

***Pterygoplichthys parnaibae* (a catfish, no common name)**

Ecological Risk Screening Summary

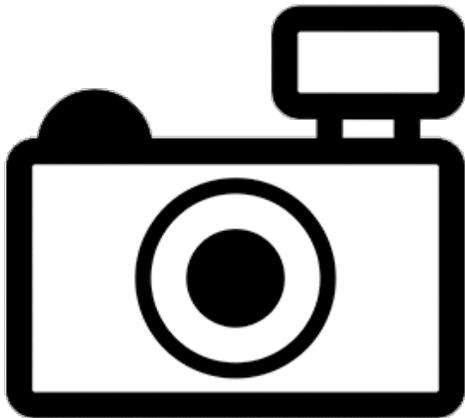
U.S. Fish & Wildlife Service, April 2012

Revised, October 2018

Web Version, 2/4/2021

Organism Type: Fish

Overall Risk Assessment Category: Uncertain



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“South America: Parnaíba River basin [Brazil].”

Status in the United States

No records of *Pterygoplichthys parnaibae* in the wild or in trade in the United States were found.

P. parnaibae falls within Group I of New Mexico’s Department of Game and Fish Director’s Species Importation List (New Mexico Department of Game and Fish 2010). Group I species “are designated semi-domesticated animals and do not require an importation permit.”

Means of Introductions in the United States

No records of *Pterygoplichthys parnaibae* in the wild in the United States were found.

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

According to Fricke et al. (2018), *Pterygoplichthys parnaibae* (Weber 1991) is the current valid name of this species. *Pterygoplichthys parnaibae* was originally described as *Glyptoperichthys parnaibae* Weber 1991.

From Bailly (2017):

“Biota > Animalia (Kingdom) > Chordata (Phylum) > Vertebrata (Subphylum) > Gnathostomata (Superclass) > [...] Actinopterygii (Class) > Siluriformes (Order) > Loricariidae (Family) > Hypostominae (Subfamily) > *Pterygoplichthys* (Genus) > *Pterygoplichthys parnaibae* (Species)”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 29.0 cm SL male/unsexed; [Weber 2003]”

Environment

From Froese and Pauly (2018):

“Freshwater; demersal.”

Climate

From Froese and Pauly (2018):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2018):

“South America: Parnaíba River basin [Brazil].”

Introduced

No records of introductions of *Pterygoplichthys parnaibae* were found.

Means of Introduction Outside the United States

No records of introductions of *Pterygoplichthys parnaibae* were found.

Short Description

Information on a short description of *Pterygoplichthys parnaibae* was not found.

Biology

Information on the biology of *Pterygoplichthys parnaibae* was not found.

Human Uses

Information on human uses of *Pterygoplichthys parnaibae* was not found.

Diseases

No information on diseases of *Pterygoplichthys parnaibae* was found. **No records of OIE-reportable diseases (OIE 2021) were found for *P. parnaibae*.**

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

No records of introductions of *Pterygoplichthys parnaibae* were found, therefore there is no information on impacts of introduction.

4 History of Invasiveness

No records of introductions of *Pterygoplichthys parnaibae* were found, therefore the history of invasiveness is classified as “no known nonnative population.”

5 Global Distribution

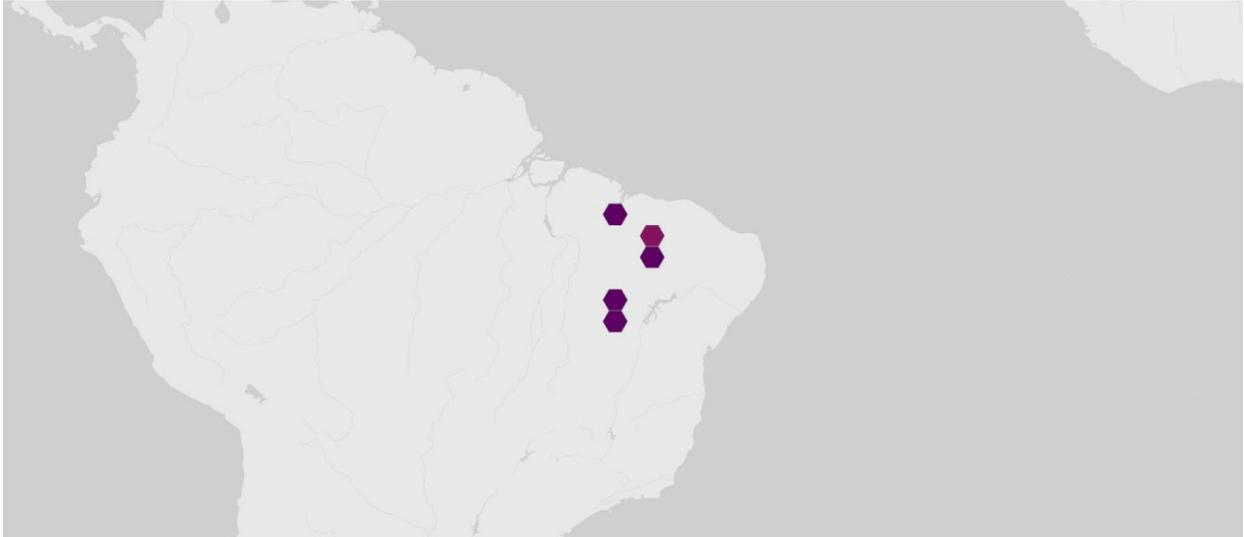


Figure 1. Map of northern South America showing locations where *Pterygoplichthys parnaibae* has been reported. Map from GBIF Secretariat (2018).

6 Distribution Within the United States

No records of *Pterygoplichthys parnaibae* in the wild in the United States were found.

7 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Pterygoplichthys parnaibae* was medium for the southern tip of Florida and Texas. Everywhere else in the contiguous United States had a low climate match. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low (scores between 0.000 and 0.005, inclusive, are classified as low). All States had a low individual climate score.

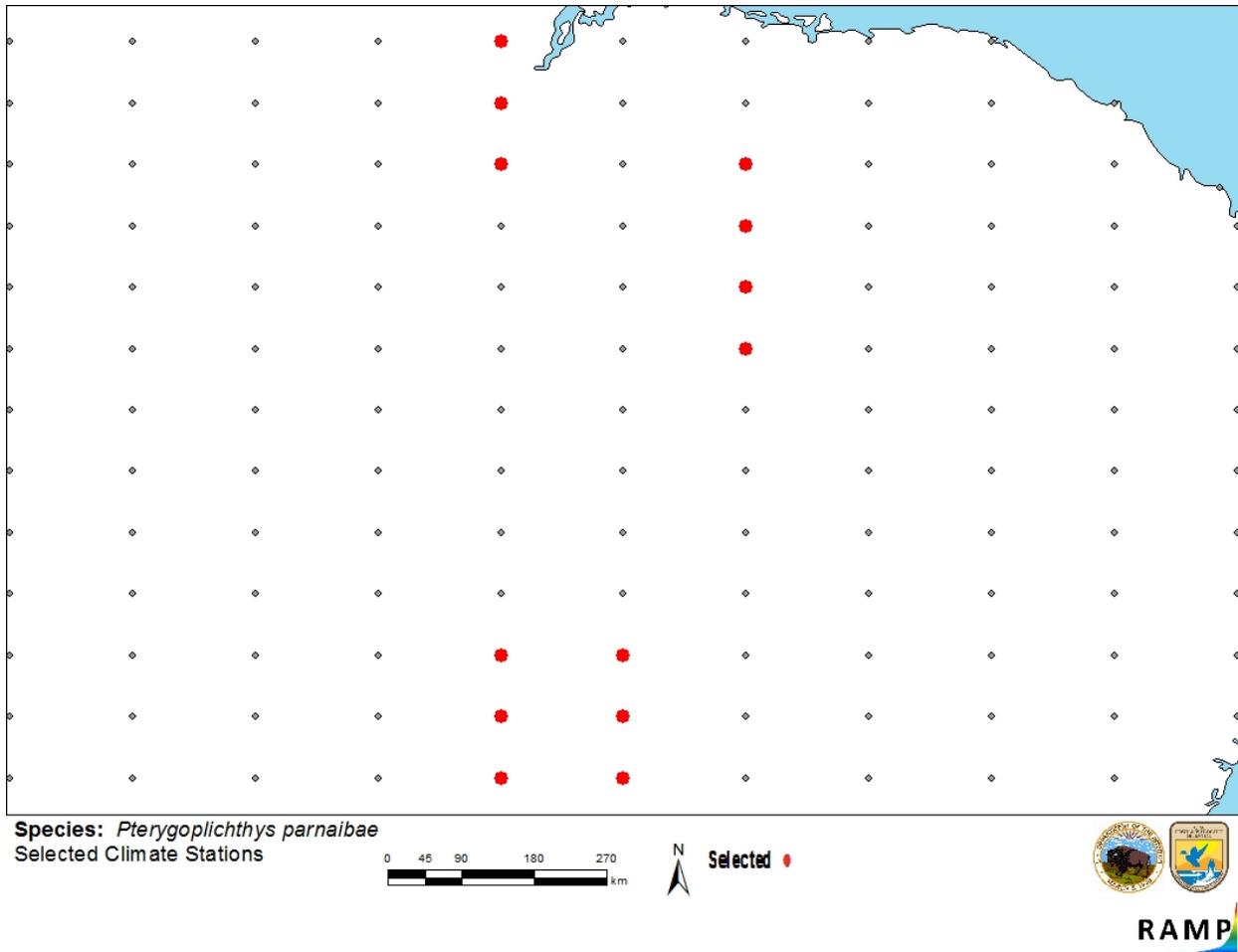


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in northern South America selected as source locations (red; Brazil) and non-source locations (gray) for *Pterygoplichthys parnaibae* climate matching. Source locations from GBIF Secretariat (2018). Selected source locations are within 100 km of one or more species occurrences, and do not necessarily represent the locations of occurrences themselves.

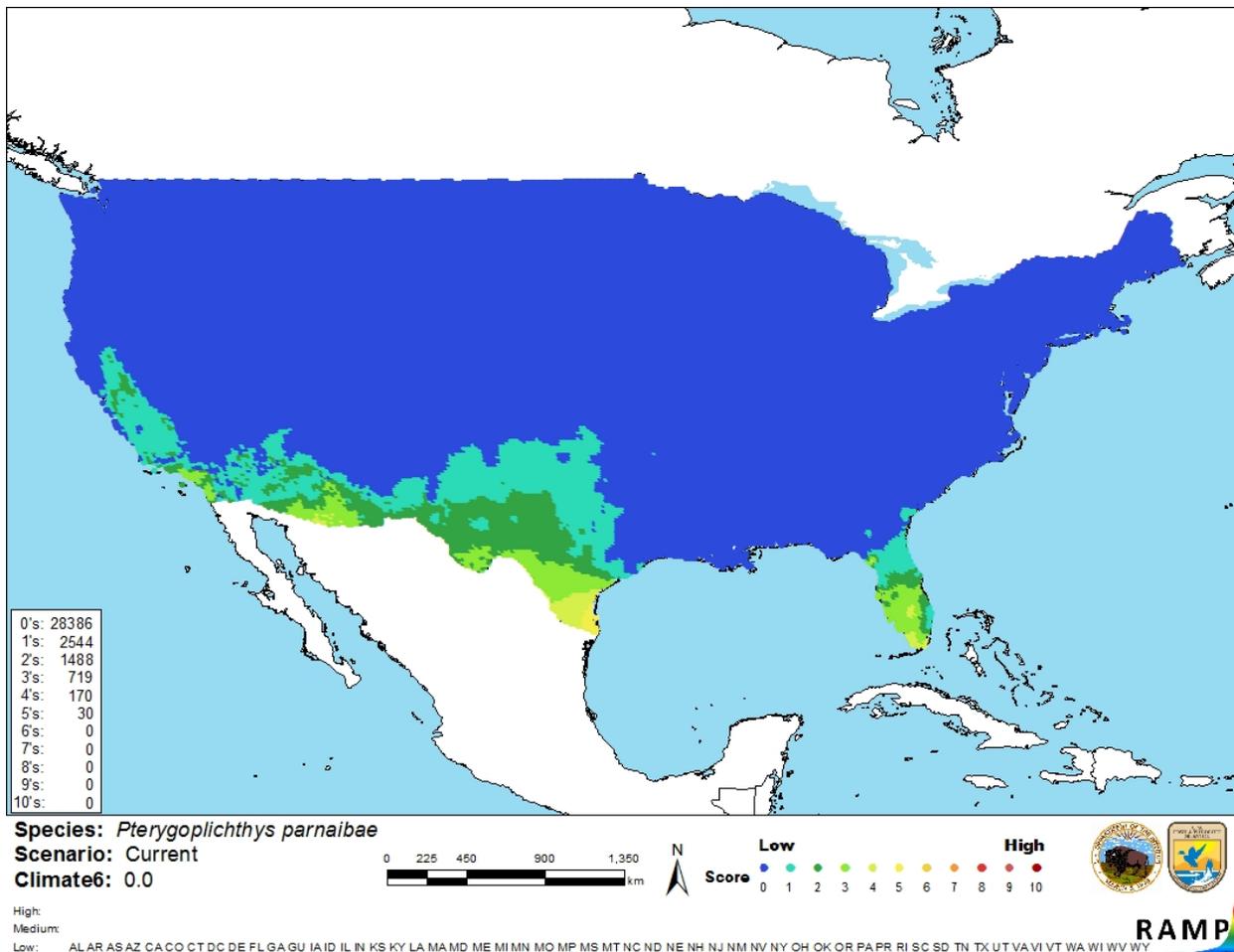


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Pterygoplichthys parnaibae* in the contiguous United States based on source locations reported from GBIF Secretariat (2018). Counts of climate match scores are tabulated on the left. 0/Blue = Lowest match, 10/Red = Highest match.

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

Climate 6: (Count of target points with climate scores 6-10)/ (Count of all target points)	Overall Climate Match Category
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

8 Certainty of Assessment

The certainty of assessment for *Pterygoplichthys parnaibae* is low. There is minimal information available for this species.

9 Risk Assessment

Summary of Risk to the Contiguous United States

Pterygoplichthys parnaibae is a South American freshwater armored catfish native to Brazil. The history of invasiveness is classified as “no known nonnative population.” It has not been reported as introduced or established anywhere in the world. The climate match for the contiguous United States was low. All states had low individual climate scores. The certainty of assessment is low. The overall risk assessment category is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 4): No Known Nonnative Population**
- **Overall Climate Match Category (Sec. 7): Low**
- **Certainty of Assessment (Sec. 8): Low**
- **Remarks/Important additional information: No additional information**
- **Overall Risk Assessment Category: Uncertain**

10 Literature Cited

Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 11.

Bailly N. 2017. *Pterygoplichthys parnaibae*. In World Register of Marine Species. Available: <http://www.marinespecies.org/aphia.php?p=taxdetails&id=1011307> (October 2018).

Fricke R, Eschmeyer WN, van der Laan R, editors. 2018. Catalog of fishes: genera, species, references. California Academy of Science. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp> (October 2018).

Froese R, Pauly D, editors. 2018. *Pterygoplichthys parnaibae* (Weber, 1991). FishBase. Available <https://www.fishbase.de/summary/Pterygoplichthys-parnaibae.html> (October 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Pterygoplichthys parnaibae* (Weber, 1991). Copenhagen: Global Biodiversity Information Facility. Available: <https://www.gbif.org/species/2340000> (October 2018).

New Mexico Department of Game and Fish. 2010. Director’s species importation list. Santa Fe, New Mexico: New Mexico Department of Game and Fish. Available: http://www.wildlife.state.nm.us/download/enforcement/importation/information/Director-s-Species-Importation-List-08_03_2010.pdf (November 2020).

[OIE] World Organisation for Animal Health. 2021. OIE-listed diseases, infections and infestations in force in 2021. Available: <http://www.oie.int/animal-health-in-the-world/oie-listed-diseases-2021/> (February 2021).

Sanders S, Castiglione C, Hoff M. 2018. Risk Assessment Mapping Program: RAMP. Version 3.1. U.S. Fish and Wildlife Service.

11 Literature Cited in Quoted Material

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.

Weber C. 1991. Nouveaux taxa dans *Pterygoplichthys* sensu lato (Pisces, Siluriformes, Loricariidae). *Revue Suisse de Zoologie* 98:637–643.

Weber C. 2003. Loricariidae - Hypostominae (armored catfishes). Pages 351–372 in Reis RE, Kullander SO, Ferraris CJ Jr, editors. Checklist of the freshwater fishes of South and Central America. Porto Alegre, Brazil: EDIPUCRS.