

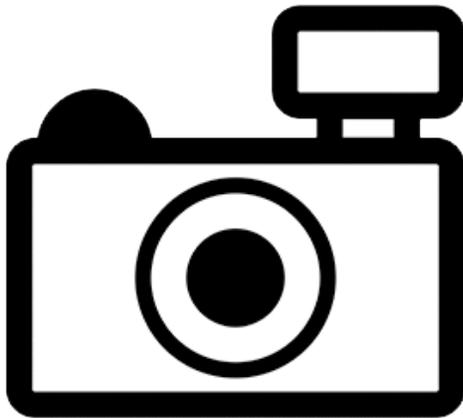
# ***Pterygoplichthys etentaculatus* (a catfish, no common name)**

## **Ecological Risk Screening Summary**

U.S. Fish & Wildlife Service, April 2012

Revised, November 2018

Web Version, 12/23/2019



No Photo Available

## **1 Native Range and Status in the United States**

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### **Native Range**

From Orfinger and Goodding (2018):

“Native Distribution: São Francisco River basin, Brazil (Weber 2003).”

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

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

### **Means of Introductions in the United States**

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

### **Remarks**

No additional remarks.

## 2 Biology and Ecology

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### Taxonomic Hierarchy and Taxonomic Standing

From Fricke et al. (2018):

“**Current status:** Valid as *Pterygoplichthys etentaculatus* (Spix and Agassiz 1829).”

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 etentaculatus* (Spix and Agassiz, 1829)”

### Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 30.0 cm SL male/unsexed; [Weber 2003]”

### Environment

From Froese and Pauly (2018):

“Freshwater; demersal; pH range: 6.2 - 7.8; dH range: ? - 25. [...] 22°C - 30°C [assumed to be recommended aquarium temperature] [Baensch and Riehl 1985]”

### Climate/Range

From Froese and Pauly (2018):

“Tropical; [...]”

## **Distribution Outside the United States**

### **Native**

From Orfinger and Goodding (2018):

“Native Distribution: São Francisco River basin, Brazil (Weber 2003).”

### **Introduced**

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

## **Means of Introduction Outside the United States**

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

## **Short Description**

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

## **Biology**

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

## **Human Uses**

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

## **Diseases**

No information on diseases of *Pterygoplichthys etentaculatus* was found. **No records of OIE-reportable diseases (OIE 2019) were found for *P. etentaculatus*.**

## **Threat to Humans**

From Froese and Pauly (2018):

“Harmless”

## **3 Impacts of Introductions**

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

## 4 Global Distribution

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**Figure 1.** Map of northern South America showing locations where *Pterygoplichthys etentaculatus* has been reported. Locations are in Brazil and Bolivia. Map from GBIF Secretariat (2018). The point in Bolivia was not used as a source point due to lack of literature to support this location.

## 5 Distribution Within the United States

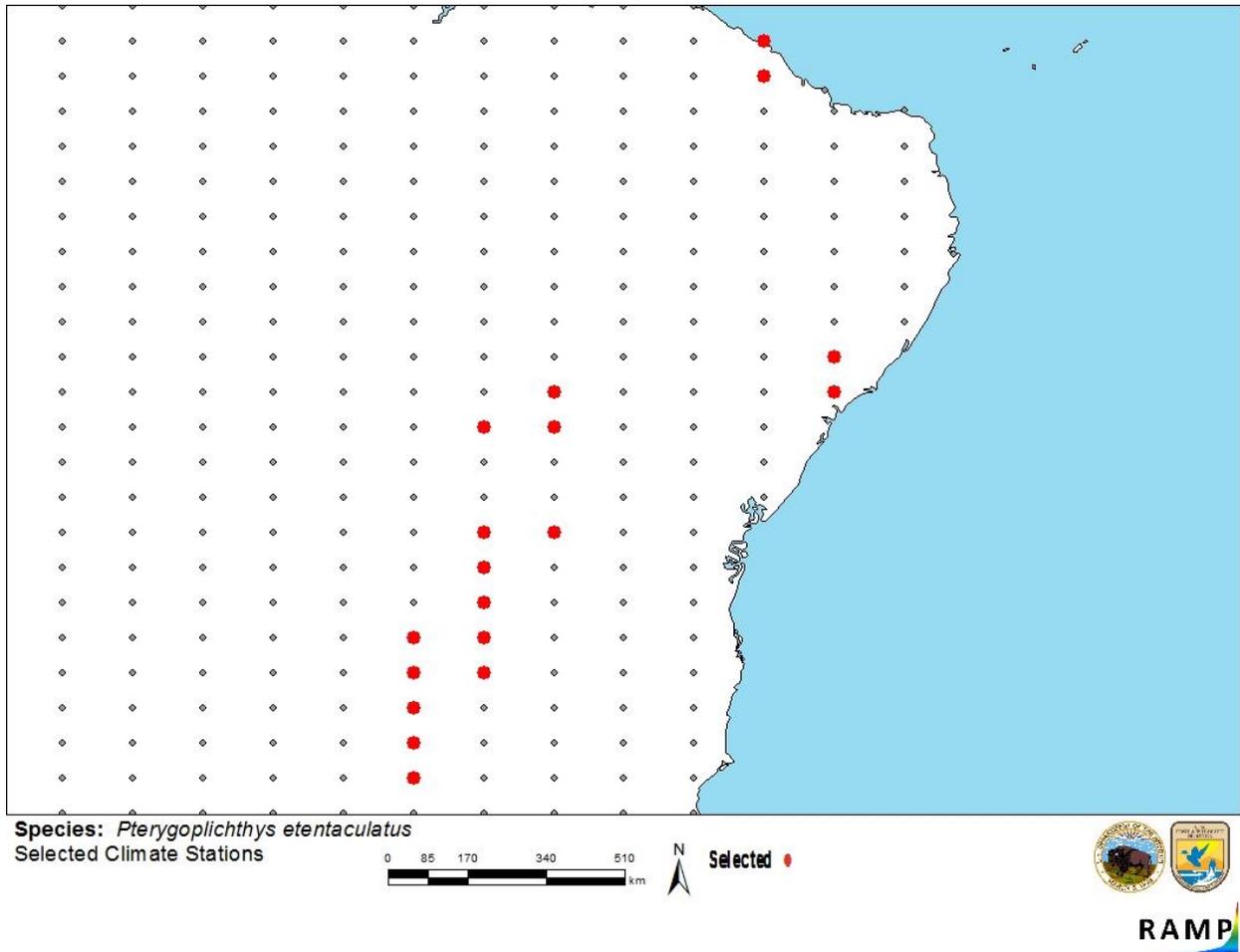
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No records of *Pterygoplichthys etentaculatus* in the wild in the United States were found.

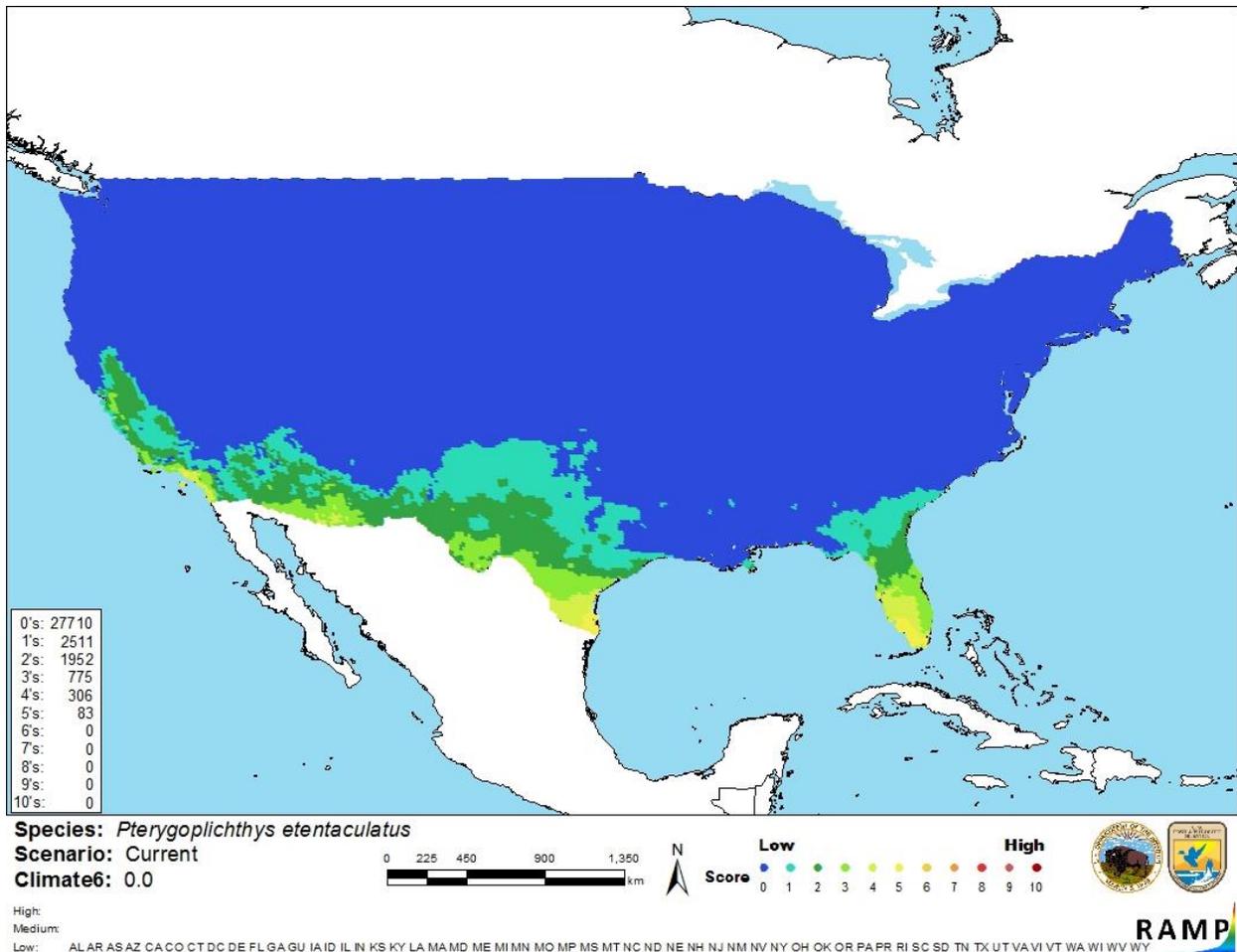
## 6 Climate Matching

### Summary of Climate Matching Analysis

The climate match for *Pterygoplichthys etentaculatus* was low for the majority of the contiguous United States with a medium match only in the southern tip of Texas, southern Florida, and the southern California coast. States along the United States and Mexico border as well as Florida, had medium-low climate matches. The Climate 6 score (Sanders et al. 2014; 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 6 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 etentaculatus* 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 etentaculatus* in the contiguous United States based on source locations reported from GBIF Secretariat (2018). 0 = Lowest match, 10 = Highest match.

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
$\geq 0.103$	High

## 7 Certainty of Assessment

The certainty of assessment for *Pterygoplichthys etentaculatus* is low. There is minimal information available for this species. No introductions of *Pterygoplichthys etentaculatus* were found.

## 8 Risk Assessment

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### Summary of Risk to the Contiguous United States

*Pterygoplichthys etentaculatus* is a freshwater armored catfish native to Brazil. Limited information is available on this species. The history of invasiveness is uncertain. *P. etentaculatus* has not been reported as introduced or established anywhere in the world outside of its native range. There is no indication of *Pterygoplichthys etentaculatus* being found in trade. The climate match for the contiguous United States was low. Only the southernmost areas of the country had a medium 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. 3): Uncertain**
- **Climate Match (Sec. 6): Low**
- **Certainty of Assessment (Sec. 7): Low**
- **Remarks/Important additional information:** No additional information.
- **Overall Risk Assessment Category: Uncertain**

## 9 References

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**Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 10.**

Fricke, R., W. N. Eschmeyer, and R. van der Laan, editors. 2018. Catalog of fishes: genera, species, references. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (November 2018).

Froese, R., and D. Pauly, editors. 2018. *Pterygoplichthys etentaculatus* Spix and Agassiz, 1829. FishBase. Available: <https://www.fishbase.de/summary/Pterygoplichthys-etentaculatus.html>. (November 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Pterygoplichthys etentaculatus* Spix and Agassiz, 1829. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/2339973> (November 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Pterygoplichthys etentaculatus* (Spix and Agassiz, 1829). Integrated Taxonomic Information System, Reston, Virginia. Available: [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=680352#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=680352#null). (November 2018).

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/>. (December 2019).

Orfinger, A. B., and D. D. Goodding. 2018. The global invasion of the suckermouth armored catfish genus *Pterygoplichthys* (Siluriformer: Loricariidae): annotated list of species, distributional summary, and assessment of impacts. *Zoological Studies* 57:1–17.

Sanders, S., C. Castiglione, and M. Hoff. 2018. Risk assessment mapping program: RAMP, version 3.1. U.S. Fish and Wildlife Service.

## 10 References Quoted But Not Accessed

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**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.**

Baensch, H. A., and R. Riehl. 1985. *Aquarien atlas, band 2*. Mergus, Verlag für Natur-und Heimtierkunde GmbH, Melle, Germany.

Weber, C. 2003. Loricariidae - Hypostominae (armored catfishes). Pages 351–372 *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.