

Aequidens potaroensis

Ecological Risk Screening Summary

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1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2015):

“South America: Essequibo River basin, Guyana.”

From Steele et al. (2013):

“*Aequidens potaroensis* has been reported in lowland and upland reaches of the Mazaruni and Potaro Rivers, as well as from the Essequibo River.”

Status in the United States

No records of *Aequidens potaroensis* in the United States were found.

Means of Introductions in the United States

No records of *Aequidens potaroensis* in the United States were found.

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2015):

“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 potaroensis* Eigenmann, 1912”

From Eschmeyer et al. (2017):

“*potaroensis*, *Aequidens* Eigenmann [C. H.] 1912:490 [...], Pl. 66 (fig. 2) [Memoirs of the Carnegie Museum v. 5 (no. 1)] Amatuk, Guyana. Holotype: FMNH 53892 [ex CM 2407]. Paratypes: BMNH 1911.10.31.25-26 (2); CAS 66883 [ex IU 12530] (5) 66887 [ex IU 12534] (1), 66889 [ex IU 12535] (2), 66893 [ex IU 12529] (5), 67011 [ex 12528] (1), 67011 [ex IU 12528], 67012-13 [ex 12532] (4, 1), 78965 [ex 12531] (5); FMNH (79, 14 localities); MCZ 30141 [CM 2393 or IU 12529] (2); NMW 32992-93 (1, 1); CAS-SU 21926 (2); USNM 66118 (2); ZMA 111427 (2), ZMB 18073 (1). Type catalog: Henn 1928:95 [...], Böhlke 1953:81 [...], Nijssen et al. 1982:83 [...], Ibarra & Stewart 1987:6 [...], Paepke & Schindler 2013:261 [...]. Originally as *potaroensis*. •Valid as *Aequidens potaroensis* Eigenmann 1912 -- (Kullander in Reis et al. 2003:609 [...], Kullander 2012[a]:52 [...], Hernández-Acevedo et al. 2015:105 [...]). **Current status:** Valid as *Aequidens potaroensis* Eigenmann 1912. Cichlidae: Cichlinae.”

Size, Weight, and Age Range

From Froese and Pauly (2015):

“Max length: 10.0 cm SL male/unsexed; [Kullander 2003]”

Environment

From Froese and Pauly (2015):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2015):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2015):

“South America: Essequibo River basin, Guyana.”

From Steele et al. (2013):

“*Aequidens potaroensis* has been reported in lowland and upland reaches of the Mazaruni and Potaro Rivers, as well as from the Essequibo River.”

Introduced

No records of *Aequidens potaroensis* introductions were found.

Means of Introduction Outside the United States

No records of *Aequidens potaroensis* introductions were found.

Short Description

From Steele et al. (2013):

“*Aequidens potaroensis* and ‘A.’ *paloemeuensis* share a number of morphological characters with species of *Krobia*, including three anal fin spines, lower vertebral and E1 scale count (compared to *Aequidens*), cycloid prepelvic scales, facial stripes as well as the retention of the suborbital stripe in adults (Kullander & Nijssen 1989; Kullander 2012[b]).”

From Kullander (2012b):

“The predorsal scale pattern is uniserial in *A. paloemeuensis* but in *A. potaroensis* it is triserial as in other species of *Aequidens*.”

From Boeseman (1954):

“This specimen has the spinous dorsal fin deformed: the third spine is curved backwards, the second slightly less strongly curved backwards, the fourth deformed, short, probably broken. The fin formula consequently is as follows: D IV.X.10; A 111.9(1). The dark band between eye and preopercle is still distinct, the cross-bands less conspicuous. There are 2 or 2 ^ rows of scales between lateral line and origin of the soft dorsal fin.”

Biology

From Froese and Pauly (2015):

“In fast-flowing 'blackwater' streams [Stawikowski and Werner 1998].”

“Both parents defend eggs and larvae [Stawikowski and Werner 1998].”

“Spawns on hard substrate: parents defend eggs and larvae [Stawikowski and Werner 1998].”

Human Uses

No information on human uses of *Aequidens potaroensis* was found.

Diseases

No information on diseases of *Aequidens potaroensis* was found.

Threat to Humans

From Froese and Pauly (2015):

“Harmless”

3 Impacts of Introductions

No records of *Aequidens potaroensis* introductions were found.

4 Global Distribution



Figure 1. Known global distribution of *Aequidens potaroensis*. Locations are in Venezuela, Guyana, and Brazil. Map from GBIF Secretariat (2017).

5 Distribution Within the United States

No records of *Aequidens potaroensis* in the United States were found.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Aequidens potaroensis* was medium along the Gulf Coast and low for the rest of the country. 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.

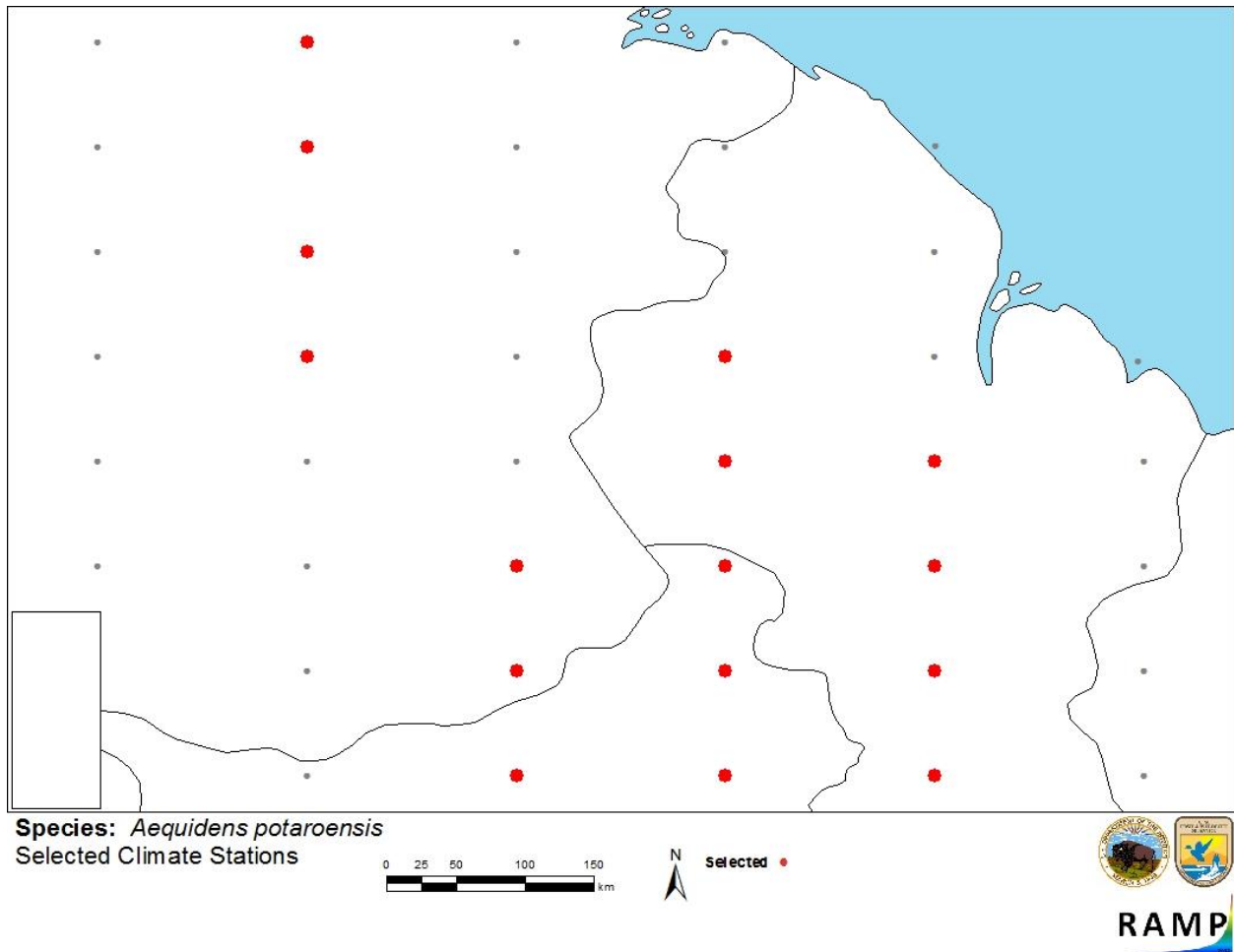


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations in Venezuela, Guyana, and Brazil selected as source locations (red) and non-source locations (gray) for *Aequidens potaroensis* climate matching. Source locations from GBIF Secretariat (2017).

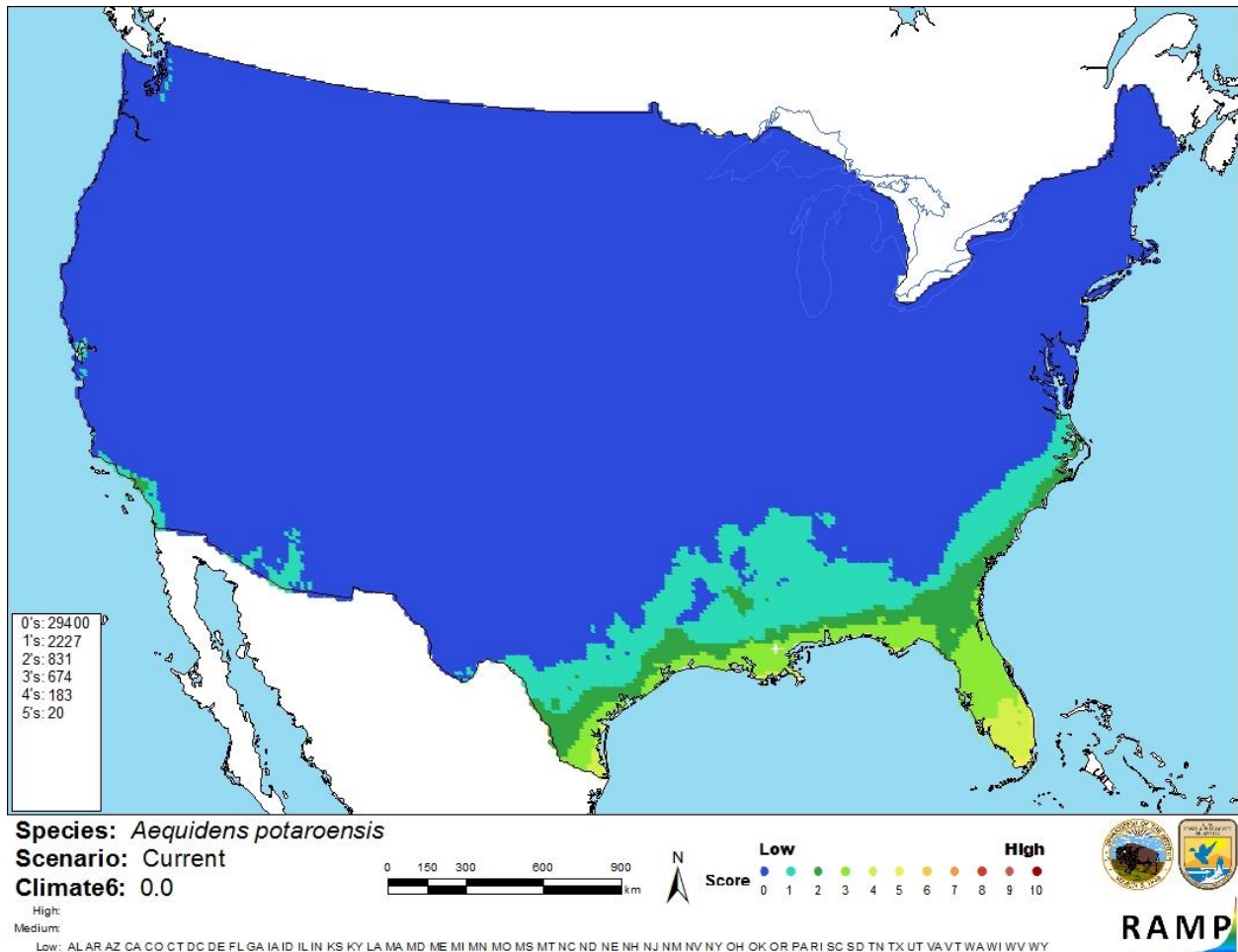


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Aequidens potaroensis* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 0 = Lowest match, 10 = Highest match.

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

The certainty of this assessment is low. There was little information available for *Aequidens potaroensis*. The information that was available was of high quality. There were no records of introduction found.

8 Risk Assessment

Summary of Risk to the Contiguous United States

The history of invasiveness is uncertain. There were no records of introduction found. Climate match is low, 0.000. Certainty of assessment is low. 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** 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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Kullander, S. O. 2012a. *Krobia xinguensis*, a new species of cichlid fish from the Xingu River drainage in Brazil (Teleostei: Cichlidae). *Zootaxa* 3197:43–54.

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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.

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