

***Miuroglanis platycephalus* (a catfish, no common name)**

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, January 2017
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Web Version, 2/27/2018



Photo: President and Fellows of Harvard College. Licensed under CC BY-NC-SA. Available: http://eol.org/data_objects/26684666. (February 2017).

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2016):

“South America: Solimões River basin in Brazil.”

Status in the United States

This species has not been reported as introduced in the United States.

From FFWCC (2016):

“Prohibited nonnative species are considered to be dangerous to the ecology and/or the health and welfare of the people of Florida. These species are not allowed to be personally possessed or used for commercial activities. [...]

Freshwater Aquatic Species [...]

Parasitic catfishes [...]

Miuroglanis platycephalus”

Means of Introductions in the United States

This species has not been reported as introduced in the United States.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2017):

“Kingdom	Animalia
Subkingdom	Bilateria
Infrakingdom	Deuterostomia
Phylum	Chordata
Subphylum	Vertebrata
Infraphylum	Gnathostomata
Superclass	Osteichthyes
Class	Actinopterygii
Subclass	Neopterygii
Infraclass	Teleostei
Superorder	Ostariophysi
Order	Siluriformes
Family	Trichomycteridae
Subfamily	Tridentinae
Genus	<i>Miuroglanis</i>
Species	<i>Miuroglanis platycephalus</i> Eigenmann and Eigenmann, 1889”

“Current Standing: valid”

Size, Weight, and Age Range

From Froese and Pauly (2016):

“Max length : 1.2 cm NG male/unsexed; [de Pínna and Wosiacki 2003]”

Environment

From Froese and Pauly (2016):

“Freshwater; demersal.”

Climate/Range

From Froese and Pauly (2016):

“Tropical, preferred ?”

Distribution Outside the United States

Native

From Froese and Pauly (2016):

“South America: Solimões River basin in Brazil.”

Introduced

No introductions of this species have been reported.

Means of Introduction Outside the United States

No introductions of this species have been reported.

Short Description

From Eigenmann and Eigenmann (1889):

“Body short, compressed and rather deep. Head greatly depressed, wider than long. Eye large, lateral, placed behind the angle of the mouth. Mouth sub-inferior, the upper jaw projecting slightly. Upper maxillary barbel scarcely extending to the gill opening; no nasal or mental barbels. Opercular and preopercular patches of spines united. Origin of the dorsal little behind that of the anal; its distance from the tip of the snout somewhat less than twice its distance from the tip of the caudal. Head 5 ½; D. 10; A. 15.”

Biology

No information available.

Human Uses

No information available.

Diseases

No information available.

Threat to Humans

From Froese and Pauly (2016):

“Harmless”

3 Impacts of Introductions

No introductions of this species have been reported.

From FFWCC (2016):

“Prohibited nonnative species are considered to be dangerous to the ecology and/or the health and welfare of the people of Florida. These species are not allowed to be personally possessed or used for commercial activities. [...]

Freshwater Aquatic Species [...]

Parasitic catfishes [...]

Miuroglanis platycephalus”

4 Global Distribution



Figure 1. Known global established locations of *Miuroglanis platycephalus* in Brazil. Map from GBIF (2016).

5 Distribution Within the United States

This species has not been reported in the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) was low throughout the contiguous U.S., reflected in a Climate 6 proportion of 0.0. The range for Climate 6 proportions indicating a low climate match is 0.000 to 0.005.

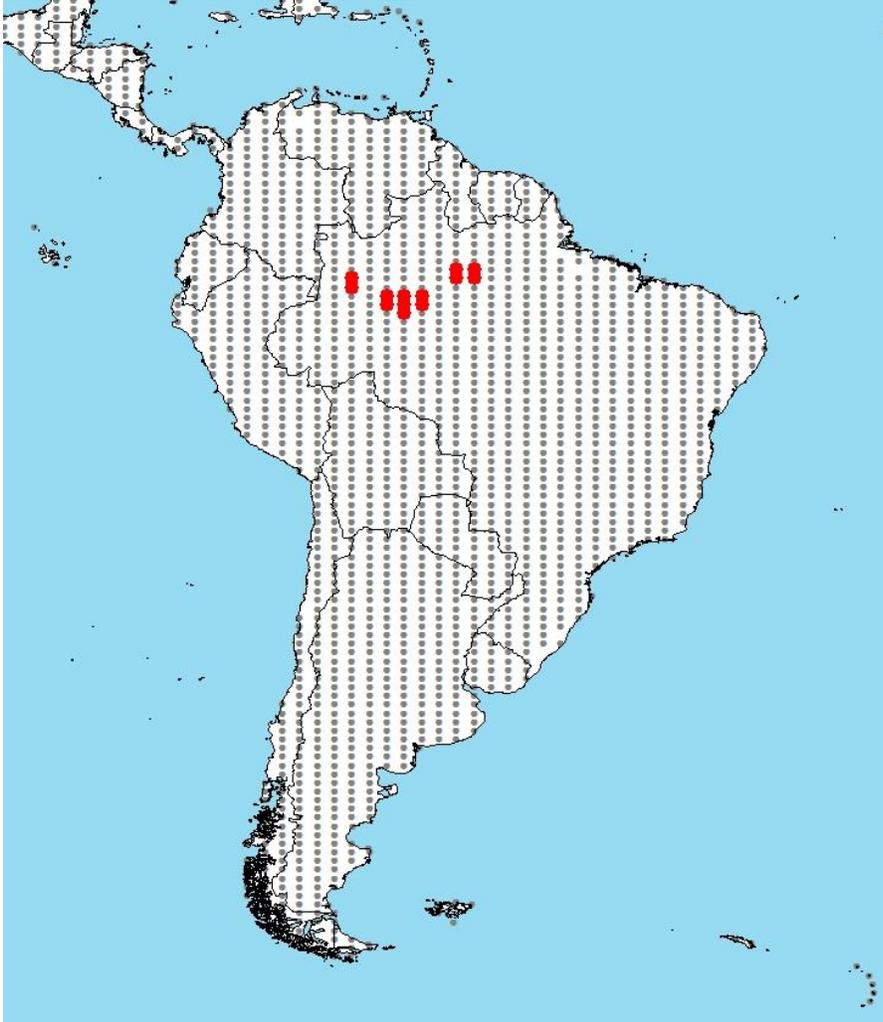


Figure 1. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *Miuroglanis platycephalus* climate matching. Source locations from GBIF (2016).

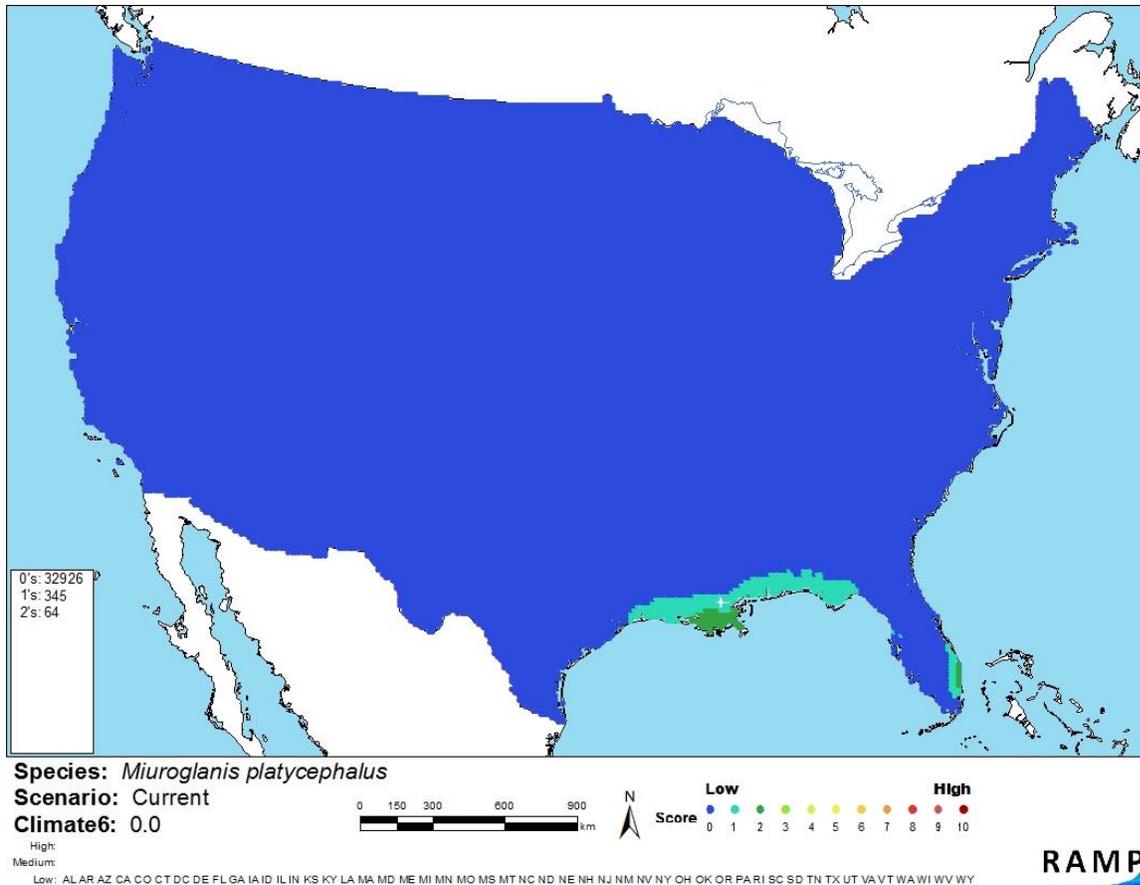


Figure 2. Map of RAMP (Sanders et al. 2014) climate matches for *Miuroglanis platycephalus* in the contiguous United States based on source locations reported by GBIF (2016). 0= Lowest match, 10=Highest match. Counts of climate matches tabulated on the left.

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

There is also very limited information available on the biology and distribution of *Miuroglanis platycephalus*. The potential impacts of an introduction are unknown because no introductions have been documented for this species previously. Due to the lack of information, the certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Miuroglanis platycephalus is a trichomycterid catfish native to northern Brazil. Very little is known about its biology, and it has not been reported as introduced outside its native range so impacts of introduction are unknown. Climate match to the contiguous U.S. is low. Overall risk posed by *M. platycephalus* is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 3): Uncertain**
- **Climate Match (Sec. 6): Low**
- **Certainty of Assessment (Sec. 7): Low**
- **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.

- Eigenmann, C. H., and R. S. Eigenmann. 1889. Preliminary notes on South American Nematognathi, II. Proceedings of the California Academy of Sciences 2(2):28-56.
- FFWCC (Florida Fish and Wildlife Conservation Commission). 2016. Prohibited species list. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida. Available: <http://myfwc.com/wildlifehabitats/nonnatives/regulations/prohibited/#nogo>. (December 2016).
- Froese, R., and D. Pauly, editors. 2016. *Miuroglanis platycephalus* Eigenmann & Eigenmann, 1889. FishBase. Available: <http://www.fishbase.org/summary/Miuroglanis-platycephalus.html>. (January 2017).
- GBIF (Global Biodiversity Information Facility). 2016. GBIF backbone taxonomy: *Miuroglanis platycephalus* Eigenmann & Eigenmann, 1889. Global Biodiversity Information Facility, Copenhagen. Available: <http://www.gbif.org/species/2342929>. (January 2017).
- ITIS (Integrated Taxonomic Information System). 2017. *Miuroglanis platycephalus* Eigenmann and Eigenmann, 1889. Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=682139#null. (January 2017).
- Sanders, S., C. Castiglione, and M. H. Hoff. 2014. Risk Assessment Mapping Program: RAMP. U.S. Fish and Wildlife Service.

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.

de Pínna, M. C. C., and W. Wosiacki. 2003. Trichomycteridae (pencil or parasitic catfishes). Pages 270-290 *in* R. E. Reis, S. O. Kullander, and C. J. Ferraris, Jr., editors. Checklist of the freshwater fishes of South and Central America. EDIPUCRS, Porto Alegre, Brazil.