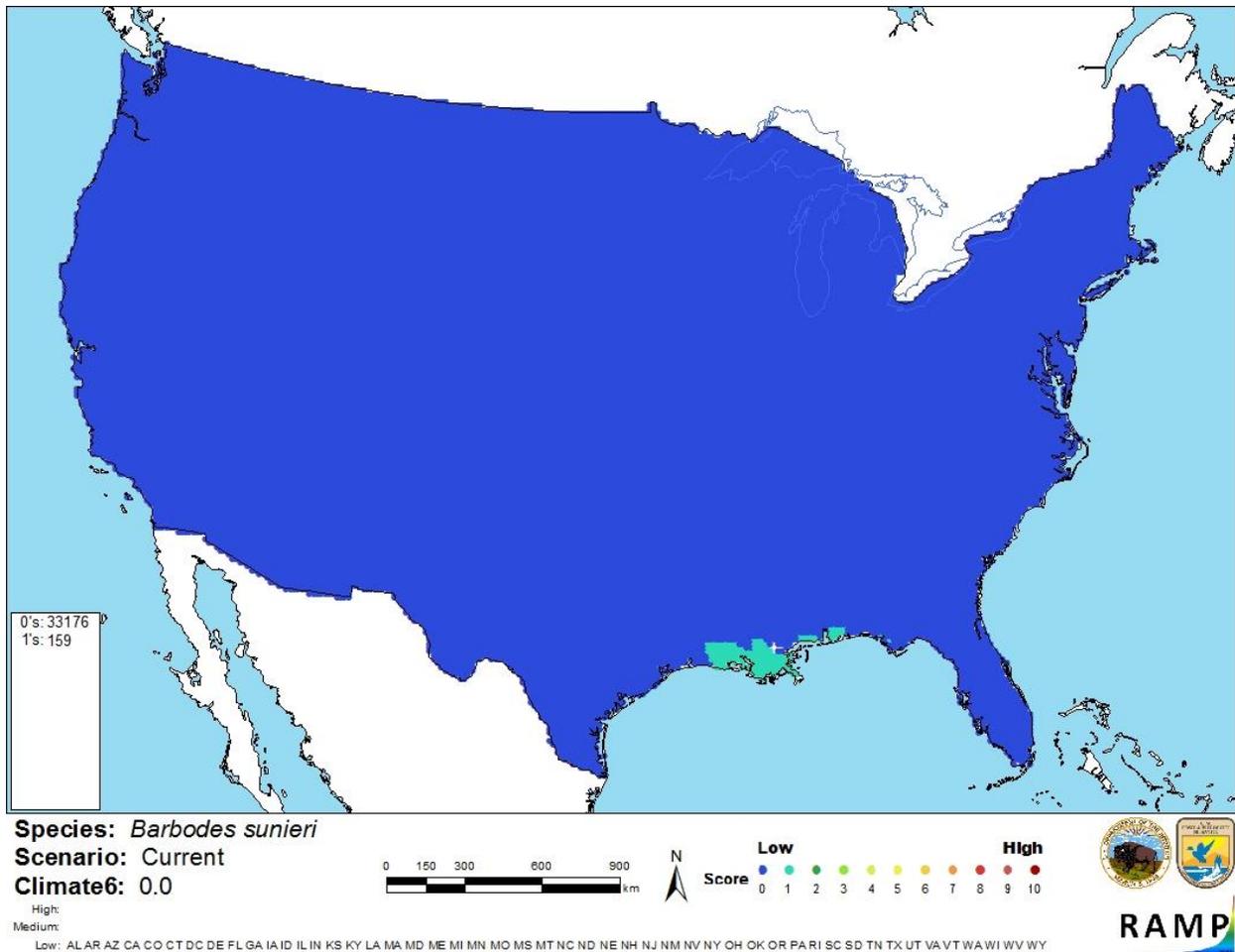


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Barbonymus sunieri* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 0 = Lowest match, 10 = Highest match. Counts of climate match scores are tabulated on the left.

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

The certainty of this assessment is low. There was very little information available for *Barbonymus sunieri*. No records of introductions were found.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Parmicka Sunierova (*Barbonymus sunieri*) is a species of freshwater fish native to the island of Borneo. The history of invasiveness for *B. sunieri* is uncertain. There were no records of introduction found. The climate match is low; the Climate 6 score was 0.000. The certainty of assessment is low. There was very limited information available for this species. The overall risk assessment category 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 remarks.
- **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.

Eschmeyer, W. N., R. Fricke, and R. van der Laan, editors. 2017. Catalog of fishes: genera, species, references. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (October 2017).

Froese, R., and D. Pauly, editors. 2015. *Barbodes sunieri* (Weber & de Beaufort, 1916). FishBase. Available: <http://www.fishbase.org/summary/Barbodes-sunieri.html>. (April 2015).

GBIF Secretariat. 2017. GBIF backbone taxonomy: *Barbodes sunieri* (Weber & de Beaufort, 1916). Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/2365885>. (October 2017).

ITIS (Integrated Taxonomic Information System). 2015. *Barbodes sunieri* (Weber & de Beaufort, 1916). Integrated Taxonomic Information System, Reston, Virginia. Available: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=639562. (April 2015).

Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk assessment mapping program: RAMP. U.S. Fish and Wildlife Service.

Sulaiman, Z. H., and R. L. Mayden. 2012. Cypriniformes of Borneo (Actinopterygii, Otophysi): an extraordinary fauna for integrated studies on diversity, systematics, evolution, ecology, and conservation. *Zootaxa* 3586:359–376.

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.

Kottelat, M., A. J. Whitten, S. N. Kartikasari, and S. Wirjoatmodjo. 1993. Freshwater fishes of Western Indonesia and Sulawesi. Periplus Editions, Hong Kong.

Weber, M., and L. F. de Beaufort. 1916. The fishes of the Indo-Australian Archipelago. III. Ostariophysi: II Cyprinoidea, Apodes, Synbranchi. E. J. Brill, Leiden, the Netherlands.