

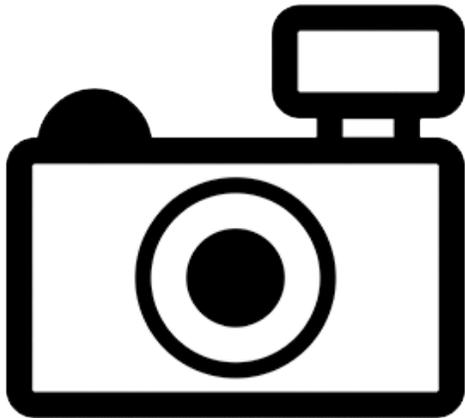
***Hypostomus goyazensis* (a catfish, no common name)**

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, February 2013

Revised, August 2018

Web Version, 9/11/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“South America: upper Araguaia River basin [Brazil].”

From Alves et al. (2006):

“[...] *H. goyazensis*, three males and two females from the Vermelho river, Goiás Velho, Goiás, Brazil [...]”

Status in the United States

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

Means of Introductions in the United States

No records of *Hypostomus goyazensis* 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 goyazensis* (Regan 1908) is the current valid name for this species. It was originally described as *Plecostomus goyazensis*.

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 goyazensis* (Regan, 1908)”

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: upper Araguaia River basin [Brazil].”

From Alves et al. (2006):

“[...] *H. goyazensis*, three males and two females from the Vermelho river, Goiás Velho, Goiás, Brazil [...]”

Introduced

No records of introductions of *Hyposotmus goyazensis* were found.

Means of Introduction Outside the United States

No records of introductions of *Hyposotmus goyazensis* were found.

Short Description

A short description of *Hyposotmus goyazensis* was not found.

Biology

Information on the biology of *Hyposotmus goyazensis* was not found.

Human Uses

Information on human uses of *Hyposotmus goyazensis* was not found.

Diseases

Information on diseases of *Hyposotmus goyazensis* was not found.

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

No records of introductions of *Hyposotmus goyazensis* were found; therefore, there is no information on impacts of introductions.

4 Global Distribution

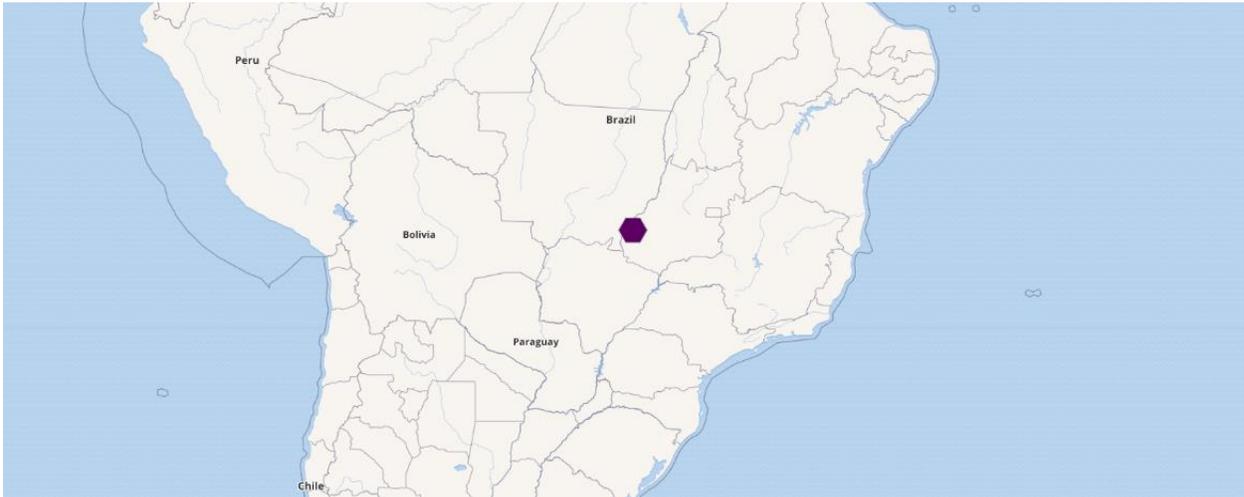


Figure 1. Known global distribution of *Hypostomus goyazensis*. Location is in Brazil. Map from GBIF Secretariat (2018).

An additional location in Brazil is given in Alves et al. (2006). The additional location is to the northeast of the location shown in Figure 1 and was used as a source point in the climate match.

5 Distribution Within the United States

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

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Hypostomus goyazensis* was generally low for most of the contiguous United States. Only southern Florida had a medium match. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for contiguous United States was 0.000, low. All States had low individual climate scores except Florida, which had a medium individual score.

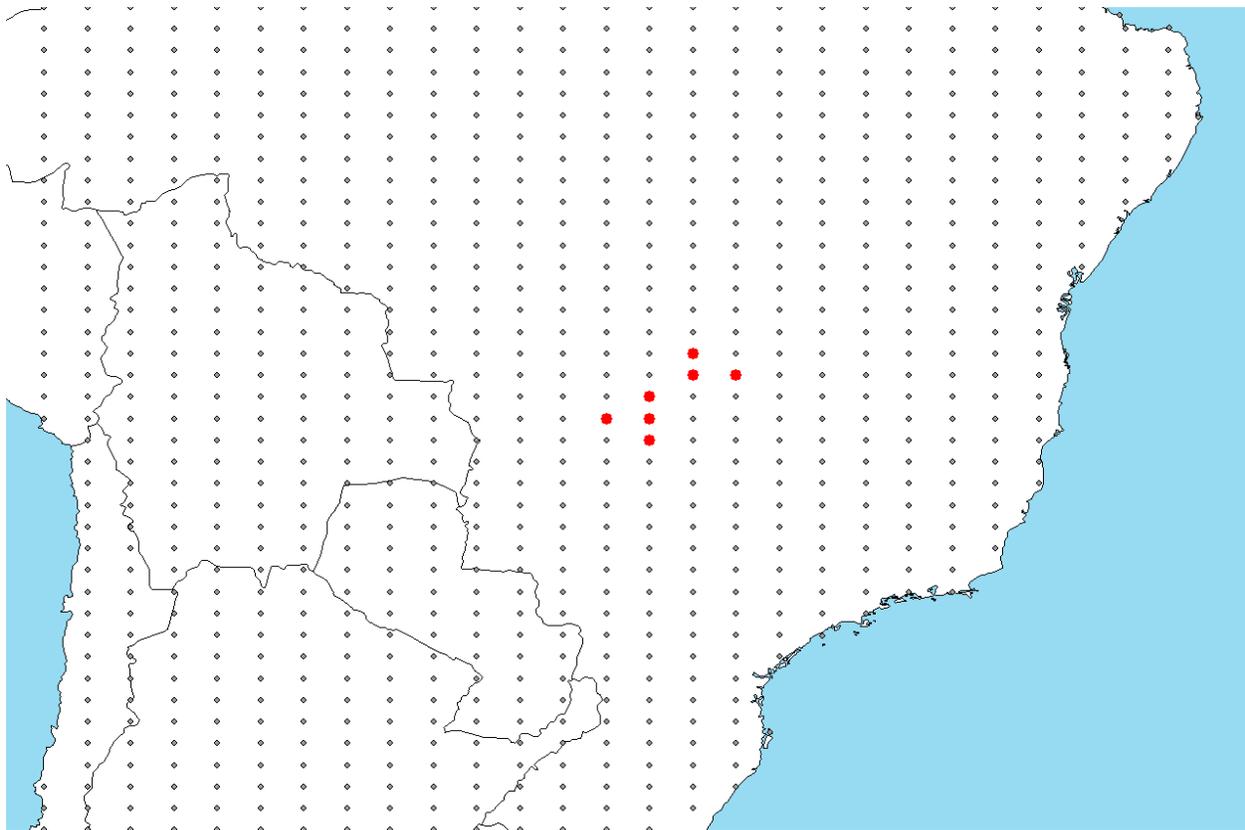


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations selected as source locations (red; Brazil) and non-source locations (gray) for *Hypostomus goyazensis* climate matching. Source locations from Alves et al. (2006) and GBIF Secretariat (2018).

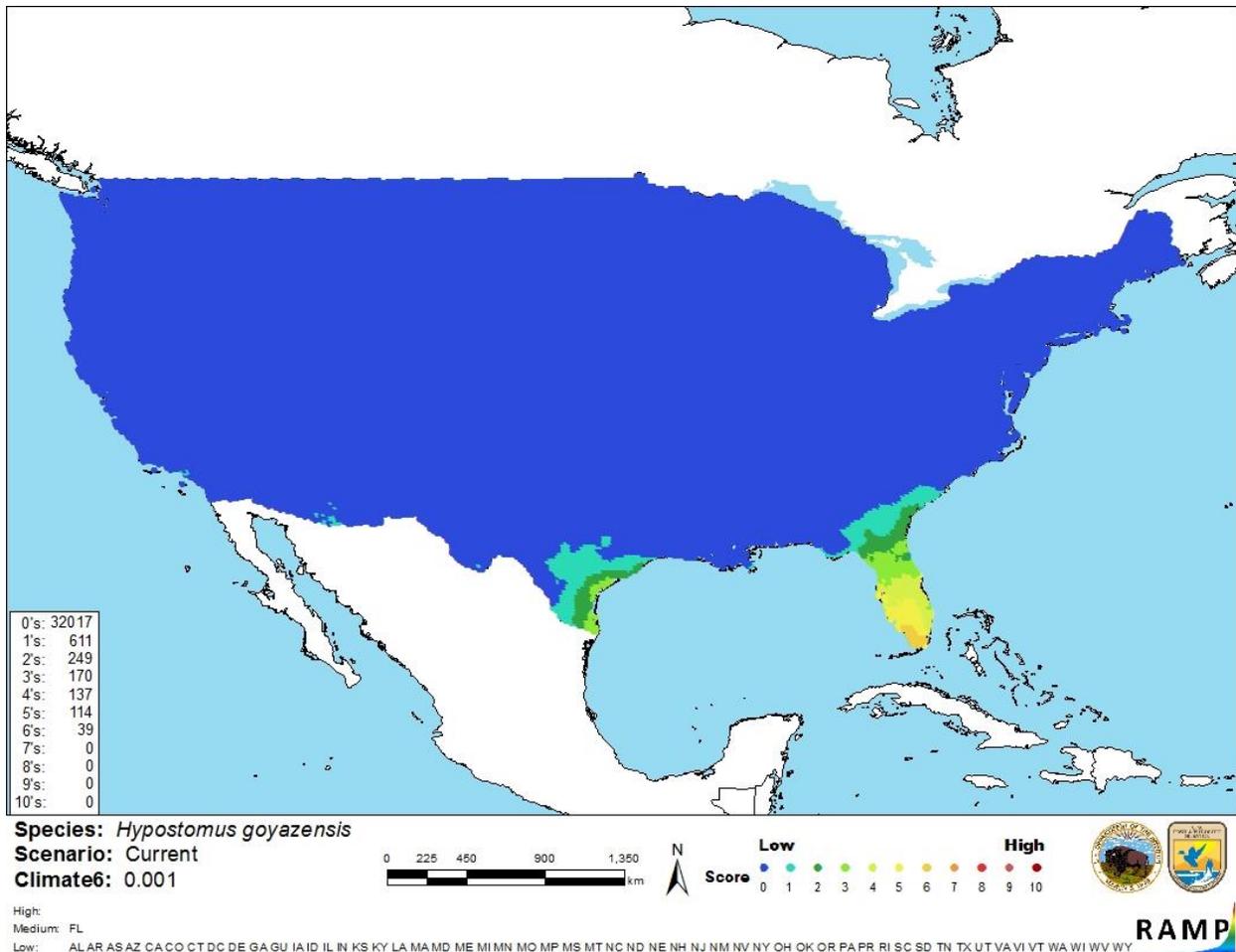


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Hypostomus goyazensis* in the contiguous United States based on source locations reported by Alves et al. (2006) and GBIF Secretariat (2018). 0 = Lowest match, 10 = Highest match.

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
≥ 0.103	High

7 Certainty of Assessment

The certainty of assessment for *Hypostomus goyazensis* is low. There was minimal information in general for the species and no records of introductions. The lack of recorded introductions means that there is no information on impacts of introductions to evaluate.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Hypostomus goyazensis is an armored catfish native to southern Brazil. The history of invasiveness is uncertain. No records of introduction were found. The climate match is low; however, Florida did have a medium individual climate score. The certainty of assessment is low. In addition to no records of introductions, there is a general 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

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

Alves, A. L., C. Oliveira, M. Nirchio, Á. Granado, and F. Foresti. 2006. Karyotypic relationships among the tribes of Hypostominae (Siluriformes: Loricariidae) with description of XO sex chromosome system in a Neotropical fish species. *Genetica* 128:1–9.

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 goyazensis* (Regan, 1908). FishBase. Available: <http://www.fishbase.se/summary/Hypostomus-goyazensis.html>. (August 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Hypostomus goyazensis* (Regan, 1908). Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/5202247>. (August 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Hypostomus goyazensis* (Regan, 1908). Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=680173#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.

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.