

***Aequidens chimantanus* (a cichlid, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, March 2014
Revised, January 2018, June 2018
Web Version, 6/13/2018



Photo: Grant Swagel, Field Museum of Natural History. Licensed under Creative Commons (CC BY-NC). Available: <https://www.gbif.org/occurrence/666680964> (January 2018).

1 Native Range, and Status in the United States

Native Range

From Froese and Pauly (2017):

“South America: Caroní River basin in Orinoco River drainage, Venezuela.”

Status in the United States

This species has not been reported as introduced or established in the United States. No documentation was found for trade in this species in the United States.

Means of Introductions in the United States

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

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 Osteichthyes
Class Actinopterygii
Subclass Neopterygii
Infraclass Teleostei
Superorder Acanthopterygii
Order Perciformes
Suborder Labroidei
Family Cichlidae
Genus *Aequidens*
Species *Aequidens chimantanus*”

“Taxonomic Status: valid”

Size, Weight, and Age Range

From Froese and Pauly (2017):

“Maturity: Lm ? range ? - ? cm
Max length : 10.2 cm SL male/unsexed; [Kullander 2003]”

From Froese and Pauly (2017):

“The largest specimen collected was less than 15 cm long [Axelrod 1993].”

Environment

From Froese and Pauly (2017):

“Freshwater; benthopelagic; pH range: 4.6 - 5.6.”

Climate/Range

From Froese and Pauly (2017):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2017):

“South America: Caroní River basin in Orinoco River drainage, Venezuela.”

Introduced

This species has not been reported as introduced.

Means of Introduction Outside the United States

This species has not been reported as introduced.

Short Description

From Inger (1956):

“Two characters, the dorsal profile and the uniform head coloration, are especially diagnostic. [...] The relatively shallow body also distinguishes *chimantanus*, as in most of the northern species body depth is usually less than 2.3.”

“No dark bar from eye to angle of preopercle; highest point of dorsal profile opposite pectoral base [...]”

Biology

No information available.

Human Uses

From Petcha (2018):

“The “true acaras” of the genus *Aequidens*, as defined by Kullander (1986), comprise some dozen species of mid-sized to large cichlids found throughout South America. The species roster includes the flagship species *tetramerus*, along with *chimantanus*, *diadema*, *metae*, *pallidus*, *paloemeuensis*, *patricki*, *plagiozonatus*, *potaroensis*, *tubicen*, *uniocellatus*, *viridis* and several as yet unnamed species. [...] Only some of these species have entered the aquarium hobby. The “true” acara species that actually arrive usually do so as contaminants and are sold — predictably — as “port cichlids” because they share the same generalized “egg-shaped” body plan of these fish.”

Diseases

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

Threat to Humans

From Froese and Pauly (2017):

“Harmless”

3 Impacts of Introductions

There are no reported introductions for this species. Data on the impacts of introductions are lacking.

4 Global Distribution



Figure 1. Map of reported global distribution of *Aequidens chimantanus*, reported from Venezuela and Colombia. Map from GBIF Secretariat (2017). Only the easternmost point is within the described established range of the species, so this was the only point used in the climate matching analysis.

5 Distribution Within the United States

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

6 Climate Matching

Summary of Climate Matching Analysis

The climate match (Sanders et al. 2018; 16 climate variables; Euclidean Distance) was low throughout the contiguous United States except for a small area of southeastern Florida that showed medium match. Climate 6 score indicated that the contiguous United States has a low climate match overall. The range for a low climate match is from 0.0 to 0.005, inclusive; Climate 6 score of *Aequidens chimantanus* was 0.0.

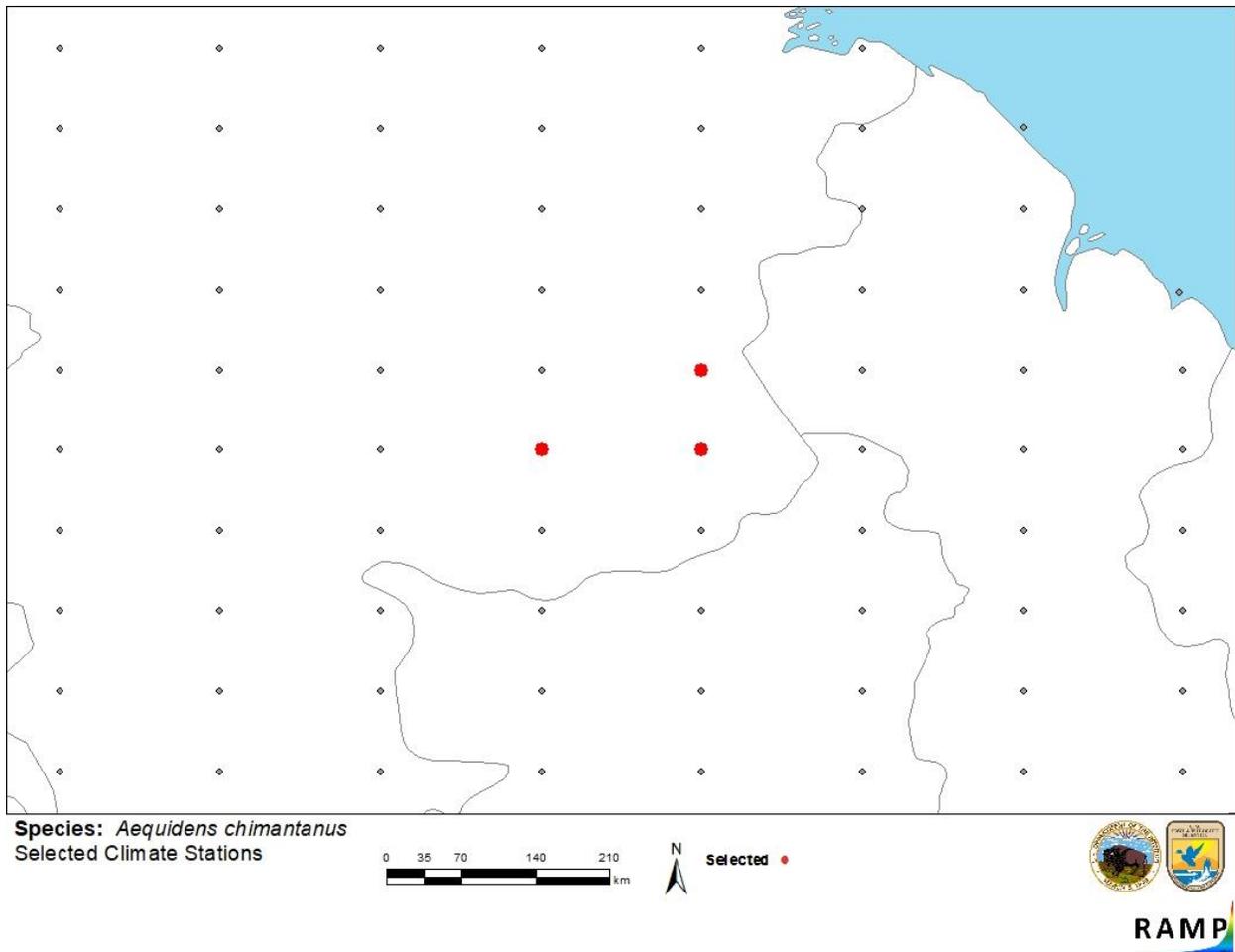


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in eastern Venezuela and adjacent countries selected as source locations (red; Venezuela) and non-source locations (gray) for *Aequidens chimantanus* climate matching. Source locations from GBIF Secretariat (2017).

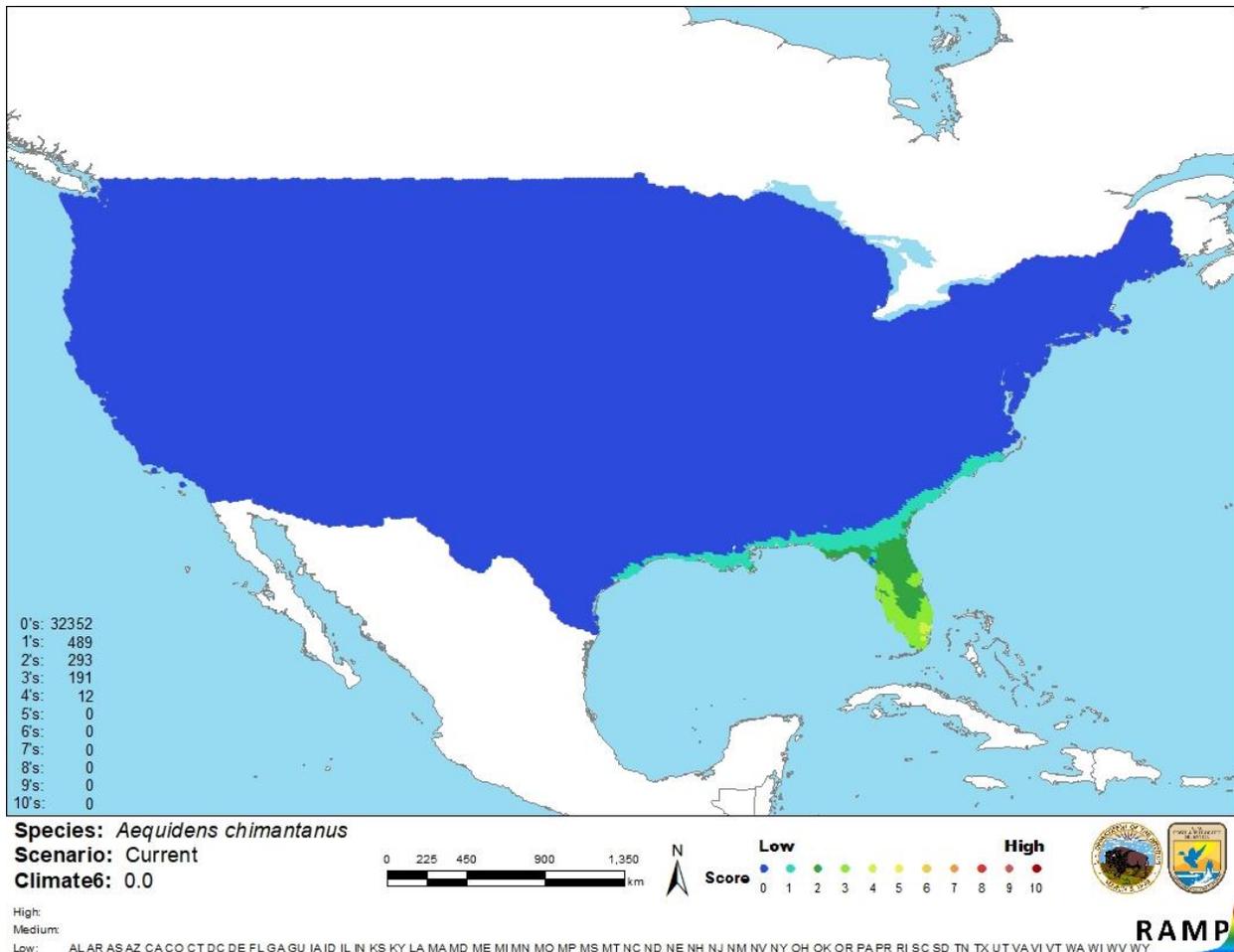


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Aequidens chimantanus* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 0=Lowest match, 10=Highest match.

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
$0.000 < X < 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

7 Certainty of Assessment

Information on the biology and distribution of *A. chimantanus* is not widely available. No introductions of this species have been reported and scientific information on the impacts of introductions are lacking. Absence of this information makes the certainty of this assessment low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Aequidens chimantanus is a freshwater fish native to South America. No introductions of this species have been reported. Data on impacts of introductions are lacking; absence of this information makes the certainty of this assessment low. Climate match with the contiguous United States is low. Overall risk posed by 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.

Froese, R., and D. Pauly, editors. 2017. *Aequidens chimantanus* Inger, 1956. FishBase. Available: <http://www.fishbase.us/summary/Aequidens-chimantanus.html>. (January 2018).

GBIF Secretariat. 2017. GBIF backbone taxonomy: *Aequidens chimantanus* Inger, 1956. Global Biodiversity Information Facility, Copenhagen. Available: <http://www.gbif.org/species/5208324>. (June 2018).

Inger, R. F. 1956. Notes on a collection of fishes from southeastern Venezuela. *Fieldiana Zoology* 34(37):425-440.

ITIS (Integrated Taxonomic Information System). 2018. *Aequidens chimantanus* Inger, 1956. Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=648232#null (January 2018).

Petcha. 2018. True or blue? Available: <https://www.petcha.com/true-or-blue/>. (June 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.

Axelrod, H. R. 1993. The most complete colored lexicon of cichlids. T. F. H. Publications, Neptune City, New Jersey.

Kullander 1986 [Source did not provide full citation information for this reference.]

Kullander, S. O. 2003. Cichlidae (Cichlids). Pages 605-654 *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.