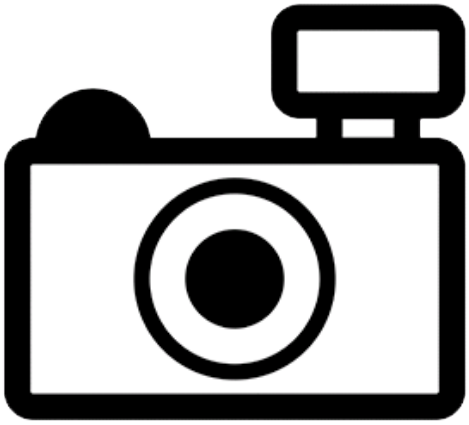
Hypostomus latirostris (a catfish, no common name)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, January 2013
Revised, August 2018
Web Version, 9/13/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

"South America: Paraguay River basin [Brazil, Paraguay]."

Status in the United States

No records of *Hypostomus latirostris* in trade or in the wild in the United States were found.

Means of Introductions in the United States

No records of *Hypostomus latirostris* in the wild in the United States were found.

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

According to Eschmeyer et al. (2018), *Hypostomus latirostris* (Regan 1904) is the current valid name of this species. *Hypostomus latirostris* was originally described as *Plecostomus jaguribensis* Regan 1904.

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 *Hypostomus*
Species *Hypostomus latirostris* (Regan, 1904)"

Size, Weight, and Age Range

From Froese and Pauly (2018):

"Max length : 26.0 cm TL male/unsexed; [Weber 2003]"

Environment

From Froese and Pauly (2018):

"Freshwater; demersal."

Climate/Range

From Froese and Pauly (2018):

"Tropical"

Distribution Outside the United States

Native

From Froese and Pauly (2018):

"South America: Paraguay River basin [Brazil, Paraguay]."

Introduced

No records of introduction were found for *Hypostomus latirostris*.

Means of Introduction Outside the United States

No records of introduction were found for *Hypostomus latirostris*.

Short Description

No description of *Hypostomus latirostris* was found.

Biology

No information on the biology of *Hypostomus latirostris* was found.

Human Uses

No information on human uses of *Hypostomus latirostris* was found.

Diseases

No records of diseases were found for *Hypostomus latirostris.*

Threat to Humans

From Froese and Pauly (2018):

"Harmless"

3 Impacts of Introductions

No records of introduction were found for *Hypostomus latirostris*, therefore there is no information on impacts of introductions.

4 Global Distribution

Figure 1. Known global distribution of *Hypostomus latirostris*. Locations are in Brazil and Bolivia. Map from GBIF Secretariat (2018).

The observations along the border between Brazil and Bolivia (Figure 1) were used as source points in the climate match. While there is no mention of this fish being present in the Amazon River drainage in Froese and Pauly (2018), multiple collections of *Hypostomus latirostris* were made by researchers at these locations (GBIF Secretariat 2018). Multiple collections and the identification by a reliable source reported in GBIF Secretariat (2018) supports the existence of a population in this area.

The observation near the mouth of the Amazon River in northern Brazil (Figure 1) was not used as a source point in the climate match. The record information indicates that the specimen was collected from a market in Belem, Brazil (GBIF Secretariat 2018) so it is not indicative of an established population at that location.

There were no georeferenced locations in Paraguay to use as source points in the climate match.

5 Distribution Within the United States

No records of *Hypostomus latirostris* in the wild in the United States were found.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Hypostomus latirostris* was low for the majority of the contiguous United States. There is a high climate match in south Florida and a medium match in coastal South Carolina, northern Florida, the Gulf Coast of Texas, and far southern Louisiana. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.013, medium. The range for a medium climate score is between 0.005 and 0.103. All States had low individual climate scores except Florida, which had a high individual climate score.

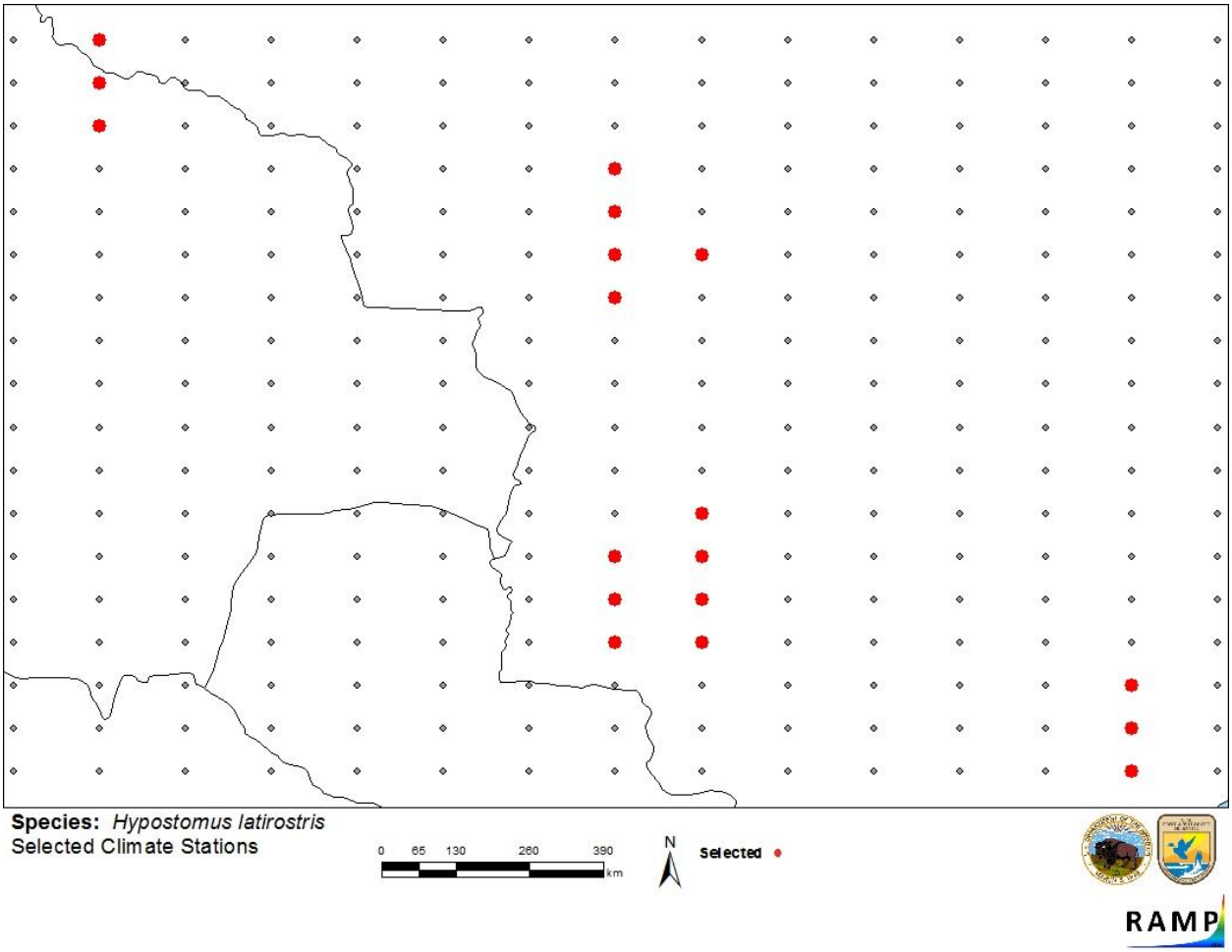


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in South America selected as source locations (red; Brazil, Bolivia) and non-source locations (gray) for *Hypostomus latirostris* climate matching. Source locations from GBIF Secretariat (2018). Georeferenced locations were not available for parts of the species range in Paraguay.

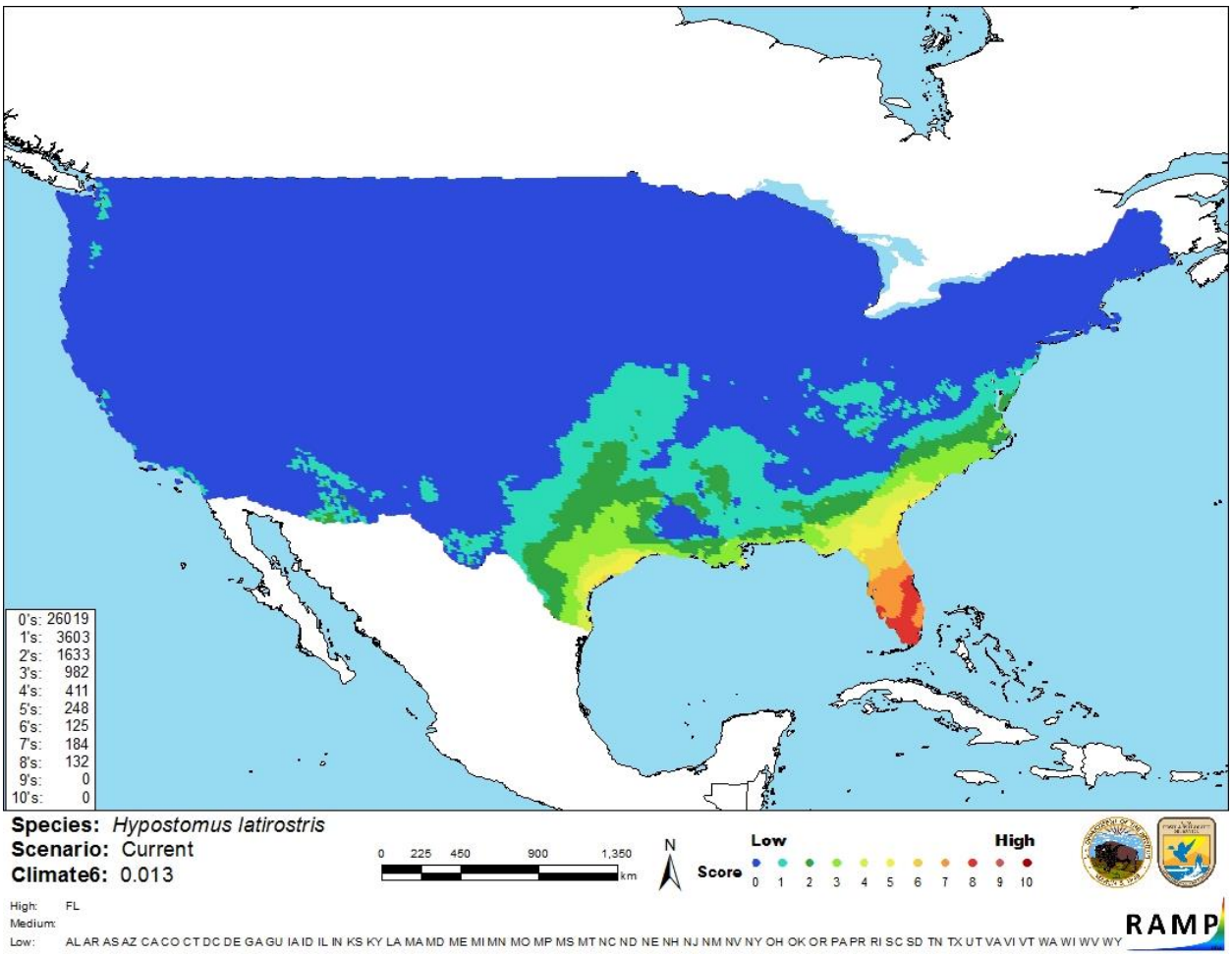


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Hypostomus latirostris* in the contiguous United States based on source locations reported by GBIF Secretariat (2018). 0 = Lowest match, 10 = Highest match.

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≤X≤0.005	Low
0.005<X<0.103	Medium
≥0.103	High

7 Certainty of Assessment

The certainty of assessment is low. There was minimal biological information available for this species. There were no records of introductions found, so impacts of introduction are unknown. The species range information used for the climate match was incomplete.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Hypostomus latirostris is a member of the suckermouth armored catfish family (Loricariidae), native to South America. Little information is available about this species. The history of invasiveness is uncertain. No records of introductions were found. The climate match for the contiguous United States was medium, although much of the area was a low match. Southern Florida had a high climate match, and coastal South Carolina, northern Florida, the Gulf Coast of Texas, and far southern Louisiana had a medium match. Because of a lack of information certainty of assessment is low and the overall risk assessment category is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 3): Uncertain**
- **Climate Match (Sec. 6): Medium**
- **Certainty of Assessment (Sec. 7): Low**
- **Remarks/Important additional information:** No additional information.
- **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.

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

Froese, R., and D. Pauly, editors. 2018. *Hypostomus latirostris* Regan, 1904. FishBase. Available: https://www.fishbase.de/summary/Hypostomus-latirostris.html. (August 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Hypostomus latirostris* (Regan, 1904). Global Biodiversity Information Facility, Copenhagen. Available: https://www.gbif.org/species/5202136. (August 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Hypostomus latirostris* (Regan, 1904). Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=680188#null. (August 2018).

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

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.

Regan, C. T. 1904. A monograph of the fishes of the family Loricariidae. Transactions of the Zoological Society of London 17(1):191–350.

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.