

# ***Pterygoplichthys xinguensis* (a catfish, no common name)**

## **Ecological Risk Screening Summary**

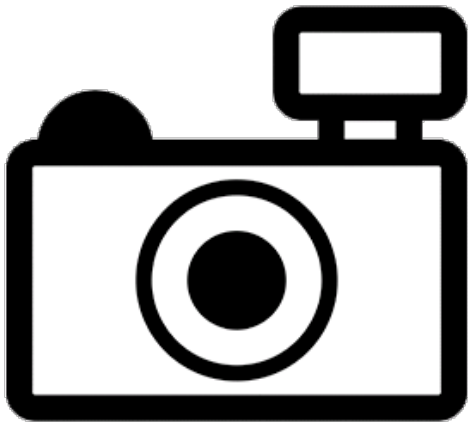
U.S. Fish & Wildlife Service, April 2012

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: Xingu River basin [Brazil].”

### **Status in the United States**

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

*P. xinguensis* 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 xinguensis* 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 xinguensis* (Weber 1991) is the current valid name of this species.

From Bailly (2017):

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

### Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 37.5 cm TL male/unsexed; [Giarrizzo et al. 2015]; max. published weight: 580.00 g [Giarrizzo et al. 2015]”

### 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: Xingu River basin [Brazil].”

### Introduced

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

## Means of Introduction Outside the United States

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

## Short Description

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

## Biology

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

## Human Uses

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

## Diseases

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

## Threat to Humans

From Froese and Pauly (2018):

“Harmless”

## 3 Impacts of Introductions

---

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

## 4 History of Invasiveness

---

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

## 5 Global Distribution

---



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

## 6 Distribution Within the United States

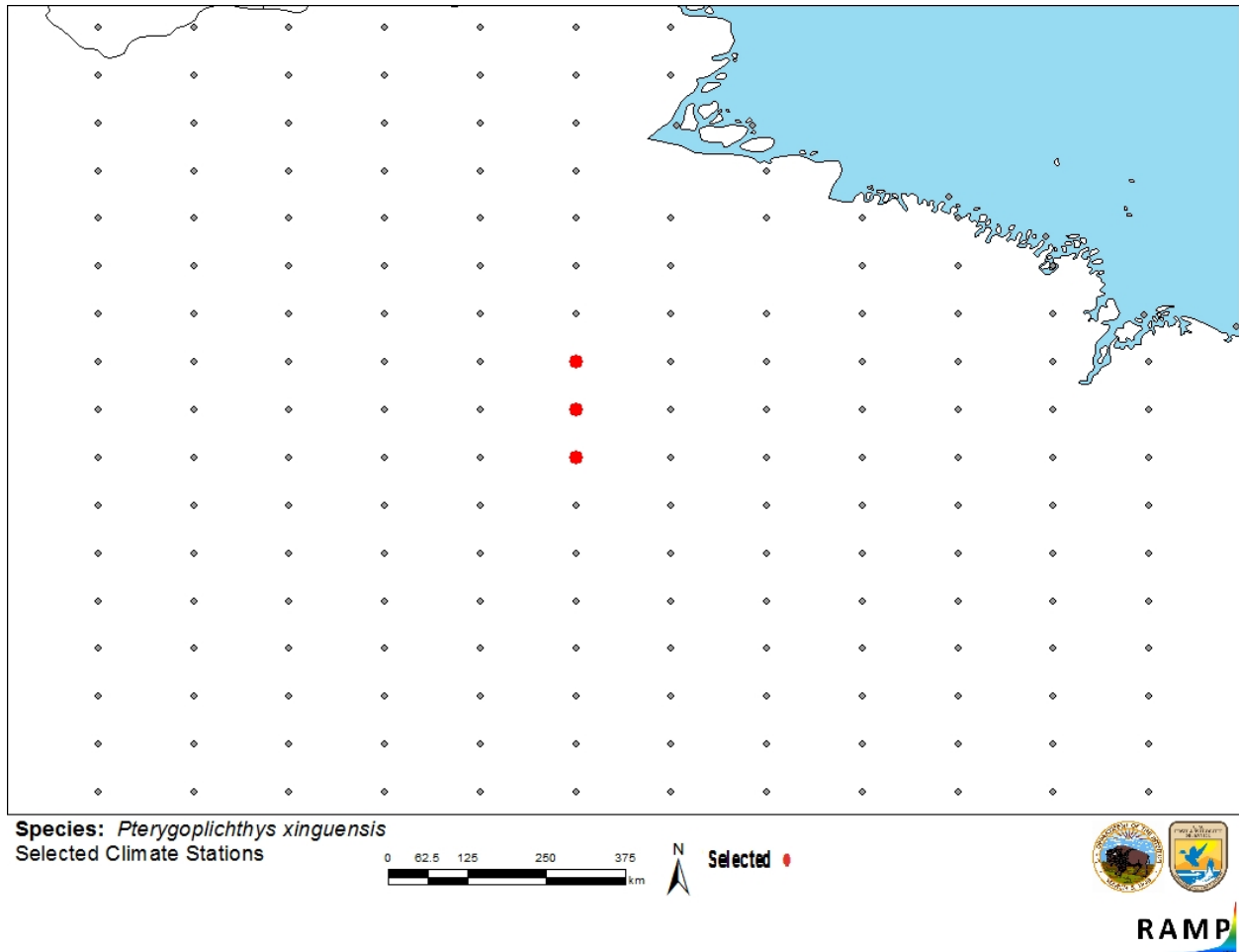
---

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

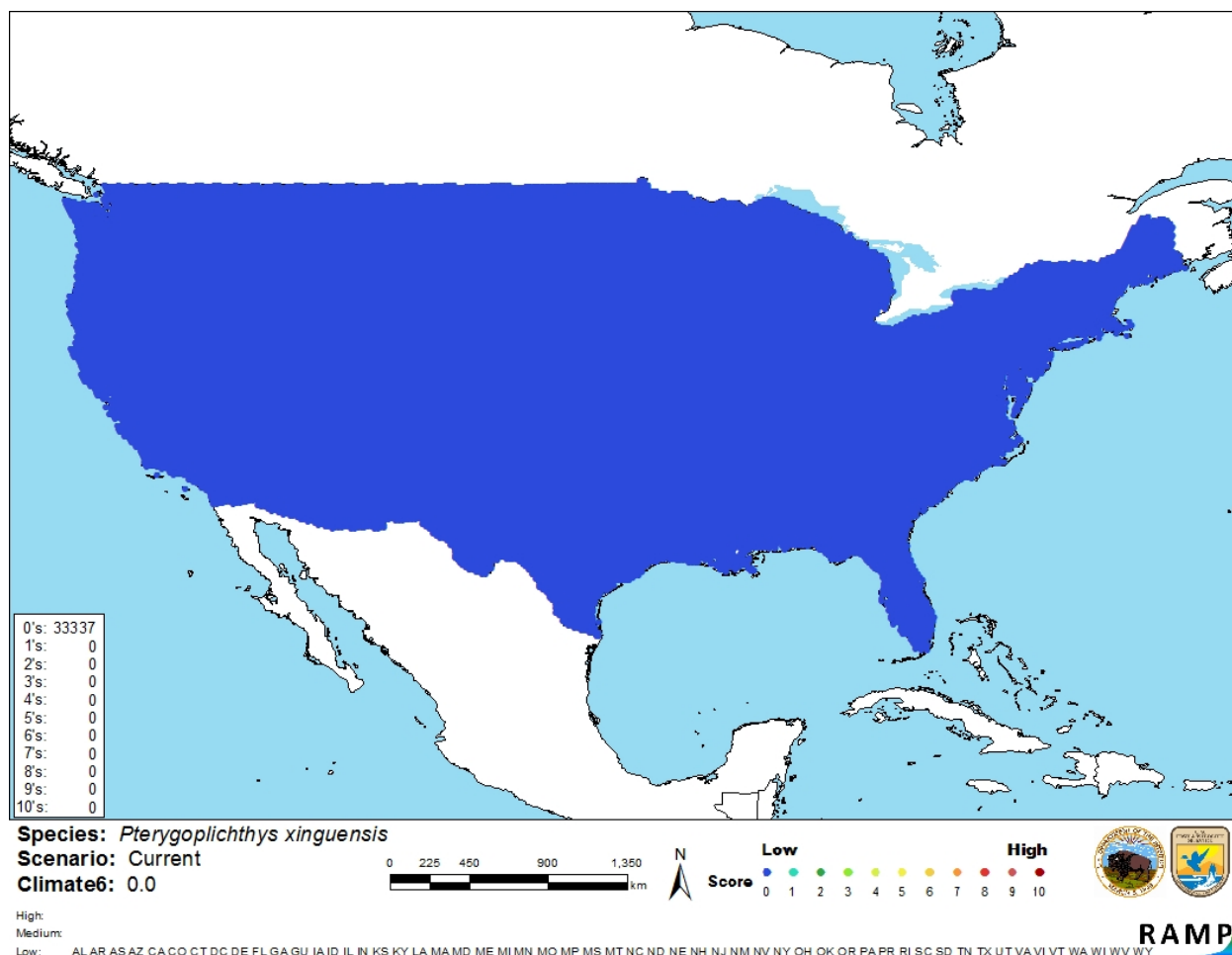
## 7 Climate Matching

### Summary of Climate Matching Analysis

The climate match for *Pterygoplichthys xinguensis* was low for the entire contiguous United States. There were no areas of high or medium 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 low individual climate scores.



**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 xinguensis* 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 xinguensis* 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
$\geq 0.103$	High

## 8 Certainty of Assessment

The certainty of assessment for *Pterygoplichthys xinguensis* is low. There is minimal information available for this species. No information on introductions of *Pterygoplichthys xinguensis* was found.

## 9 Risk Assessment

---

### Summary of Risk to the Contiguous United States

*Pterygoplichthys xinguensis* is a South American freshwater armored catfish native to Brazil. Little information was available on this species. The history of invasiveness for *P. xinguensis* 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 throughout the entire area. The certainty of assessment is low due to lack of information. The overall risk assessment category for *P. xinguensis* 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.**

Bailey N. 2017. *Pterygoplichthys xinguensis*. In World Register of Marine Species. Available: <http://www.marinespecies.org/aphia.php?p=taxdetails&id=1011323> (September 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 xinguensis* (Weber, 1991). FishBase. Available: <http://www.fishbase.se/summary/Pterygoplichthys-xinguensis.html> (October 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Pterygoplichthys xinguensis* (Weber, 1991). Copenhagen: Global Biodiversity Information Facility. Available: <https://www.gbif.org/species/5961544> (October 2018).

New Mexico Department of Game and Fish. 2010. Director's species importation list. Santa Fe: 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](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. 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/> (June 2019).

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.**

Giarrizzo T, de Sena Oliveira RR, Andrade MC, Gonçalves AP, Barbosa TAP, Martins AR, Marques DK, dos Santos JLB, de P R, da S. Frois, de Albuquerque TPO, de A. Montag LF, Camargo M, de Sousa LM. 2015. Length-weight and length-length relationships for 135 fish species from the Xingu River (Amazon basin, Brazil). *Journal of Applied Ichthyology* 31:514–424.

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