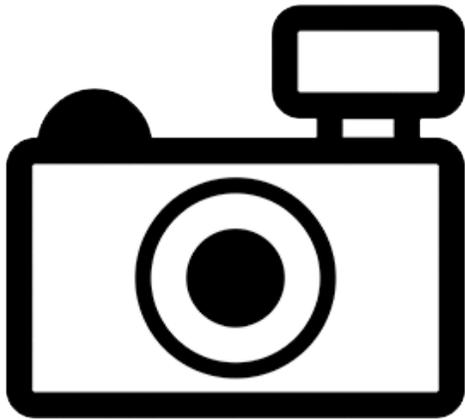


Hypostomus strigaticeps (a catfish, no common name)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, January 2013
Revised, December 2018
Web Version, 8/13/2019



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“South America: Tietê River basin [Brazil].”

From Cardone et al. (2006):

“*Hypostomus strigaticeps* (Regan, 1907) is one of the most abundant and widely distributed species in the Corumbataí river.”

GBIF Secretariat (2018) suggests that there are established populations in Paraguay as well as Brazil.

Status in the United States

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

Means of Introductions in the United States

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

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From Fricke et al. (2018):

“**Current status:** Valid as *Hypostomus strigaticeps* (Regan 1908).”

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* Lacepède, 1803 – suckermouth catfishes
Species *Hypostomus strigaticeps* (Regan, 1908)”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 16.0 cm SL male/unsexed; [Zawadzki et al. 2012]”

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: Tietê River basin [Brazil].”

From Cardone et al. (2006):

“*Hypostomus strigaticeps* (Regan, 1907) is one of the most abundant and widely distributed species in the Corumbataí river.”

GBIF Secretariat (2018) suggests that there are established populations in Paraguay as well as Brazil.

Introduced

No records were found of introductions of *Hypostomus strigaticeps*.

Means of Introduction Outside the United States

No records were found of introductions of *Hypostomus strigaticeps*.

Short Description

From Cardone et al. (2006):

“Like other loricariids (Siluriformes, Loricariidae), it exhibits important functional adaptations – ventral mouth, modified lips forming an adherent sucker and teeth resembling spatulae [...].”

Biology

From Cardone et al. (2006):

“Like other loricariids (Siluriformes, Loricariidae), it exhibits important functional adaptations – ventral mouth, modified lips forming an adherent sucker and teeth resembling spatulae – to scrape its food from a variety of substrates (Shaefer & Lauder, 1986; Delariva & Agostinho, 2001), for it feeds mainly off diatoms and periphyton (Power, 1984; 1990).”

From Gomiero and Braga (2007):

“The cascudos, *Hypostomus strigaticeps* and *Hypostomus ancistroides* had a prolonged reproductive period, contrasting to what was registered by Barbieri and Verani (1987) and

Barbieri and Santos (1987). Prolonged breeding may be due to the low fecundity and parental care, as in Mazzoni and Caramaschi (1995).”

Human Uses

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

Diseases

No records of OIE-reportable diseases (OIE 2019) were found for *Hypostomus strigaticeps*.

From Zica et al. (2011):

“*Hypostomus hermanni*, [...] and *H. strigaticeps* were new hosts recorded for *A. compactum* metacercariae.”

From Zica et al. (2012):

“This is the first record of *U. unilatus* in southeastern Brazil, outside the Amazon River Basin, with *H. strigaticeps*, [...] as new hosts, [...].”

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

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

4 Global Distribution

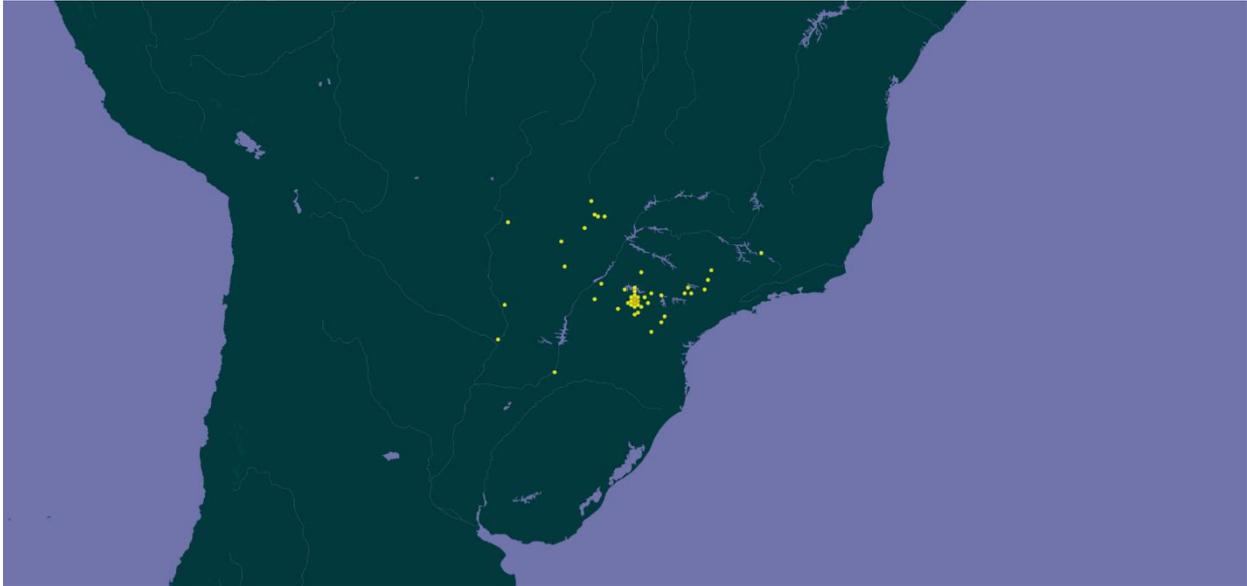


Figure 1. Map of South America showing locations where *Hypostomus strigaticeps* has been reported. Locations are in Brazil and Paraguay. Map from GBIF Secretariat (2018).

5 Distribution Within the United States

This species has not been reported in the wild in the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Hypostomus strigaticeps* was low for the majority of western and middle United States as well as the northeast. The majority of the coastal southeast and Gulf Coast had a high match with inland parts the southern States having a medium match. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.044, medium (scores greater than 0.005, but less than 0.103, are classified as medium). Most States had low individual Climate 6 scores; however, Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina had high scores and Texas had a medium score.

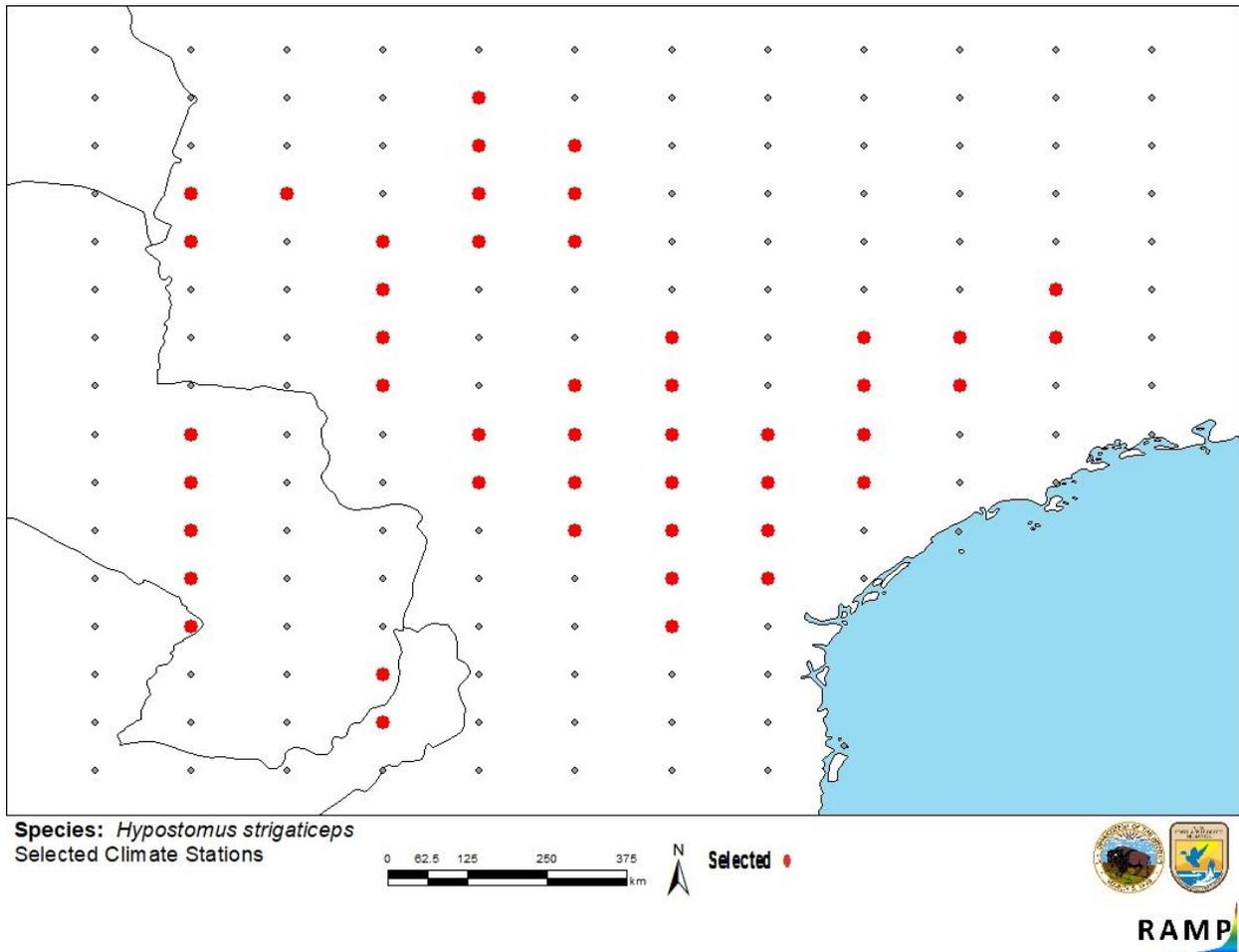


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in South America selected as source locations (red; Brazil, Paraguay, Argentina) and non-source locations (gray) for *Hypostomus strigaticeps* climate matching. Source locations are from GBIF Secretariat (2018). Selected source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

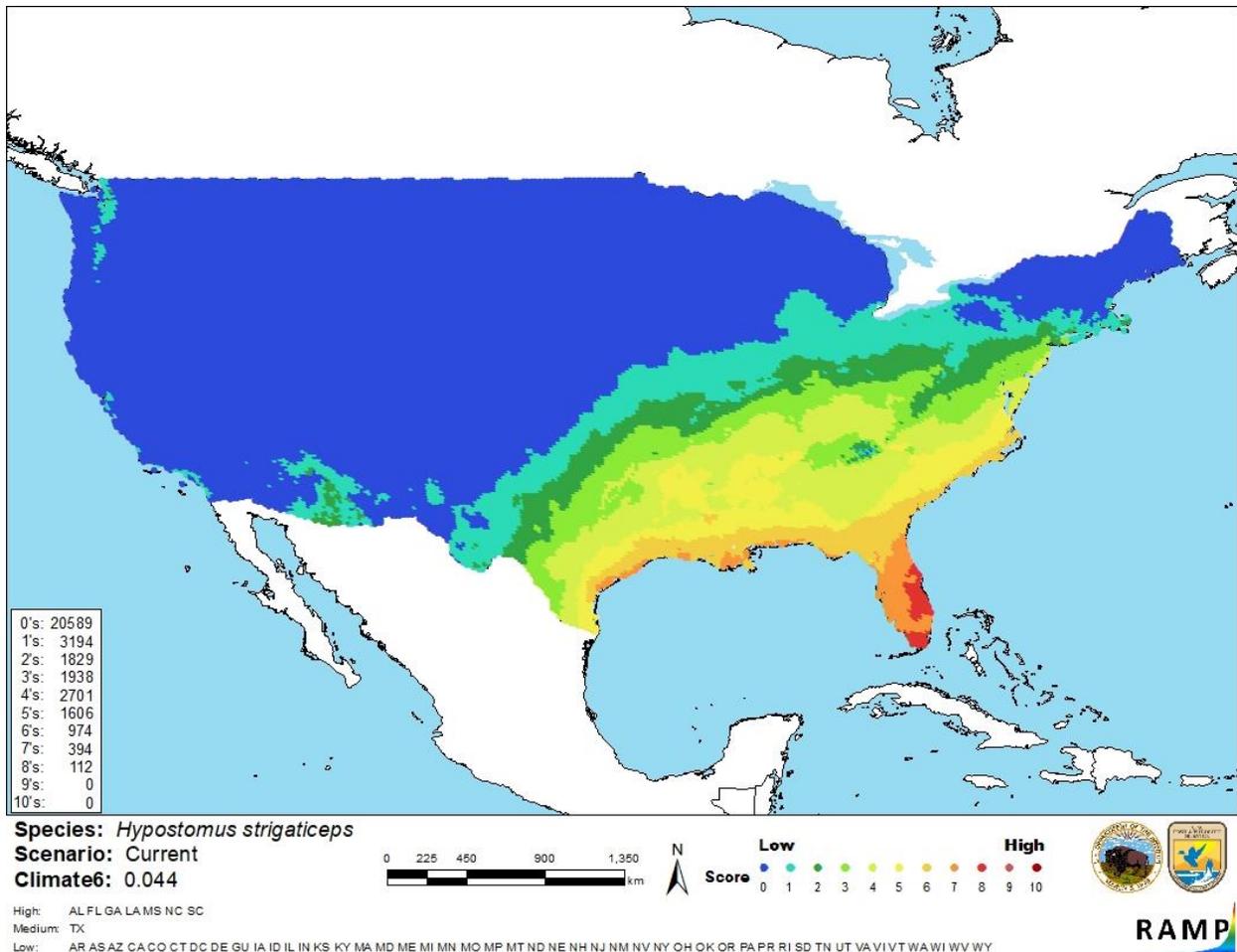


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Hypostomus strigaticeps* in the contiguous United States based on source locations reported from GBIF Secretariat (2018). 0 = Lowest match, 10 = Highest match.

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
$0.000 \leq X < 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

7 Certainty of Assessment

There is minimal information available for *Hypostomus strigaticeps*. No information was found on introductions; therefore, there is no information on impacts of introduction. The certainty of assessment for *H. strigaticeps* is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Hypostomus strigaticeps is a South American suckermouth catfish native to Brazil. It has not been reported as introduced or established anywhere in the world outside of its native range; therefore, there is no information on impact of introduction. This species is not found in trade. The history of invasiveness is uncertain. The overall climate match for the contiguous United States was medium. The southern States and Texas had medium climate matches with areas of high match along the coastal areas. Due to lack of information, the certainty of assessment is low. The overall risk assessment category for this species 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.

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- Zica, E. O. P., H. Brandão, C. H. Zawadzki, A. B. Nobile, E. D. Carvalho, and R. J. da Silva. 2011. The occurrence of *Austrodiplostomum compactum* (Lutz, 1928) (Digenea: Diplostomidae) metacercariae in the eyes of loricariid fish (Siluriformes: Osteichthyes: Loricariidae) from Brazil. *Journal of Helminthology* 85:73–79.

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.

- Barbieri, G., and E. P. Santos. 1987. Crescimento e tamanho da primeira maturação gonadal de *Hypostomus* aff. *plecostomus* (Linnaeus, 1758) (Osteichthyes, Loricariidae), da represa do Monjolinho. (São Carlos, SP). *Ciência e Cultura* 39(7):659–663.
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