

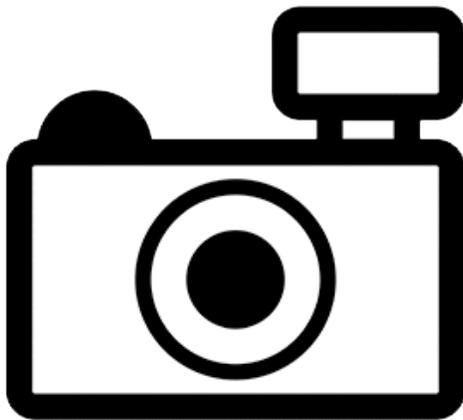
# ***Hypostomus fonchii* (a catfish, no common name)**

## **Ecological Risk Screening Summary**

U.S. Fish & Wildlife Service, January 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: Cushabatay River basin in Peru [Weber 2003]; Río Mamoré basin in Bolivia [Zawadzki et al. 2014].”

From Hidalgo del Aguila and Chocano (2016):

“This species occurs in the Amazon river basin in Peru (Ortega et al. 2012). Its type locality is Lower part near mouth of Río Pauya, Quebrada John, Ucayali, in the Cordillera Azul National Park, Peru (360 m asl) (Weber and Montoya-Burgos 2002, Ortega Hidalgo 2008). It also occurs in the Pachitea River Basin.”

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

There is no record of *Hypostomus fonchii* in the wild or in trade in the United States.

## Means of Introductions in the United States

There are no records of *Hypostomus fonchii* in the United States.

## Remarks

*Hypostomus fonchii* was first described in 2002 by Weber and Montoya-Burgos (Weber and Montoya-Burgos 2002).

## 2 Biology and Ecology

---

### Taxonomic Hierarchy and Taxonomic Standing

According to Eschmeyer et al. (2018), *Hypostomus fonchii* Weber and Montoya-Burgos 2002 is the current valid name for this species. It is also the original name.

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 fonchii* Weber and Montoya-Burgos, 2002”

### Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 15.4 cm SL male/unsexed; [Zawadzki et al. 2014]”

### Environment

From Froese and Pauly (2018):

“Freshwater; demersal.”

“Found in clear water, with large rocks on fine sand, clay or shingle bottom; no aquatic vegetation but with leaves and dead wood [Weber 2003].”

From Hidalgo del Aquila and Chocano (2016):

“Benthic freshwater fish. It lives in clear waters with sandy or rocky grounds with low current.”

“Wetlands (inland) -> 5.1. Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)”

## **Climate/Range**

From Froese and Pauly (2018):

“High altitude”

## **Distribution Outside the United States**

Native

From Froese and Pauly (2018):

“South America: Cushabatay River basin in Peru [Weber 2003]; Río Mamoré basin in Bolivia [Zawadzki et al. 2014].”

From Hidalgo del Aguila and Chocano (2016):

“This species occurs in the Amazon river basin in Peru (Ortega et al. 2012). Its type locality is Lower part near mouth of Río Pauya, Quebrada John, Ucayali, in the Cordillera Azul National Park, Peru (360 m asl) (Weber and Montoya-Burgos 2002, Ortega Hidalgo 2008). It also occurs in the Pachitea River Basin.”

Introduced

There are no records of introduction for *Hypostomus fonchii*.

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

There are no records of introduction for *Hypostomus fonchii*.

## **Short Description**

From Weber and Montoya-Burgos (2002):

“Head dorsally covered with odontods except a small naked area on snout tip, roughly triangular (upside down), as large as nostril. Dorsal margin of orbit very slightly elevated, continuing in smoother ridge on posttemporal and first contiguous plate. Very low ridge on supraoccipital, becoming wider and somewhat more tabular on predorsal plates. One plate bordering posterior margin of supraoccipital. Body deep, dorsal profile gradually descending from dorsal spine origin to four plates before end of caudal peduncle. Caudal peduncle roughly ovate in cross-section; dorsal plates, from middle of dorsal-fin base to end of base of adipose fin, flat in their dorsal portion. Outer face of upper lip covered with small platelets; maxillary barbels short. Teeth moderately large, crown elongated without lateral cusp [...]. Body completely covered with five rows of smooth plates with very slight angle in medial portion, forming four longitudinal nearly un conspicuous [*sic*] ridges. Abdomen and ventral surface of head completely

covered with minute platelets. Distal quarter of pectoral-fin spine dorsally covered with progressively [*sic*] larger prominent [*sic*] odontods, larger ones stronger hooked. Dorsal fin, when layed down, reaches half plate far from adipose fin. Adipose fin medium sized and slightly curved. Caudal-fin margin strongly concave; medium sized outer rays.”

“*Subadult* [...]. Differs from adult in having only small lateral areas of outer face of upper lip covered with small platelets. Platelets of ventral face (head and abdomen) much less numerous and spread on whole surface, isolated from one another. Distal part of pectoral-fin spine without elongated odontods.”

## **Biology**

No information is available on the biology of *Hypostomus fonchii*.

## **Human Uses**

From Hidalgo del Aguila and Chocano (2016):

“There is local use as a protein source, but at a low level”

## **Diseases**

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

## **Threat to Humans**

From Froese and Pauly (2018):

“Harmless”

## **3 Impacts of Introductions**

---

There are no records of introductions or impacts of *Hypostomus fonchii*, and therefore no information on impacts of introductions.

## 4 Global Distribution

---



**Figure 1.** Known global distribution of *Hypostomus fonchii*. Locations are in Peru. Map from GBIF Secretariat (2018).

## 5 Distribution Within the United States

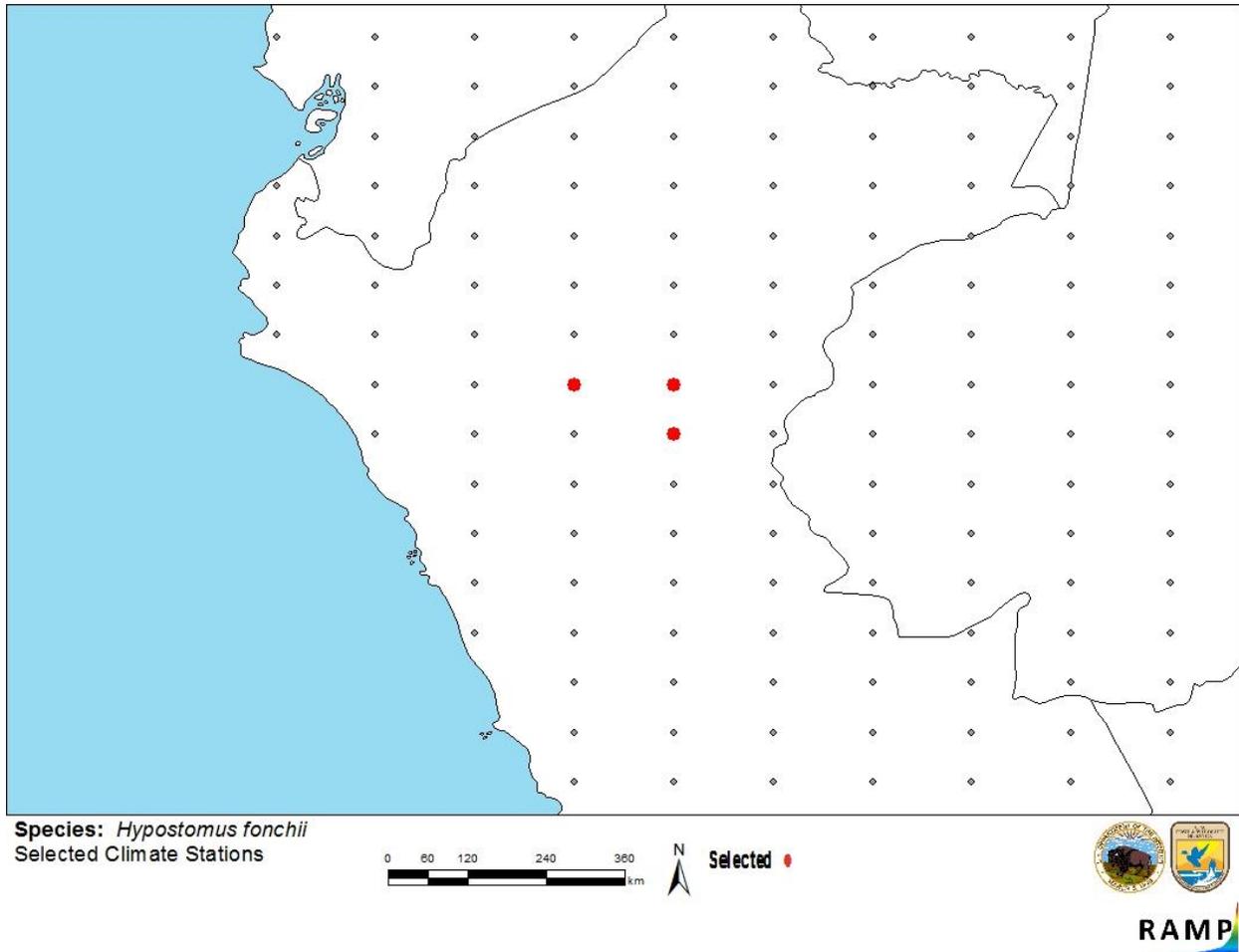
---

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

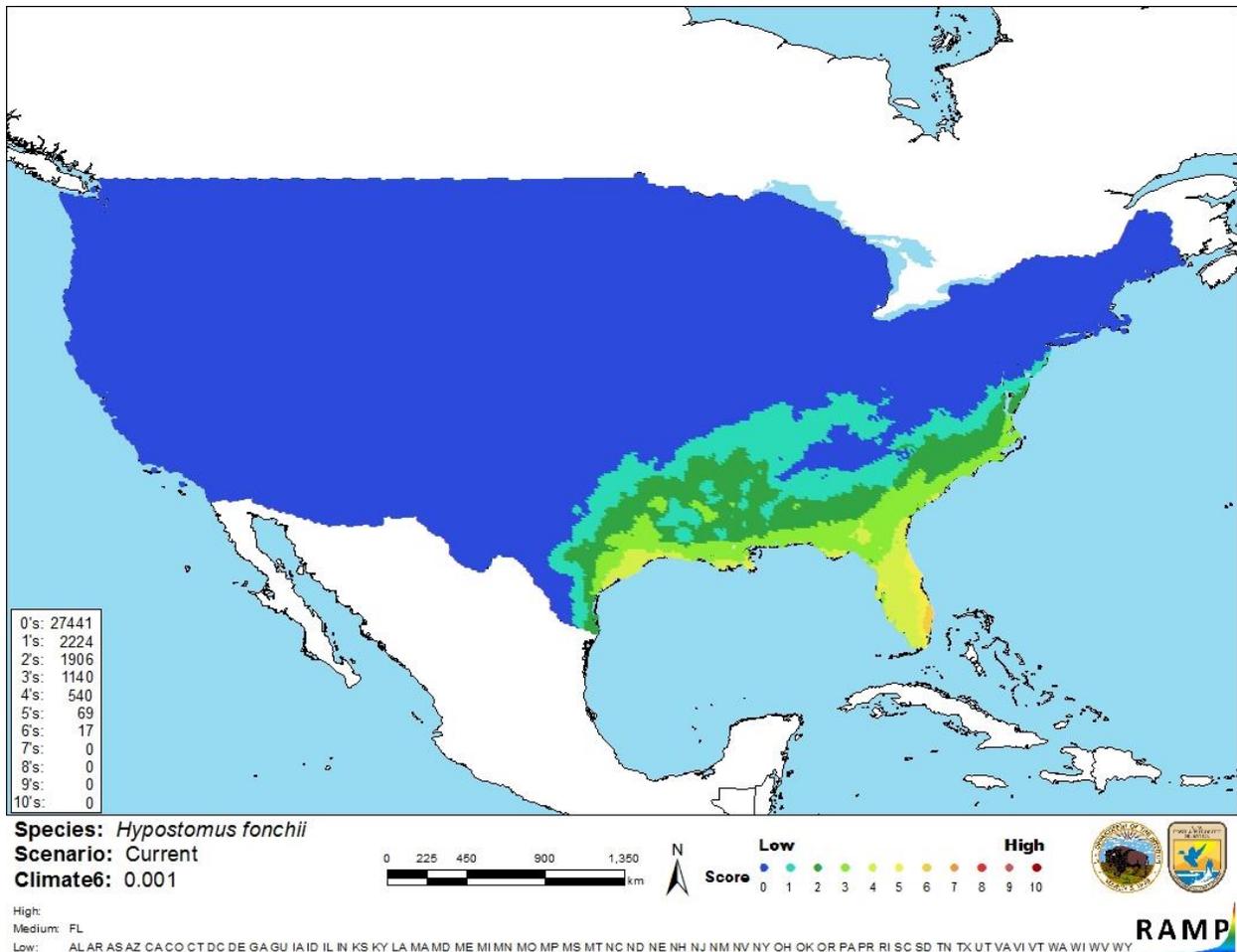
## 6 Climate Matching

### Summary of Climate Matching Analysis

The climate match for the contiguous United States was mostly low. Parts of the Gulf Coast and most of Florida had medium matches. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for contiguous United States was 0.001, low. Florida had a medium individual climate score, all other States had low individual climate scores.



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



**Figure 3.** Map of RAMP (Sanders et al. 2018) climate matches for *Hypostomus fonchii* 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
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
$\geq 0.103$	High

## 7 Certainty of Assessment

There is limited information available for *Hypostomus fonchii* and a lack of peer-reviewed literature. The certainty of this assessment is low.

## 8 Risk Assessment

---

### Summary of Risk to the Contiguous United States

*Hypostomus fonchii* is a member of the suckermouth armored catfish family (*Loricariidae*), native to South America. The history of invasiveness is uncertain. No records of introduction impacts were found. The climate match was low for the contiguous United States. All States had a low individual climate score except Florida, which had a medium climate match. The certainty of assessment is low; 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:** *Hypostomus fonchii* was first described in 2002.
- **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 fonchii* Weber & Montoya-Burgos, 2002. FishBase. Available: <https://www.fishbase.de/summary/Hypostomus-fonchii.html>. (August 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Hypostomus fonchii* (Weber & Montoya-Burgos, 2002). Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/5202181>. (August 2018).

Hidalgo del Aguila, M., and L. Chocano. 2016. *Hypostomus fonchii*. The IUCN Red List of Threatened Species 2016: e.T49829571A53817148. Available: <http://www.iucnredlist.org/details/49829571/0>. (August 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Hypostomus fonchii* (Weber & Montoya-Burgos, 2002). Integrated Taxonomic Information System, Reston, Virginia. Available: [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=680169#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=680169#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.

Weber, C., and J.I. Montoya-Burgos. 2002. *Hypostomus fonchii* sp. n. (Siluriformes: Loricariidae) from Peru, a key species suggesting the synonymy of *Cochliodon* with *Hypostomus*. *Revue Suisse de Zoologie* 109(2):355–368.

## 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.**

Ortega Hidalgo. 2008. [Source did not provide full reference].

Ortega, H., M. Hidalgo, G. Trevejo, E. Correa, A. M. Cortijo, V. Meza, and J. Espino. 2012. Lista anotada de los peces de aguas continentales del Perú: Estado actual del conocimiento, distribución, usos y aspectos de conservación. Ministerio del Ambiente, Dirección General de Diversidad Biológica - Museo de Historia Natural, UNMSM, Lima, Peru.

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.

Zawadzki, C. H., L. F. C. Tencatt, and O. Froehlich. 2014. A new unicuspid-toothed species of *Hypostomus* Lacépède, 1803 (Siluriformes: Loricariidae) from the rio Paraguai basin. *Neotropical Ichthyology* 12(1):97–104.