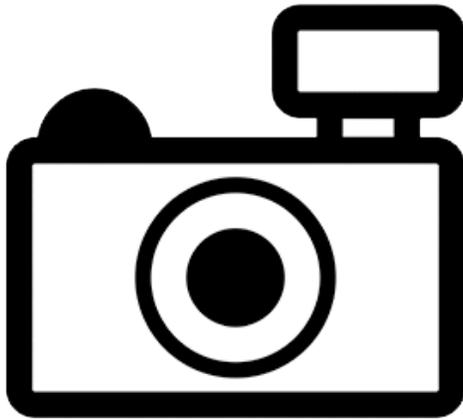


# ***Hypostomus interruptus* (a catfish, no common name)**

## **Ecological Risk Screening Summary**

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



No Photo Available

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

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### **Native Range**

From Oyakawa et al. (2005):

“*Hypostomus interruptus* is known to occur only in Ribeira de Iguape river basin [Brazil]. Sampling efforts in this region in the last ten years suggests *Hypostomus interruptus* as the most common *Hypostomus* in the area. [...] *Hypostomus interruptus* was found in relatively large rivers as exemplified by the rivers Ribeira, Pilões, Catas Altas, Pardo, and also in smaller drainages as Betari, Saibadela, Arataca, a tributary of rio Jacupiranga, and Braço Bonito, a tributary of rio São Lourenço.”

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

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

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

No records of *Hypostomus interruptus* 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

According to Eschmeyer et al. (2018), *Hypostomus interruptus* (Miranda Ribeiro 1918) is the current valid name for this species. It was originally described as *Plecostomus interruptus* Miranda Ribeiro 1918.

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 interruptus* (Miranda Ribeiro, 1918)”

### Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 12.0 cm SL 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 Oyakawa et al. (2005):

“*Hypostomus interruptus* is known to occur only in Ribeira de Iguape river basin [Brazil]. Sampling efforts in this region in the last ten years suggests *Hypostomus interruptus* as the most common *Hypostomus* in the area. [...] *Hypostomus interruptus* was found in relatively large rivers as exemplified by the rivers Ribeira, Pilões, Catas Altas, Pardo, and also in smaller drainages as Betari, Saibadela, Arataca, a tributary of rio Jacupiranga, and Braço Bonito, a tributary of rio São Lourenço.”

### Introduced

No records of *Hypostomus interruptus* introductions were found.

## Means of Introduction Outside the United States

No records of *Hypostomus interruptus* introductions were found.

## Short Description

From Oyakawa et al. (2005):

“Dorsal profile gently raising upwards from snout tip to dorsal-fin origin and gently descending from this point to the end of caudal peduncle. Caudal peduncle roughly oval in cross-section, flattened on ventral portion. Dorsal plates between end of dorsal-fin base and adipose-fin spine flattened. One preadipose plate.”

“Pre-dorsal region of trunk located between pterotic-supracleithrum and vertical through dorsal-fin origin covered by three horizontal series of plates that extends posteriorly to caudal fin. Median series of plates bearing the lateral-line canal. Mid-dorsal series situated above and mid-ventral series situated below median series. Dorsal series of plates starting at dorsal-fin origin. Ventral series of plates starting approximately at midlength of pelvic-fin base extension. Plates of mid-dorsal series not aligned, interrupted by first plate of dorsal series [...]. Covering of abdomen ontogenetically variable. Plates restricted to central area of abdomen in specimens up to 95.0 mm SL; in larger specimens abdomen usually covered with minute platelets, leaving a naked area just around the pelvic fin.”

“Plates on dorsal and lateral portion of body relatively smooth in small and median size specimens. Trunk plates of larger specimens with relatively well developed ridges, forming four keels along flanks. Dorsal-most keel located over dorsal series of plates. Keel on mid-dorsal series of plates interrupted, following the alignment of plates. Anterior portion of this keel somewhat continuous with ridge on pterotic-supracleithrum, crossing the middorsal series of plates on pre-dorsal region of trunk, and not aligned to keel of posterior portion of mid-dorsal series. Keel on median series of plates poorly developed. Keel on three dorsal-most horizontal series of plates usually starting at dorsal-fin origin, except by largest specimens examined that have those keels more conspicuous posterior to the vertical through insertion of sixth branched dorsal-fin ray. Mid-ventral keel well developed, more conspicuous on anterior half of trunk.”

“Head somewhat triangular, rounded anteriorly. Dorsal and ventral region of head completely covered with dermal ossifications, except for a small oval naked area on snout tip. Outer face of upper lip covered with small platelets, except small specimens that have most of this region naked (smaller than 100.0 mm SL). Ornamentation of pterotic-supracleithrum similar to the remaining surface of head and with odontodes densely distributed. Dorsal margin of orbit slightly elevated, continuing in a low ridge on pterotic-supracleithrum. Larger specimens with a low ridge on supraoccipital, diverging in two weakly developed separated ridges on predorsal plates. Usually two plates, sometimes one, bordering posterior margin of the supraoccipital bone. Space between orbits almost straight or slightly convex. Eyes large.”

“Mouth wide, rounded. Anterior-most papillae of inner face of lower lip irregular in form, somewhat elongate, followed by roundish papillae decreasing in size posteriorly. Teeth long and bicuspid; medial cusp approximately twice in length of outer cusp and curved inwards. Premaxillary teeth inserted in a relatively straight line; dentary teeth inserted in a concave arch facing mouth cavity; contralateral dentaries forming a relatively wide angle. Maxillary barbels relatively thin, elongated, slightly shorter than eye diameter, and without papillae.”

“Dorsal-fin origin situated on vertical anterior to pelvic-fin origin, approximately on posterior third of pectoral-fin spine. Dorsal fin relatively small; tips of adpressed last two rays ending on second or third plate anterior to adipose-fin spine. Margin of dorsal fin relatively straight. Adipose-fin spine compressed, moderately strong with posterior-most portion curved ventrally in specimens around 150.0 mm SL and straight in smaller specimens. Distal half of pectoral-fin spine of larger specimens covered dorsally with small odontodes slightly curved forward (larger than 110.0 mm SL). Tip of adpressed pectoral fin beyond origin of pelvic fin. Tip of adpressed pelvic-fin spine reaching origin of anal fin in larger specimens and posterior to origin of the last branched ray in small specimens (up to 180.0 mm SL). Basal lamina of first proximal radial of anal fin covered by skin in the majority of specimens examined, except in a few small specimens. Caudal fin margin concave, lower spine slightly longer than upper.”

## **Biology**

From Gerhard et al. (2004):

“[...] an algivore-detritivore fish species (*H. interruptus*) [...]”

“[...] there is a consistent group of species occurring mainly in deeper habitats, such as *Hypostomus interruptus*, [...]”

## **Human Uses**

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

## **Diseases**

No information on diseases of *Hypostomus interruptus* was found.

## Threat to Humans

From Froese and Pauly (2018):

“Harmless”

## 3 Impacts of Introductions

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

## 4 Global Distribution

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

Additional locations in southern Brazil are given in Oyakawa et al. (2005) and were included in the climate match.

## 5 Distribution Within the United States

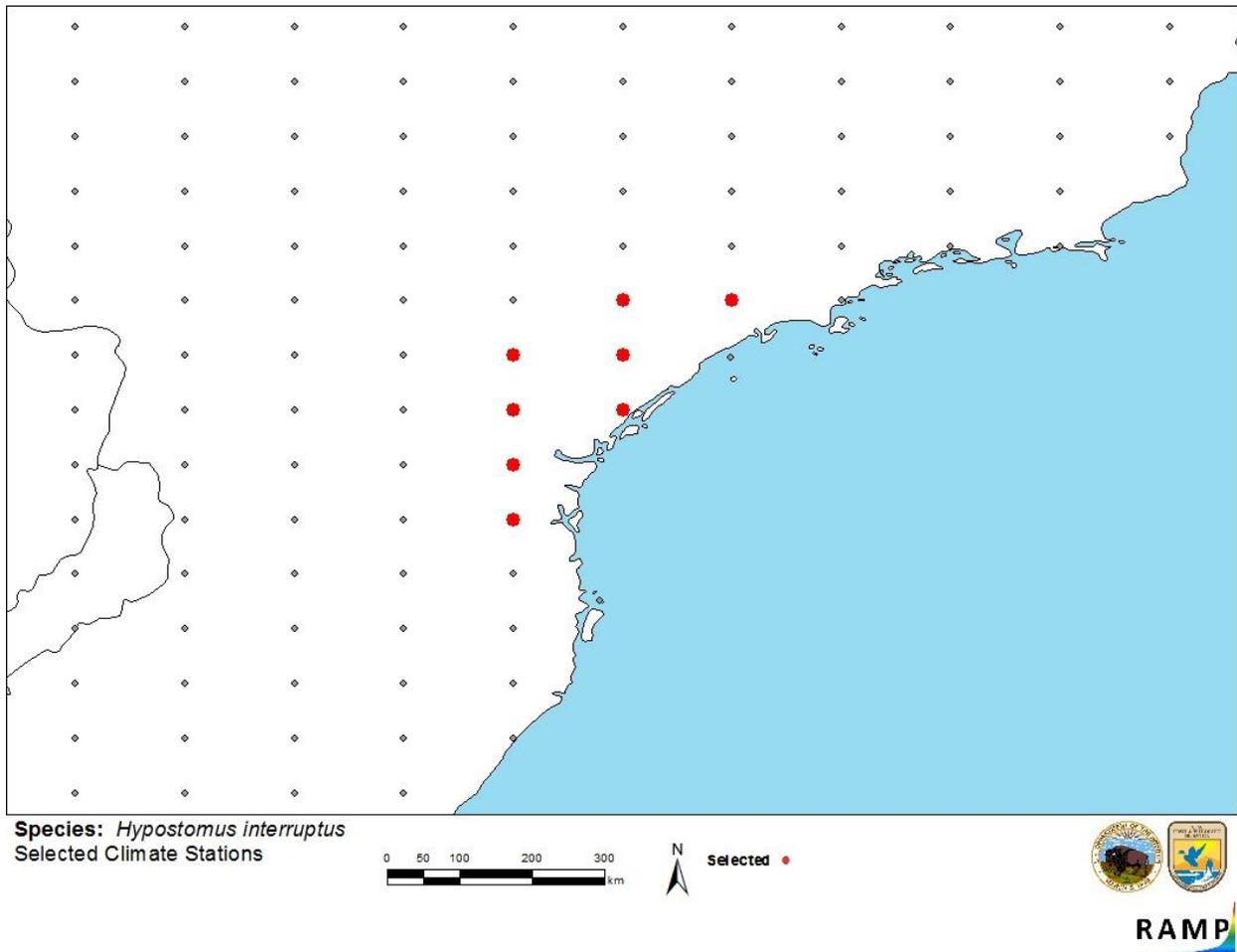
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No records of *Hypostomus interruptus* in the wild in the United States were found.

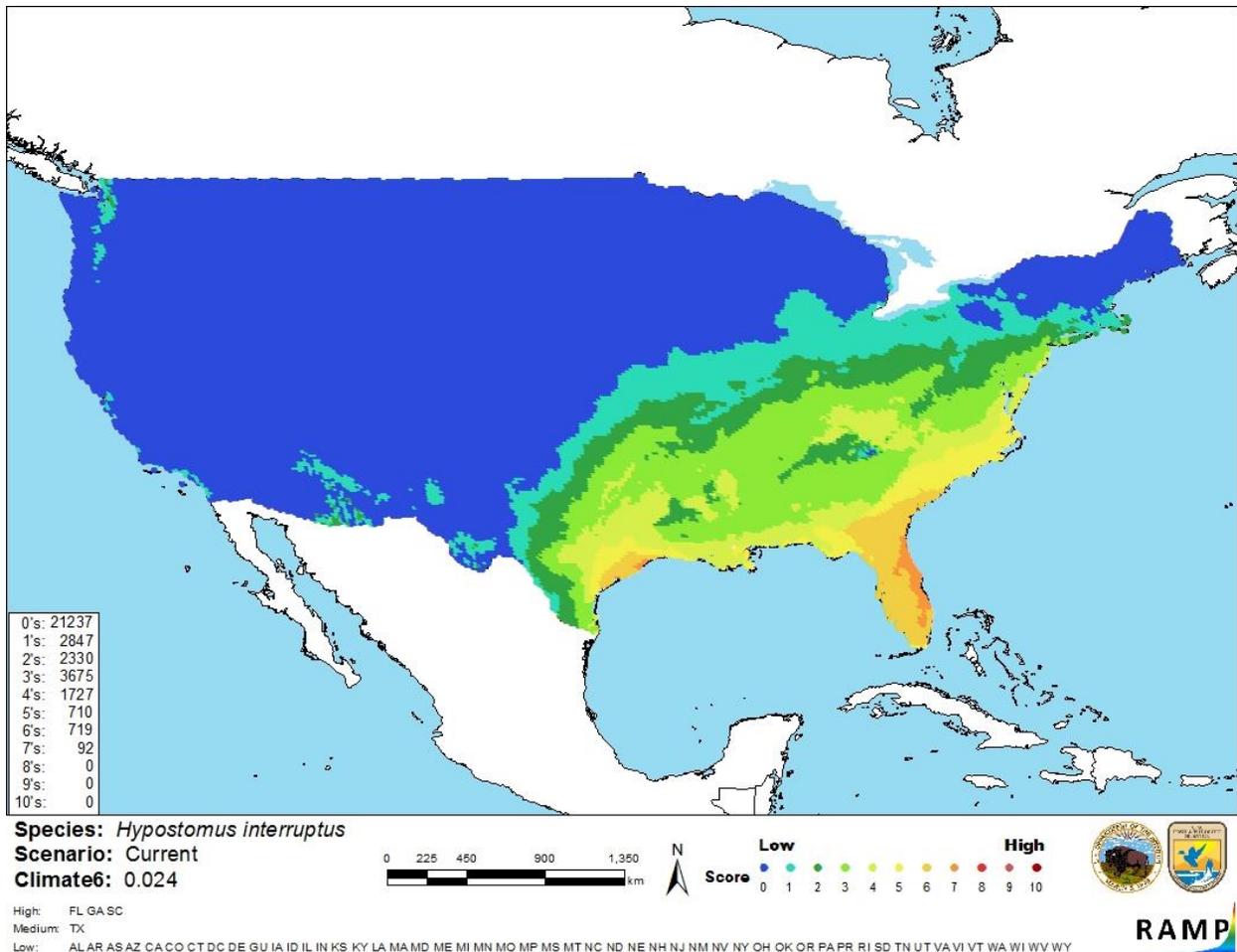
## 6 Climate Matching

### Summary of Climate Matching Analysis

The climate match for *Hypostomus interruptus* was high along Florida's Atlantic Coast and in a small coastal area in eastern Texas. The southern Atlantic and Gulf coastal areas had medium match. Areas of inland eastern Texas and Kentucky also had a medium match. Everywhere else in the contiguous United States had a low climate match. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for contiguous United States was 0.024, medium. The range for a medium climate score is between 0.005 and 0.103. The following States had high individual climate scores: Florida, Georgia, and South Carolina.



**Figure 2.** RAMP (Sanders et al. 2018) source map showing weather stations in eastern South America selected as source locations (red; Brazil) and non-source locations (gray) for *Hypostomus interruptus* climate matching. Source locations from Oyakawa et al. (2005) and GBIF Secretariat (2018).



**Figure 3.** Map of RAMP (Sanders et al. 2018) climate matches for *Hypostomus interruptus* in the contiguous United States based on source locations reported by Oyakawa et al. (2005) 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
$0.000 \leq X < 0.005$	Low
$0.005 < X < 0.103$	Medium
$\geq 0.103$	High

## 7 Certainty of Assessment

The certainty of assessment is low. There is some general information available for *Hypostomus interruptus*. However, there were no records of introduction found, therefore there is no information on impacts of introductions to evaluate.

## 8 Risk Assessment

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### Summary of Risk to the Contiguous United States

*Hypostomus interruptus* is a species of suckermouth armored catfish native to river drainages in southeastern Brazil. The history of invasiveness is uncertain. No records of introductions were found. The climate match was medium. The highest areas of match were along the southern Atlantic and Gulf coasts. Florida, Georgia, and South Carolina had high individual climate scores. 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): Medium**
- **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.**

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 interruptus* (Miranda Ribeiro, 1918). FishBase. Available: <http://www.fishbase.se/summary/Hypostomus-interruptus.html>. (August 2018).

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Gerhard, P., R. Moraes, and S. Molander. 2004. Stream fish communities and their associations to habitat variables in a rain forest reserve in southeastern Brazil. *Environmental Biology of Fishes* 71:321–340.

ITIS (Integrated Taxonomic Information System). 2018. *Hypostomus interruptus* (Miranda Ribeiro, 1918). Integrated Taxonomic Information System, Reston, Virginia. Available: [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=680182#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=680182#null). (August 2018).

Oyakawa, O. T., A. Akama, and A. M. Zanata. 2005. Review of the genus *Hypostomus* Lacépède, 1803 from rio Ribeira de Iguape basin, with description of a new species (Pisces, Siluriformes, Loricariidae). *Zootaxa* 921:1–27.

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.**

Weber, C. 2003. Loricariidae - Hypostominae (armored catfishes). Pages 351–372 in R. E. Reis, S. O. Kullander, and C. J. Ferraris, Jr., eds. Checklist of the freshwater fishes of South and Central America. EDIPUCRS, Porto Alegre, Brazil.