

# Bushymouth Catfish (*Ancistrus dolichopterus*)

## Ecological Risk Screening Summary

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## 1 Native Range and Status in the United States

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### Native Range

From Froese and Pauly (2013):

“South America: upper and middle Brazilian Amazon River basin and from the Negro, lower Trombetas, Tefé, Madeira and Tapajós River basins.”

From Reis and Lima (2009):

“This widespread species occurs throughout the Amazon River basin. It is native to Plurinational States of Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, and Venezuela.”

### Status in the United States

No records of *Ancistrus dolichopterus* in the United States were found.

### Means of Introductions in the United States

No records of *Ancistrus dolichopterus* in the United States were found.

## Remarks

No additional remarks.

## 2 Biology and Ecology

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### Taxonomic Hierarchy and Taxonomic Standing

From Eschmeyer (2017):

“*dolichopterus*, *Ancistrus* Kner [...] **Current status:** Valid as *Ancistrus dolichopterus* Kner 1854 [...]”

From ITIS (2013):

“Kingdom Animalia  
Phylum Chordata  
Subphylum Vertebrata  
Superclass Osteichthyes  
Class Actinopterygii  
Subclass Neopterygii  
Infraclass Teleostei  
Superorder Ostariophysi  
Order Siluriformes  
Family Loricariidae  
Subfamily Hypostominae  
Genus *Ancistrus* Kner, 1854  
Species *Ancistrus dolichopterus* Kner, 1854”

### Size, Weight, and Age Range

From Froese and Pauly (2013):

“Max length: 11.8 cm SL male/unsexed; [Fisch-Muller 2003]”

### Environment

From Froese and Pauly (2013):

“Freshwater; demersal; pH range: 6.0 - 8.0; dH range: 5 - 19. [...]; 23°C - 27°C [assumed to be recommended aquarium temperature range] [Riehl and Baensch 1991]”

### Climate/Range

From Froese and Pauly (2013):

“Tropical; [...]”

## **Distribution Outside the United States**

### **Native**

From Froese and Pauly (2013):

“South America: upper and middle Brazilian Amazon River basin and from the Negro, lower Trombetas, Tefé, Madeira and Tapajós River basins.”

From Reis and Lima (2009):

“This widespread species occurs throughout the Amazon River basin. It is native to Plurinational States of Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, and Venezuela.”

### **Introduced**

No records of *Ancistrus dolichopterus* introductions were found.

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

No records of *Ancistrus dolichopterus* introductions were found.

## **Short Description**

A short description of *Ancistrus dolichopterus* was not available.

## **Biology**

From Reis and Lima (2009):

“*A. dolichopterus* is a demersal (living at or near the bottom of the water body) species that inhabits fast flowing, clear waters with submerged wood. The male of this species guards the clutch of eggs, which is usually hidden between roots.”

From Brysiewicz et al. (2011):

“The reproduction of bushymouth catfish, *Ancistrus dolichopterus* Kner, 1854, is difficult to observe because it occurs at night in shaded areas—most frequently in hiding spots. The male prepares so called “pseudo-nest” before female would lay the eggs. He carefully cleans the nest and protects it from invasion of any potential predators e.g., snails. This specific care fulfilled only by the male lasts during the entire embryonic development till the larvae leave the nest, move independently, and are able to feed themselves (Rymkiewicz 1988).”

“During spawning the female can lay from 30 to more than 100 eggs, on average 3.1 mm in diameter. Thick and non-transparent membrane of eggs makes it impossible to observe the embryonic development (Rymkiewicz 1988). According to Petrovický (1985) the embryonic development of *A. dolichopterus* takes 94°D (degree-days) at water temperature of 25°C.”

## Human Uses

From Froese and Pauly (2013):

“Fisheries: of no interest; aquarium: commercial”

From Reis and Lima (2009):

“*A. dolichopterus* is the most commonly available *Ancistrus* species in the aquarium trade. Easily bred in aquariums.”

## Diseases

**No records of OIE reportable diseases were found.**

From Froese and Pauly (2013):

“Aeromonosis, Bacterial diseases

Cryptobia Infestation, Parasitic infestations (protozoa, worms, etc.)

Ichthyobodo Infection, Parasitic infestations (protozoa, worms, etc.)

Bacterial Infections (general), Bacterial diseases

Capillostrongyloides Infestation 2, Parasitic infestations (protozoa, worms, etc.)”

## Threat to Humans

From Froese and Pauly (2013):

“Harmless”

## 3 Impacts of Introductions

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No records of *Ancistrus dolichopterus* introductions were found.

## 4 Global Distribution

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**Figure 1.** Known global distribution of *Ancistrus dolichopterus*. Locations are in Brazil. Map from GBIF Secretariat (2017).

## 5 Distribution Within the United States

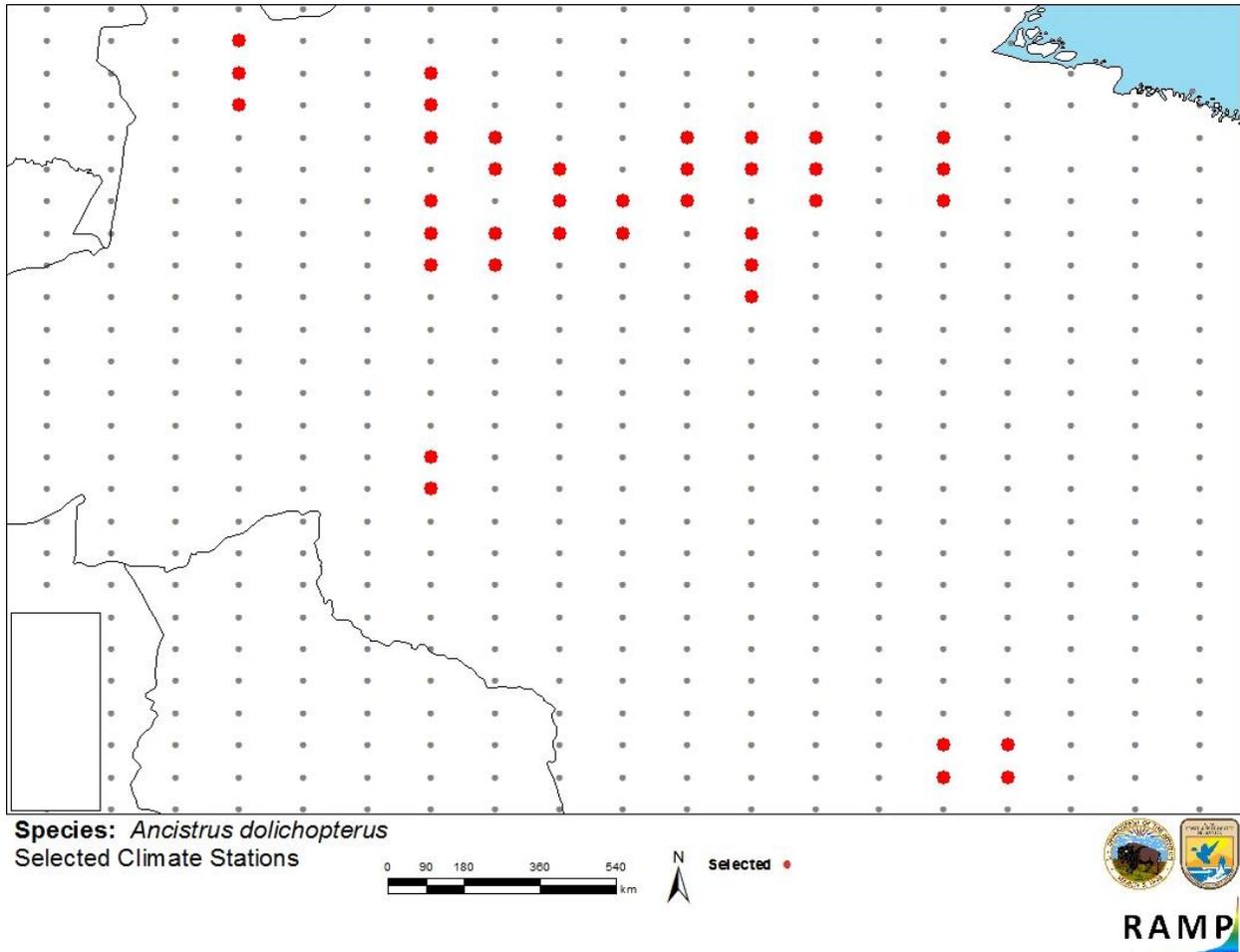
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No records of *Ancistrus dolichopterus* in the United States were found.

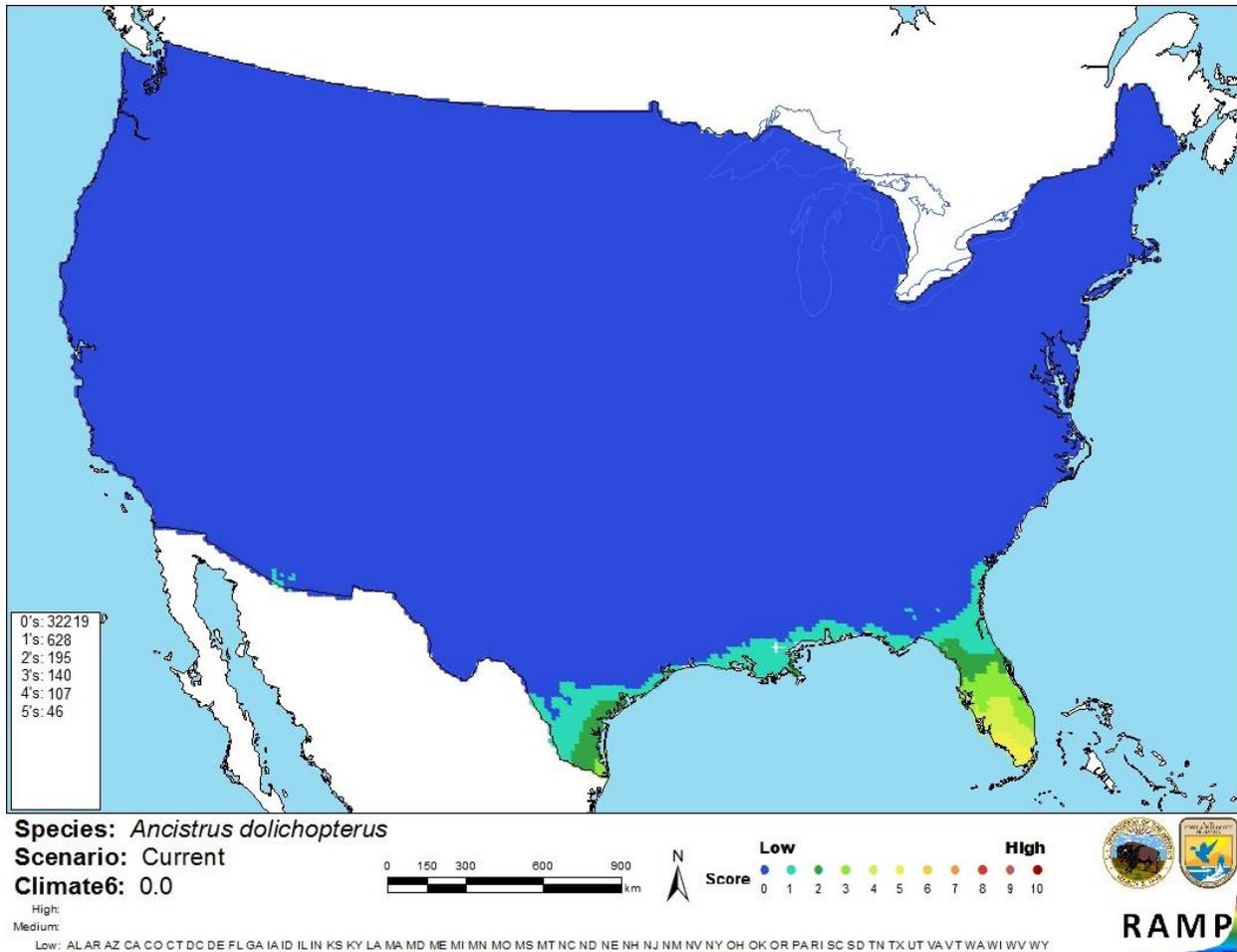
## 6 Climate Matching

### Summary of Climate Matching Analysis

The climate match for *Ancistrus dolichopterus* was very low for most of the United States. It was medium for the southwestern coast of Florida. The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous U.S. was 0.000, low, and no states had an individually high climate match.



**Figure 2.** RAMP (Sanders et al. 2014) source map showing weather stations in Brazil selected as source locations (red) and non-source locations (grey) for *Ancistrus dolichopterus* climate matching. Source locations from GBIF Secretariat (2017).



**Figure 3.** Map of RAMP (Sanders et al. 2014) climate matches for *Ancistrus dolichoferus* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 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 this assessment is medium. There was an adequate amount of information available for this species. No records were found of introductions or impacts of introductions. Reis and Lima (2009) stated that *Ancistrus dolichoferus* was the most popular *Ancistrus* species in the aquarium trade.

## 8 Risk Assessment

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### Summary of Risk to the Contiguous United States

A history of invasiveness for *Ancistrus dolichopterus* is uncertain. No records of introductions either inside or outside the United States could be found even though *A. dolichopterus* seems to be popular in the aquarium trade. The climate match is 0.000, categorically low. The certainty of the assessment is medium. 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): Medium**
- **Remarks/Important additional information** No additional remarks.
- **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.**

- Brysiewicz, A., J. Szulc, K. Formicki, A. Tański, and A. Korzelecka-Orkisz. 2011. The structure and the embryogenetic role of eggs and egg membranes of *Ancistrus dolichopterus* (Actinopterygii: Siluriformes: Loricariidae). *Acta Ichthyologica et Piscatoria* 41(3):223–227.
- Eschmeyer, W., editor. 2017. Catalog of fishes online database. California Academy of Sciences, San Francisco, California. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (February 2017).
- Froese, R., and D. Pauly, editors. 2013. *Ancistrus dolichopterus* Kner, 1854. FishBase. Available: <http://www.fishbase.org/summary/Ancistrus-dolichopterus.html>. (May 2013).
- GBIF Secretariat. 2017. GBIF backbone taxonomy: *Ancistrus dolichopterus* Kner, 1854. Global Biodiversity Information Facility, Copenhagen. Available: <http://www.gbif.org/species/5961451>. (February 2017).
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- Reis, R., and F. Lima. 2009. *Ancistrus dolichopterus*. The IUCN Red List of Threatened Species 2009: e.T167809A6385972. Available: <http://www.iucnredlist.org/details/full/167809/0>. (May 2013).

Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk assessment mapping program: RAMP. 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.**

Fisch-Muller, S. 2003. Loricariidae-Ancistrinae (Armored catfishes). Pages 373–400 *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.

Riehl, R., and H. A. Baensch. 1991. Aquarien atlas. Band. 1. Melle: Mergus, Verlag für Natur- und Heimtierkunde, Germany.

Rymkiewicz A. 1988. Uwagi o hodowli i rozmnażaniu „glonojadów”. Magazyn Akwarium [Online archive.] 2:(104) Available: <http://akwa-mania.mud.pl/archiwum/a104/a104.html>. (In Polish.)

Petrovický I. 1985. Tropikalne ryby akwariowe. PWRiL, Warszawa. (In Polish.)