

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

Ecological Risk Screening Summary

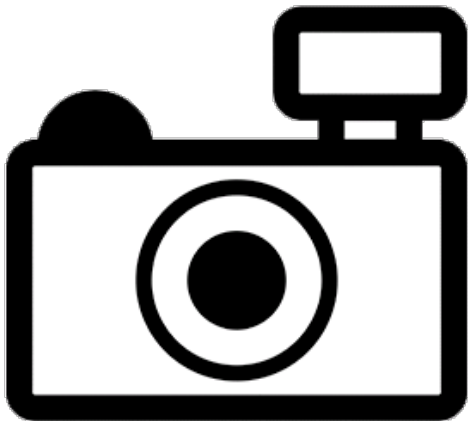
U.S. Fish & Wildlife Service, April 2012

Revised, October 2018

Web Version, 3/19/2021

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: Lake Maracaibo basin [Venezuela].”

Status in the United States

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

P. zuliaensis 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 zuliaensis* 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 zuliaensis* Weber 1991 is the current and original valid name of this species.

From ITIS (2018):

Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Actinopterygii
Class Teleostei
Superorder Ostariophysi
Order Siluriformes
Family Loricariidae
Subfamily Hypostominae
Genus *Pterygoplichthys*
Species *Pterygoplichthys zuliaensis* Weber, 1991

Size, Weight, and Age Range

Information on size, weight, and age was not found for *Pterygoplichthys zuliaensis*.

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: Lake Maracaibo basin [Venezuela].”

Introduced

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

Means of Introduction Outside the United States

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

Short Description

A short description of *Pterygoplichthys zuliaensis* was not found.

Biology

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

Human Uses

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

Diseases

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

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

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

4 History of Invasiveness

The history of invasiveness of *Pterygoplichthys zuliaensis* is classified as No Known Nonnative Population. No records of introduction were found for *P. zuliaensis*.

5 Global Distribution

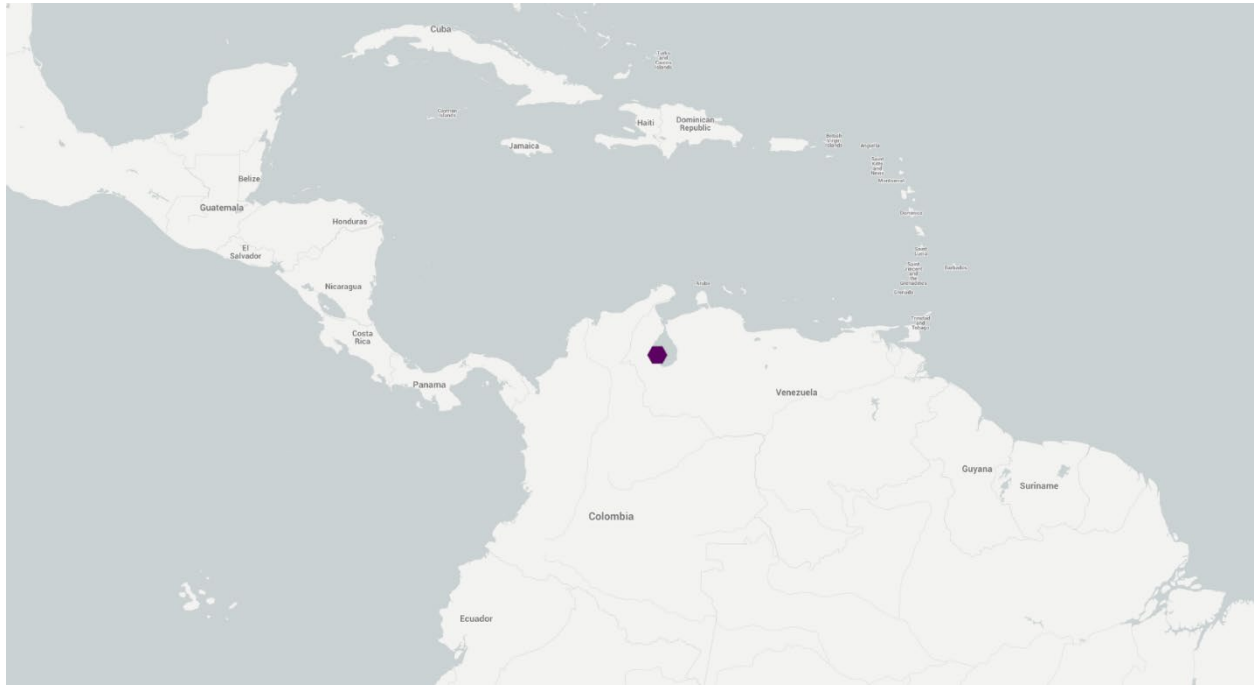


Figure 1. Map of northern South America showing location where *Pterygoplichthys zuliaensis* has been reported. Location is in Venezuela. Map from GBIF Secretariat (2018).

6 Distribution Within the United States

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

7 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Pterygoplichthys zuliaensis* was medium for southern peninsular Florida. 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 0.001, low (scores between 0.000 and 0.005, inclusive, are classified as low). Florida had a medium individual climate score.

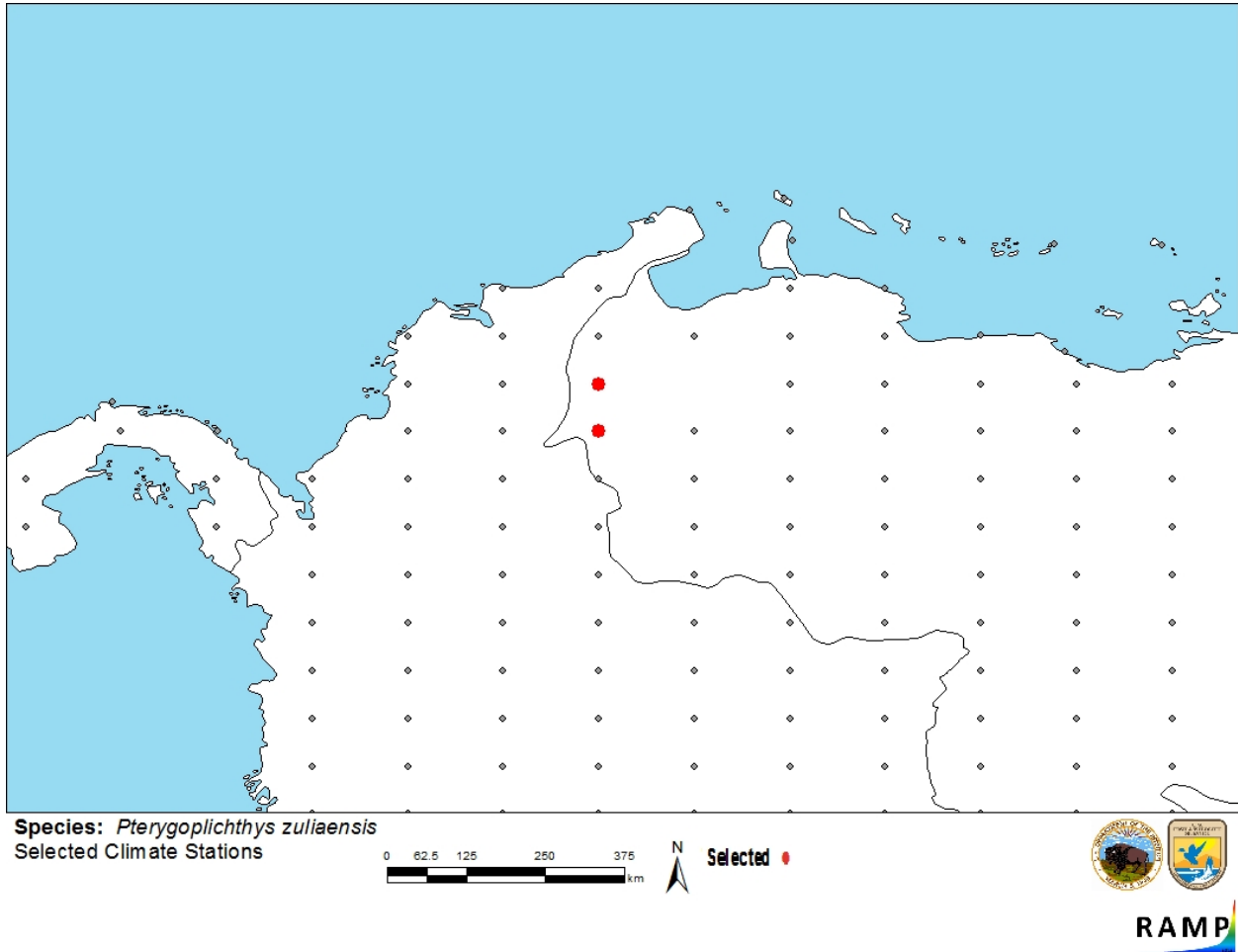


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in northern South America selected as source locations (red; Venezuela) and non-source locations (gray) for *Pterygoplichthys zuliaensis* climate matching. Source locations from GBIF Secretariat (2018). Selected source locations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

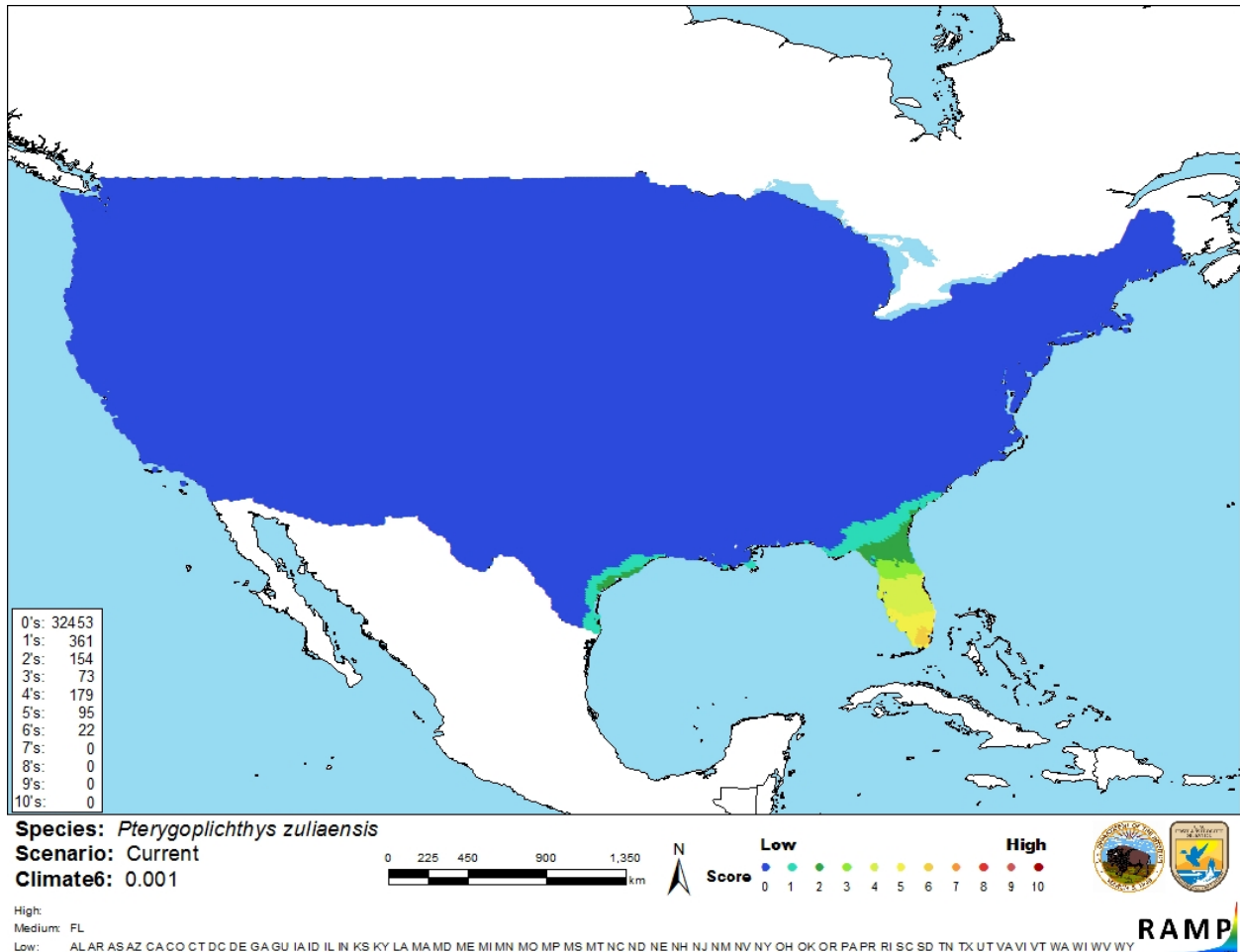


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Pterygoplichthys zuliaensis* in the contiguous United States based on source locations reported from Froese and Pauly (2018) and GBIF Secretariat (2018). Counts of climate match scores are tabulated on the left. 0/Blue = Lowest match, 10/Red = 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 zuliaensis* is low. There is minimal information available for this species, and there have been no introductions.

9 Risk Assessment

Summary of Risk to the Contiguous United States

Pterygoplichthys zuliaensis is a South American freshwater armored catfish native to Venezuela. Very little is known about this species. 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. However, southern peninsula Florida had a medium climate match. The certainty of assessment is low due to lack of information. 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.

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 zuliaensis* Weber, 1991. FishBase. Available: <http://www.fishbase.org/summary/Pterygoplichthys-zuliaensis.html> (October 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Pterygoplichthys zuliaensis* Weber, 1991. Copenhagen: Global Biodiversity Information Facility. Available: <https://www.gbif.org/species/2339961> (October 2018).

[ITIS] Integrated Taxonomic Information System. 2018. *Pterygoplichthys zuliaensis* Weber, 1991. Reston, Virginia: Integrated Taxonomic Information System. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=680355#null (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/Directors-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/> (March 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.