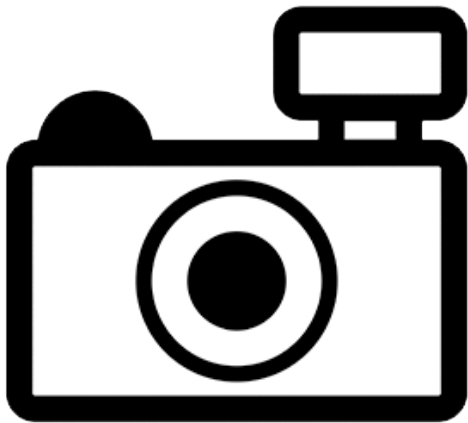


***Aequidens patricki* (a fish, no English common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, web version – 03/29/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2015):

“South America: restricted to the Aguaytía and Pachitea rivers of the Amazon River basin, Peru.”

From Říčan (2017):

“Both study localities [stream in pristine condition in the vicinity of the Ashaninka village of Betania and around Puerto Bermúdez in the Rio Pichis–Pachitea river basin of the Ucayali drainage] present new records of *B. labiosa*, *B. robusta*, *B. megalospilus* (Kullander, 1986), *Tahuantisuyoa chipi* (Kullander, 1991), *Aequidens patricki* (Kullander, 1984), and *Crenicichla sedentaria* (Kullander, 1986) (and the southernmost records for *B. megalospilus*, *T. chipi*, *A. patricki*) which are all narrow endemic species of the upper Ucayali and its main tributaries (Kullander 1986, Kullander 1991).”

Status in the United States

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

Means of Introductions in the United States

No records of *Aequidens patricki* 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 patricki* Kullander, 1984”

From Eschmeyer et al. (2017):

“*patricki*, *Aequidens* Kullander [S. O.] 1984:2 [...], Figs. 1-3 [Revue française d'Aquariologie Herpétologie v. 11 (no. 1)] Small brook from a drying pool, tributary of Río Aguaytia, 9°02'S, 75°31'W, Coronel Portillo Province, Peru. Holotype: MHNG 2163.93. Paratypes: IRSNB 700 (1); MHNG 216394 (1); NRM 17760 [A82/1976376.3458] (1); ZFMK 10766-10767 (2), 10769 (1), 10770-10771 (2); ZMH 6427 (1), 6435 (2). Type catalog: Walschaerts 1987:28 [...], Wilkens & Dohse 1993:418 [...], Weber 1998:12 [...], Herder et al. 2010:126 [...]. •Valid as *Aequidens patricki* Kullander 1984 -- (Kullander 1986:347 [...], Ortega & Vari 1986:20 [...], Kullander in Reis et al. 2003:608 [...]). **Current status:** Valid as *Aequidens patricki* Kullander 1984. Cichlidae: Cichlinae.”

Size, Weight, and Age Range

From Froese and Pauly (2015):

“Max length: 11.6 cm SL male/unsexed; [Kullander 1986]”

Environment

From Froese and Pauly (2015):

“Freshwater; benthopelagic; pH range: 5.8 - ?; dH range: 3 - 19. [...]; 21°C - 24°C [assumed to be recommended aquarium temperature range] [Stawikowski and Werner 1998]”

From Ortega Torres et al. (2016):

“The elevation range is between 190 and 600 m (Quezada-Garcia 2009).”

Climate/Range

From Froese and Pauly (2015):

“Tropical; [...]”

Distribution Outside the United States

Native

From Froese and Pauly (2015):

“South America: restricted to the Aguaytía and Pachitea rivers of the Amazon River basin, Peru.”

Introduced

No records of introduction were found for *Aequidens patricki*.

Means of Introduction Outside the United States

No records of introduction were found for *Aequidens patricki*.

Short Description

A short description of *Aequidens patricki* was not found.

Biology

From Froese and Pauly (2015):

“Inhabit streams.”

From Ortega Torres et al. (2016):

“This species inhabits slow to moderate streams of clear and white waters with sand, gravel or rocky bottoms (Quezada-Garcia 2009).”

Human Uses

From Froese and Pauly (2015):

“Is rare in the aquarium trade but has been imported on occasion [Axelrod 1993].”

Diseases

Information on diseases of *Aequidens patricki* was not found.

Threat to Humans

From Froese and Pauly (2015):

“Harmless”

3 Impacts of Introductions

No records of introduction were found for *Aequidens patricki*.

4 Global Distribution



Figure 1. Known global distribution of *Aequidens patricki*. Locations are in Peru. Map from GBIF Secretariat (2017).

5 Distribution Within the United States

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

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Aequidens patricki* was low for most of the country and medium for the California coast, and parts of Texas, New Mexico and Washington. 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.

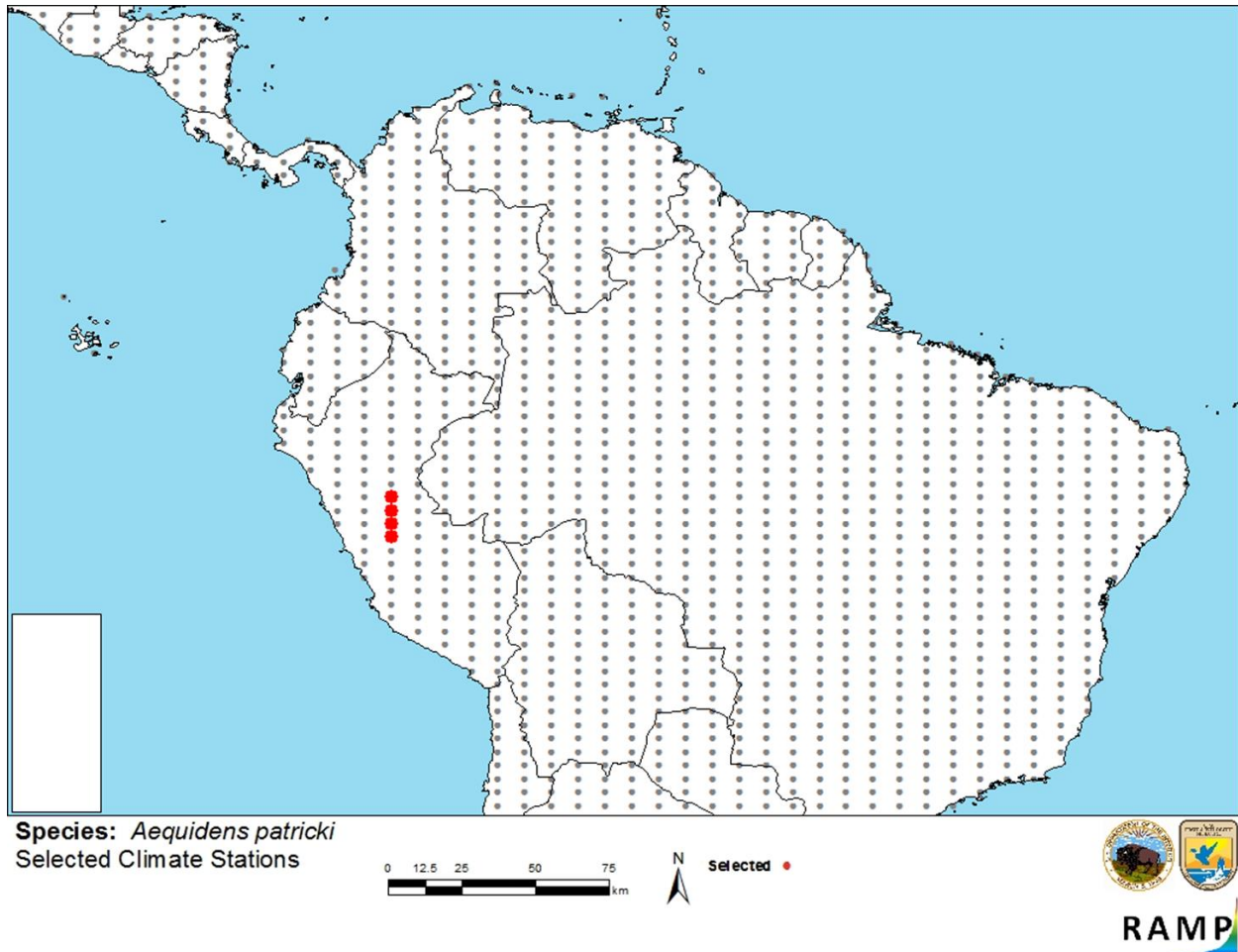


Figure 2. RAMP (Sanders et al. 2014) source map of northern South America showing weather stations selected as source locations (red) and non-source locations (gray) for *Aequidens patricki* climate matching. Source locations from GBIF Secretariat (2017) and Řičan (2017).

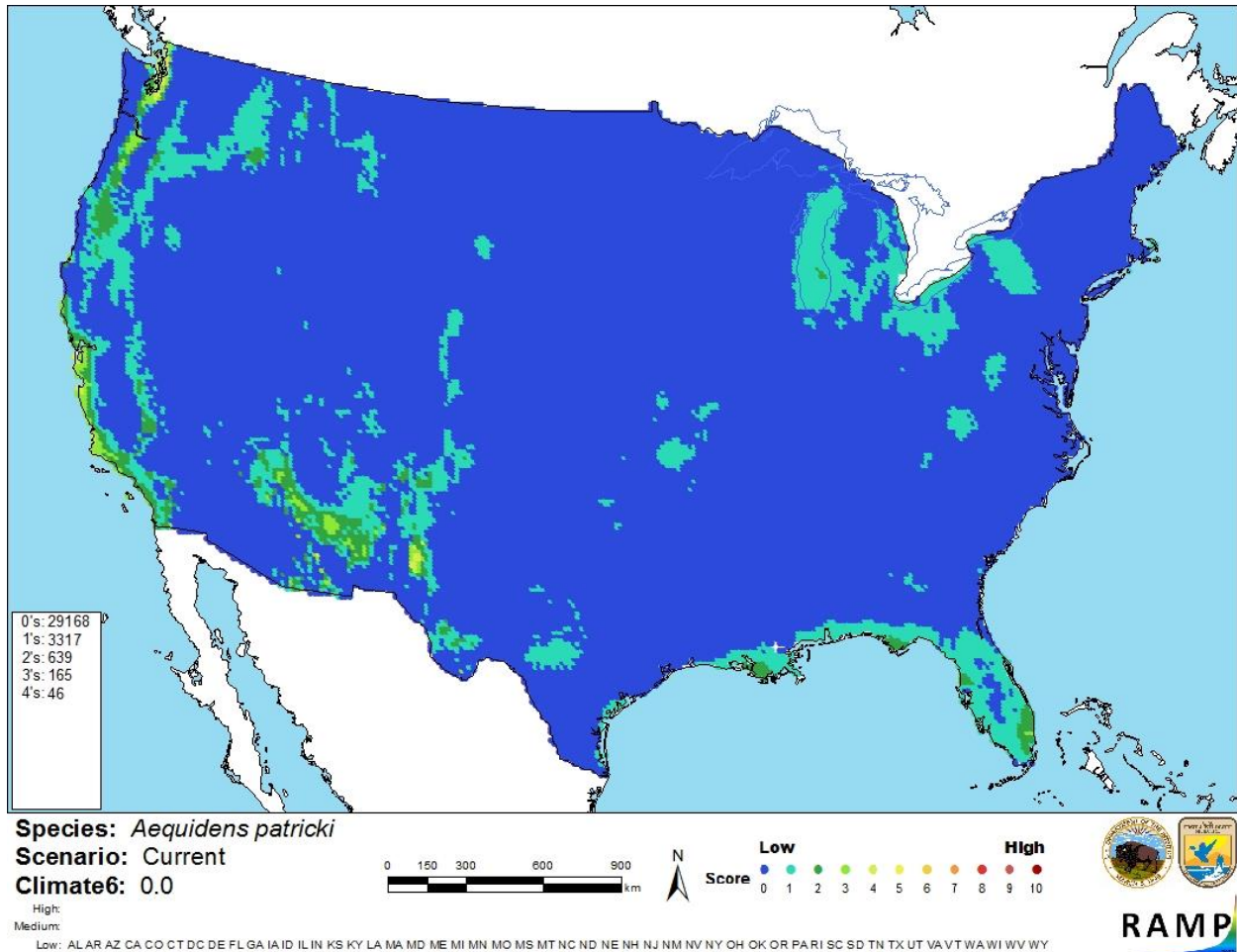


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Aequidens patricki* in the contiguous United States based on source locations reported by GBIF Secretariat (2017) and Řičan (2017). 0 = Lowest match, 10 = Highest match. Counts of climate match scores are tabulated on the left.

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

7 Certainty of Assessment

The certainty of assessment is low. There was limited information available for *Aequidens patricki*. The distribution of this species is limited but may not be fully discovered yet. No records of introduction were found for this species.

8 Risk Assessment

Summary of Risk to the Contiguous United States

The history of invasiveness is uncertain. There were no records of *Aequidens patricki* introductions. The climate match is low; the Climate 6 score was 0.000. The climate match was low across the contiguous United States. The certainty of assessment is low.

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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- 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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