

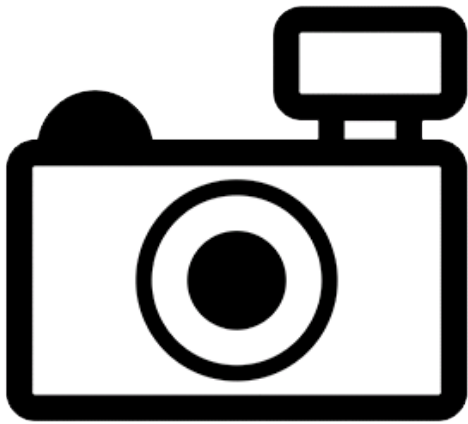
***Ancistrus bufonius* (a catfish, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, December 2011

Revised, September 2018

Web Version, 1/31/2019



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“South America: Apurimac River basin in Peru.”

Status in the United States

This species has not been reported as introduced or established in the United States. A search for U.S.-based online aquarium retailers selling *A. bufonius* yielded no results.

Means of Introductions in the United States

This species has not been reported as introduced or established in the United States.

Remarks

According to Fricke et al. (2018), *A. bufonius* was originally described using the name *Hypostomus bufonius*. Information searches for this ERSS used both scientific names.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

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 *Ancistrus*
Species *Ancistrus bufonius* (Valenciennes in Cuvier and Valenciennes, 1840)”

From Fricke et al. (2018):

“**Current status:** Valid as *Ancistrus bufonius* (Valenciennes 1840). Loricariidae: Hypostominae.”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 11.5 cm SL male/unsexed; [Fisch-Muller 2003]”

Environment

From Froese and Pauly (2018):

“Freshwater; demersal.”

Climate/Range

From Froese and Pauly (2018):

“Tropical”

According to Fricke et al. (2018), the type specimen was found at an elevation of 2000 meters (about 6500 feet).

Distribution Outside the United States

Native

From Froese and Pauly (2018):

“South America: Apurimac River basin in Peru.”

Introduced

No known introductions.

Means of Introduction Outside the United States

No known introductions.

Short Description

From Fowler (1940):

“Depth $5 \frac{2}{3}$; head $3 \frac{2}{3}$, length $1 \frac{1}{8}$ in width. Snout $1 \frac{2}{5}$ in head; eye $5 \frac{3}{4}$, 4 in snout, $2 \frac{1}{2}$ in interorbital; buccal disk broad, width equals head length, small lateral barbel each side or barely projects as very short point; mandibular ramus $1 \frac{3}{4}$ to $1 \frac{4}{5}$ in interorbital, with 37 fine close-set slender bifid teeth on each; lower lip broad, strongly papillate, with papillae smaller and more crowded marginally; interorbital $1 \frac{7}{8}$ to 2 in head, greatly depressed to nearly flat. In small specimens margin of head anteriorly broadly soft and cutaneous, with age furnished with median series of longitudinal tentacles $\frac{2}{3}$ interorbital width in length, also few much shorter ones each side before cluster of 14 to 15 erectile hooked spines on interopercle.”

“Scutes 24+2 in lateral axial series; 3 or 4 variable predorsal scutes, 6 behind dorsal, 11 behind anal to caudal base. Under surface of head and belly smooth.”

“D. I, 7, spine $1 \frac{1}{10}$ to $1 \frac{1}{3}$ in head; adipose fin atrophied; A. I, 4, first branched ray $2 \frac{3}{5}$ to $3 \frac{1}{4}$; least depth of caudal peduncle $2 \frac{1}{3}$ to $2 \frac{7}{8}$; caudal (damaged); pectoral 1 to $1 + \frac{1}{8}$, rays I, 6, spine heavy, robust, spinescent; ventral 1, terminally flexible spine spinescent, rays I, 5.”

“Color in alcohol dark gray-brown above, with obscure darker blotches in younger specimens. Under surfaces paler, especially of head and disk which buff-white. Dorsal and caudal with dark spots. Iris dark gray.”

Biology

No information available.

Human Uses

No information available.

Diseases

No information available. No OIE reportable diseases have been documented in this species.

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

No known introductions.

4 Global Distribution

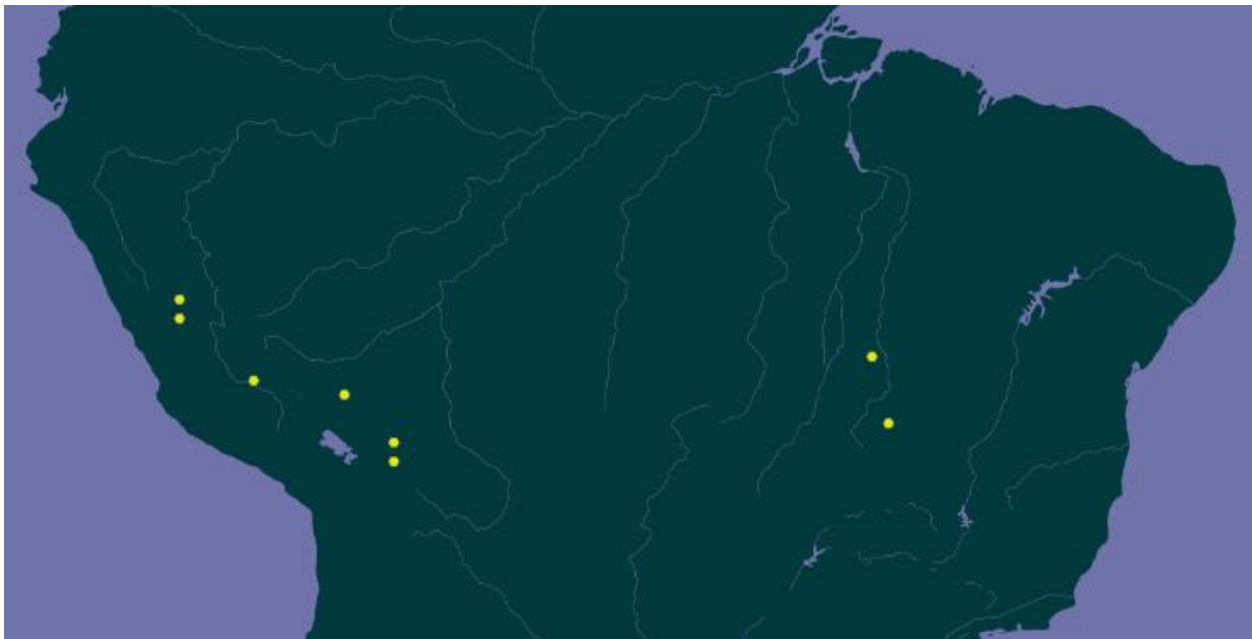


Figure 1. Known global distribution of *Ancistrus bufonius*. Map from GBIF Secretariat (2017). The points in Brazil and Bolivia were removed for climate matching as these points are not within the reported range of this species.

5 Distribution Within the United States

No known occurrences.

6 Climate Matching

Summary of Climate Matching Analysis

The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.00, which is a low score. The range for a low climate match is from 0 to 0.005, inclusive. Every state recorded a low score. There were small areas of medium match in western Texas, New Mexico, and on the Pacific coast north of Seattle and between San Francisco and Los Angeles. All other areas of the contiguous United States had low matches.

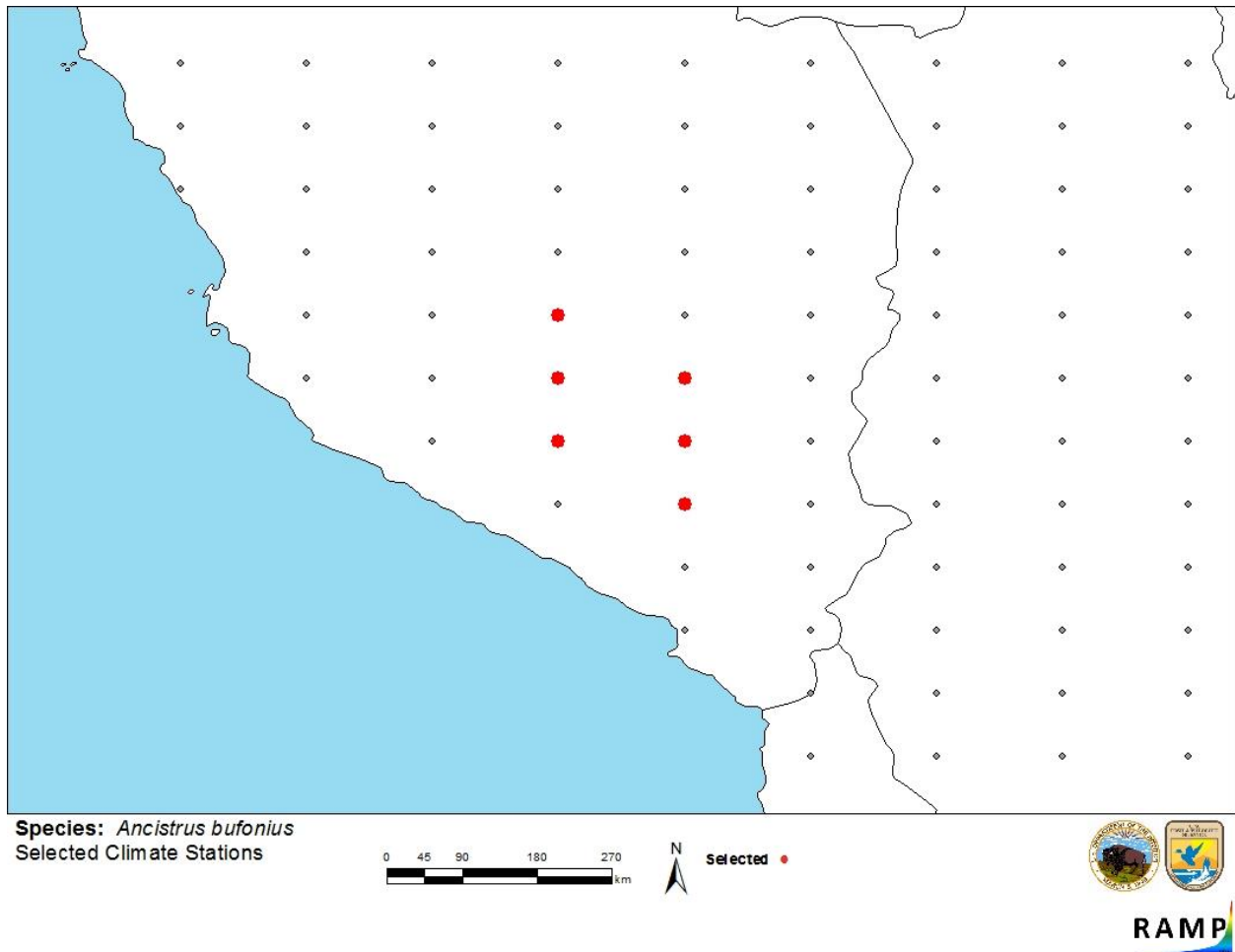


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations selected as source locations (red; Apurimac River basin in Peru) and non-source locations (gray) for *Ancistrus bufonius* climate matching. Source locations from GBIF Secretariat (2017).

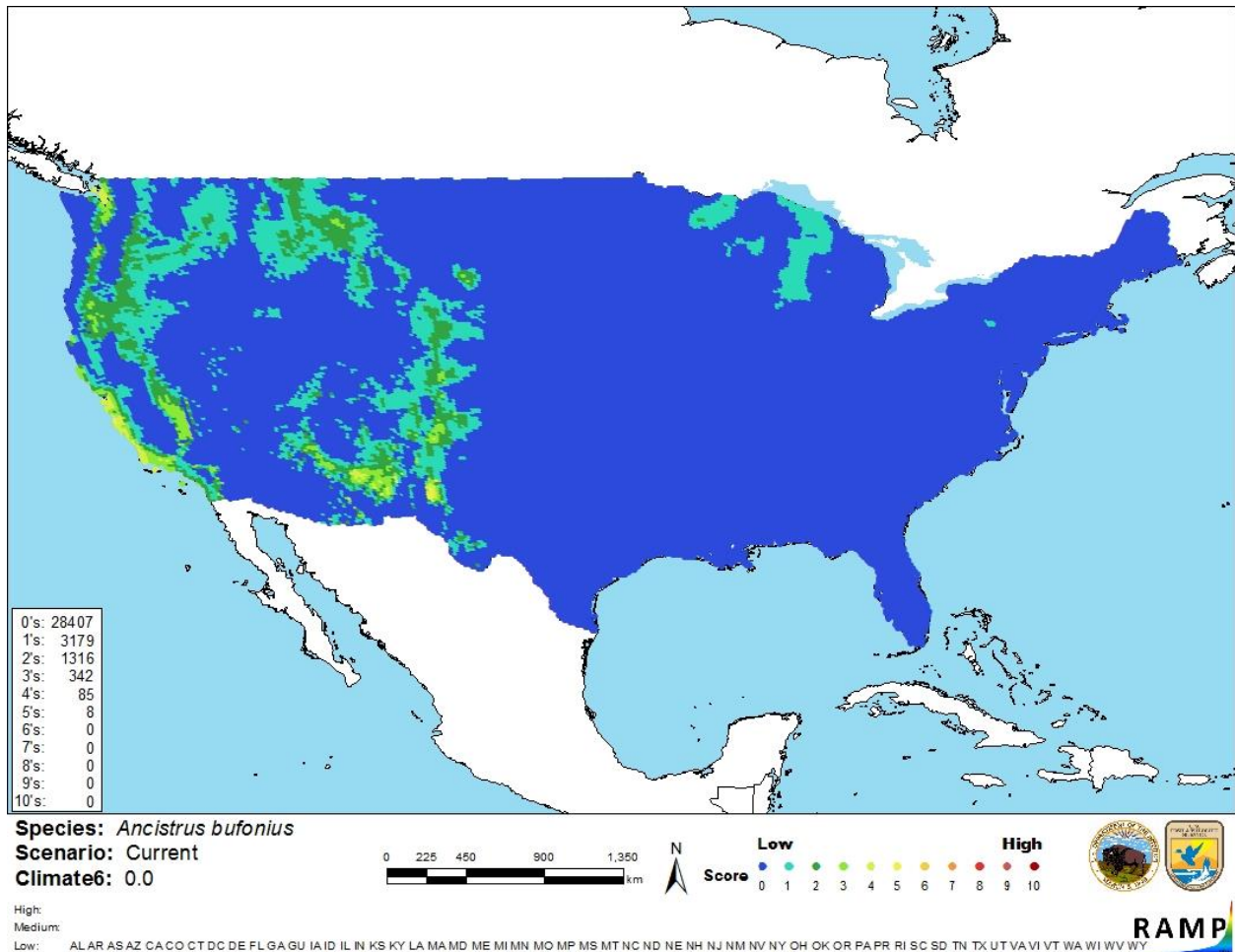


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Ancistrus bufonius* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 0=Lowest match, 10=Highest match.

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
≥ 0.103	High

7 Certainty of Assessment

Little information is known on the biology and ecology of *Ancistrus bufonius*. This fish has not been reported as introduced and no information is available on potential impacts if this species is introduced. Due to lack of information, the certainty of assessment is low. More information is needed to elevate the assessment certainty.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Ancistrus bufonius is an armored catfish that is native to the Apurimac River basin in Peru. It has not been reported as introduced outside of its native range. Therefore, history of invasiveness is uncertain. The climate match with the contiguous United States is low, with several small areas of medium match in the west. Certainty of assessment is low due to lack of information, and the overall risk for this species is Uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 3): Uncertain**
- **Climate Match (Sec. 6): Low**
- **Certainty of Assessment (Sec. 7): Low**
- **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.

- Fowler, H. W. 1940. Zoological results of the second Bolivian expedition for the Academy of Natural Sciences of Philadelphia, 1936-1937, part I: the fishes. Proceedings of the Academy of Natural Sciences of Philadelphia 92:43-103. (September 2018).
- Fricke, R., W. N. Eschmeyer, and R. van der Laan, editors. 2018. Catalog of fishes: genera, species, references. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatget.asp?spid=4934>. (September 2018).
- Froese, R., and D. Pauly, editors. 2018. *Ancistrus bufonius* (Valenciennes, 1840). FishBase. Available: <https://www.fishbase.de/summary/Ancistrus-bufonius.html>. (September 2018)
- GBIF Secretariat. 2017. GBIF backbone taxonomy: *Ancistrus bufonius* (Valenciennes, 1840). Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/5961472>. (September 2018)
- ITIS (Integrated Taxonomic Information System). 2018. *Ancistrus bufonius* (Valenciennes in Cuvier and Valenciennes, 1840). Integrated Taxonomic Information System, Reston, Virginia. Available: https://itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=679993#null. (September 2018).
- Sanders, S., C. Castiglione, and M. H. 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.

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.