

Bristlenose Catfish (*Ancistrus triradiatus*)

Ecological Risk Screening Summary

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1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2013):

“South America: middle and lower Orinoco River tributaries; Valencia Lake basin and Los Guayos River basin; southern tributaries of Lake Maracaibo basin.”

From Taphorn et al. (2010):

“As noted above, this new species’ distribution is bordered to the west by *Ancistrus martini* in the Lake Maracaibo Basin, and by *A. triradiatus* and *A. gymnorhynchus* to the immediate south in the Tocuyo, Aroa and Yaracuy drainages.

Status in the United States

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

Means of Introductions in the United States

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

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From Eschmeyer (2017):

“*triradiatus*, *Ancistrus* Eigenmann 1918 [...] **Current status:** Valid as *Ancistrus triradiatus* Eigenmann 1918 [...]”

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 triradiatus* Eigenmann, 1918”

Size, Weight, and Age Range

From Froese and Pauly (2013):

“Max length: 9.2 cm SL male/unsexed; [Fisch-Muller 2003]”

Environment

From Froese and Pauly (2013):

“Freshwater; demersal. [...]; 24°C - 28°C [assumed to be recommended aquarium temperature range] [Baensch and Riehl 1995]”

Climate/Range

From Froese and Pauly (2013):

“Tropical; [...]”

Distribution Outside the United States

Native

From Froese and Pauly (2013):

“South America: middle and lower Orinoco River tributaries; Valencia Lake basin and Los Guayos River basin; southern tributaries of Lake Maracaibo basin.”

From Taphorn et al. (2010):

“As noted above, this new species’ distribution is bordered to the west by *Ancistrus martini* in the Lake Maracaibo Basin, and by *A. triradiatus* and *A. gymnorhynchus* to the immediate south in the Tocuyo, Aroa and Yaracuy drainages.

Introduced

No records of *Ancistrus triradiatus* introductions were found.

Means of Introduction Outside the United States

No records of *Ancistrus triradiatus* introductions were found.

Short Description

From Eigenmann (1917):

“Head 2.6-2.75; depth 6.5; D. I, 7; A. I, 3; scutes 24 or 25, 4 + 1 or 2 in front of the adipose, 9-11+3 between anal and caudal; eye 7-9 in head, 3-5 in interorbital, 5 in snout; width of head about 1.25 in its length; mandibular ramus 1.8-2.33 in the interorbital; interopercle with 15-20 or more spines; tentacles profuse, fully developed in a specimen 78 mm. long, consisting in the male of a row along the margin of the snout and up the sides of the head in front of the preopercle and the usual Y-shaped series on the snout ; the snout very narrowly naked in the female ; dorsal reaching plate in front of adipose spine, its base equal to its distance from some part of the adipose spine, pectoral spine in the male reaching to the second third of the ventrals; depth of caudal peduncle about 2.5 in its length. Caudal rounded, more obliquely so in young than in adult.”

“Color of the type: body including head and belly, with faint, roundish, light spots; dorsal with about five series of comma-shaped black spots in broken series lengthwise of the fin; caudal with similar but shorter spots which merge into two continuous bars at the base; pectorals and ventrals with similar but larger spots, those of successive rays alternating, outer angles of caudal light. In other specimens sometimes the tip of the first two dorsal rays, and in the young the margin of the

caudal light, the markings on the fins confined to the rays. Ventral surface in the small specimens plain.”

Biology

From Flecker (1997):

“Instead, the armored catfish *Chaetostoma milesi* (Loricariidae) and *Ancistrus triradiatus* (Loricariidae), and the characoid *Parodon apolinari* (Parodontidae), were the abundant benthic feeders of riffles.”

From Winemiller et al. (2008):

“For example, *Ancistrus triradiatus* (Loricariidae), *Lebiasina erythrinoides* (Lebiasinidae) and *Synbranchus marmoratus* (Synbranchidae) were essentially restricted to shallow riffle and glide habitats in Caño Volcán, a Venezuelan piedmont stream (K. O. Winemiller, unpublished observations).”

Human Uses

From Ramírez-Duarte et al. (2011):

“*Ancistrus triradiatus* or xenocara is an ornamental armored catfish native to the Orinoco basin belonging to the family Loricariidae, the second largest family of ornamental species of commercial interest in Colombia. This family contributed with 4,497,338 units exported in 2009, representing 20.41% of the total (MADR & CCI, 2010).”

Diseases

No information on diseases of *Ancistrus triradiatus* was found.

Threat to Humans

From Froese and Pauly (2013):

“Harmless”

3 Impacts of Introductions

No records of *Ancistrus triradiatus* introductions were found.

4 Global Distribution



Figure 1. Known global distribution of *Ancistrus triradiatus*. Locations are in Colombia and Venezuela. Map from GBIF Secretariat (2015).

The furthest east point reported by GBIF Secretariat (2015) indicated that the coordinates needed to be verified so it was not included in the source points for the climate match.

5 Distribution Within the United States

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

6 Climate Matching

Summary of Climate Matching Analysis

The climate match was low for most of the contiguous United States. There was a medium match for southern Florida and small, isolated sections of the Pacific coast. 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.

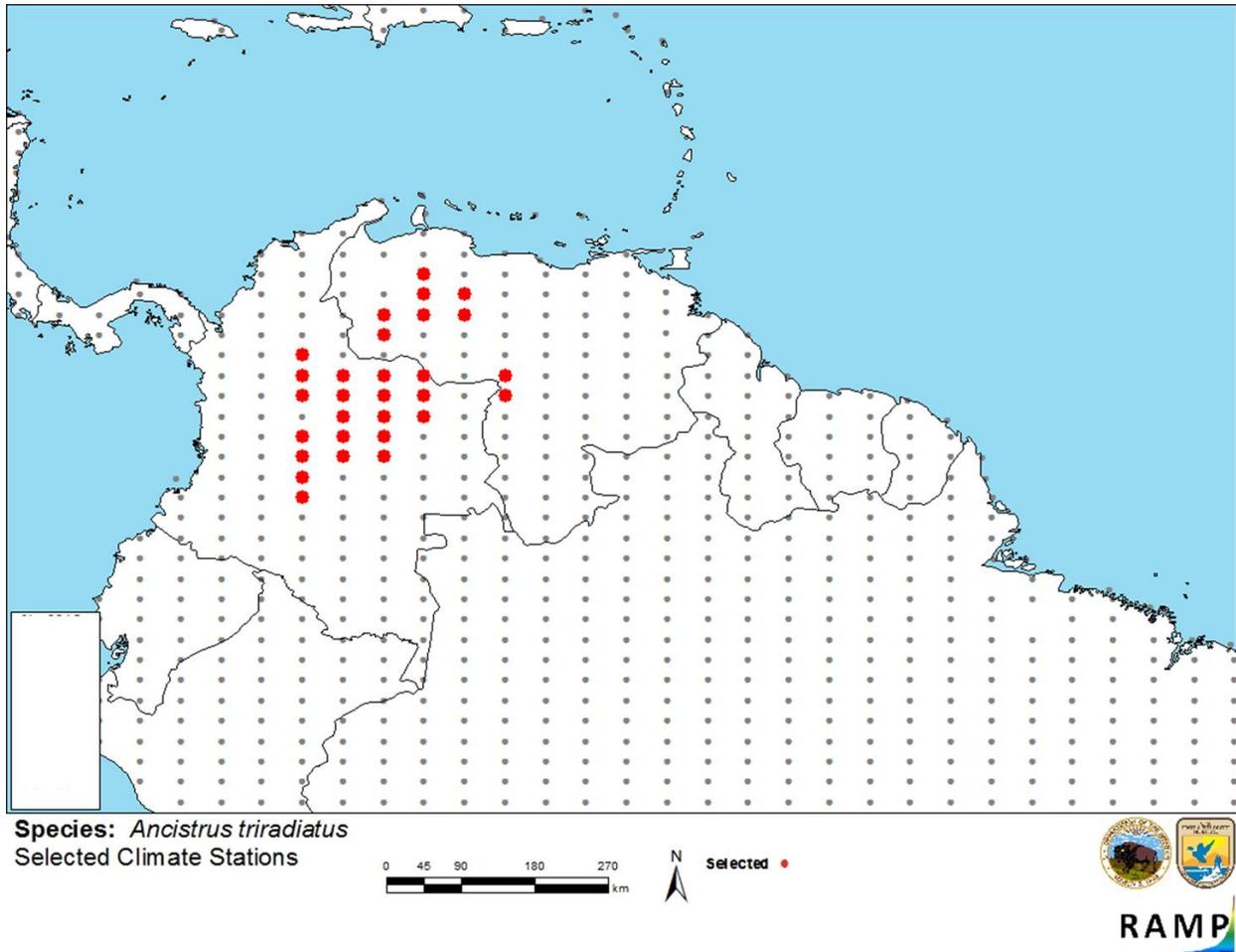


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations in Colombia and Venezuela selected as source locations (red) and non-source locations (grey) for *Ancistrus triradiatus* climate matching. Source locations from GBIF Secretariat (2015).

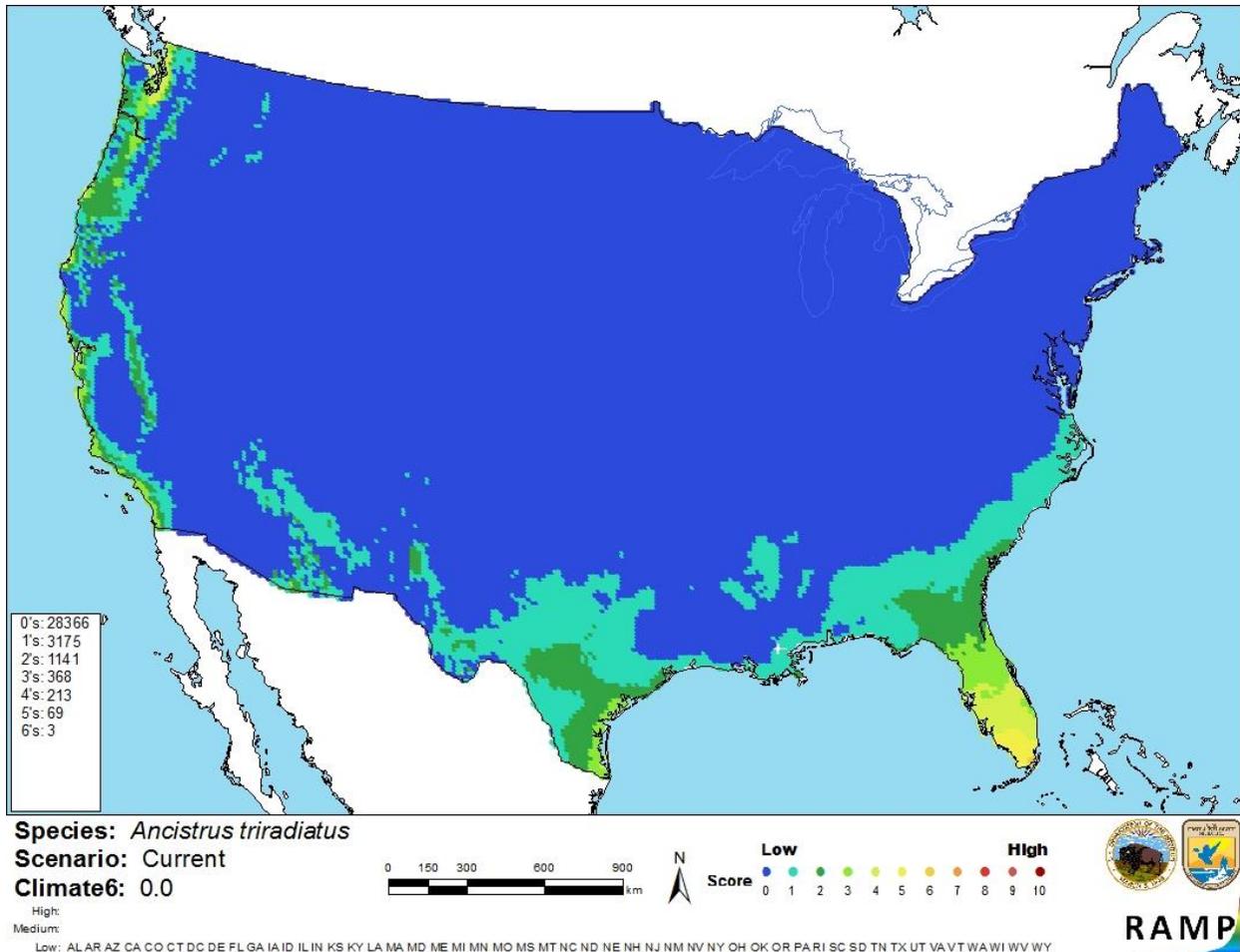


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Ancistrus triradiatus* in the contiguous United States based on source locations reported by GBIF Secretariat (2015). 0 = Lowest match, 10 = Highest match.

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

The certainty of assessment is medium. There was some information about *Ancistrus triradiatus*; the information that was available was reliable. No records of introductions of *A. triradiatus* were found.

8 Risk Assessment

Summary of Risk to the Contiguous United States

The history of invasiveness is uncertain. There were no records found for introductions of *Ancistrus triradiatus* outside its native range. There was evidence for its popularity in the aquarium trade. Trade volumes for the Loricariidae family were found but none specifically for *A. triradiatus*. The climate match is low. The certainty of assessment is medium. The overall risk assessment 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

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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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.

- Baensch, H. A., and R. Riehl. 1995. *Aquarien atlas*. Band 4. Mergus Verlag GmbH, Verlag für Natur-und Heimtierkunde, Melle, Germany.
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