

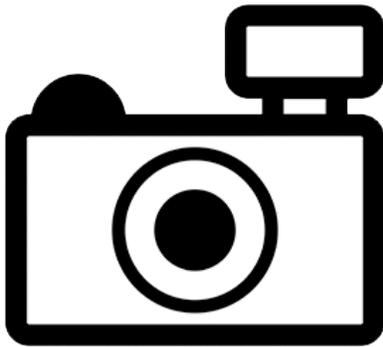
Ituglanis laticeps (a catfish, no common name)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, December 2016

Revised, February 2017

Web Version, 1/29/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2016):

“South America: Ecuador.”

Status in the United States

This species has not been reported in the United States.

From FFWCC (2016):

“Prohibited nonnative species are considered to be dangerous to the ecology and/or the health and welfare of the people of Florida. These species are not allowed to be personally possessed or used for commercial activities. [...]

Freshwater Aquatic Species [...]

Parasitic catfishes [...]

Ituglanis laticeps”

Means of Introductions in the United States

This species has not been reported in the United States.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2016):

“Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Osteichthyes
Class Actinopterygii
Subclass Neopterygii
Infraclass Teleostei
Superorder Ostariophysii
Order Siluriformes
Family Trichomycteridae
Subfamily Trichomycterinae
Genus *Ituglanis*
Species *Ituglanis laticeps* (Kner, 1863)”

“Taxonomic Status: valid”

Size, Weight, and Age Range

From Froese and Pauly (2016):

“Max length : 8.9 cm NG male/unsexed; [de Pínna and Wosiacki 2003]”

Environment

From Froese and Pauly (2016):

“Freshwater; benthopelagic.”

From Laaz and Aguirre (2011):

“Often it occurs in shallow waters less than 30 cm in depth (Barriga, 1989).”

Climate/Range

From Froese and Pauly (2016):

“Tropical, preferred ?”

Distribution Outside the United States

Native

From Froese and Pauly (2016):

“South America: Ecuador.”

From Laaz and Aguirre (2011):

“This species is common along the Pacific slope of Ecuador from Esmeraldas to Huaquillas and there are many references for its occurrence in the area (e.g., Eigenmann, 1918; Eigenmann, 1922; Ovchynnyk, 1971; Glodek, 1978; Barriga, 1989; Barriga, 1994; Ferraris, 2007; Laaz & Torres, 2010).”

Introduced

This species has not been reported as introduced outside of its native range.

Means of Introduction Outside the United States

This species has not been reported as introduced outside of its native range.

Short Description

From Laaz and Aguirre (2011):

“*Ituglanis laticeps* is distinguished from other species occurring in Western Ecuador by its elongate body shape and having a body is that is uniformly covered by very numerous close-set light brown spots. Teeth are conical only in young specimens, otherwise teeth are incisiform (Glodek, 1978). Glodek (1978) indicates that dark brown median stripes are absent although smaller individuals collected by Aguirre and collaborators had a mix of stripes and spots suggesting that color may change during ontogeny.”

Biology

From Laaz and Aguirre (2011):

“It is [an] ecologically important omnivorous fish(Barriga, 1994). It lives in streams with clear, fast-running water, that have rocks or gravel on the bottom.”

Human Uses

From Laaz and Aguirre (2011):

“This species is occassionally [*sic*] used as a food fish in western Ecuador. For example, large specimens are consumed in rural parts of Bolivar Province (Laaz, personal observation).”

Diseases

No information available.

Threat to Humans

From Froese and Pauly (2016):

“Harmless”

3 Impacts of Introductions

This species has not been reported as introduced outside of its native range.

From FFWCC (2016):

“Prohibited nonnative species are considered to be dangerous to the ecology and/or the health and welfare of the people of Florida. These species are not allowed to be personally possessed or used for commercial activities. [...]

Freshwater Aquatic Species [...]

Parasitic catfishes [...]

Ituglanis laticeps”

4 Global Distribution



Figure 1. Known global established locations of *Ituglanis laticeps*. Map from GBIF (2016). Points outside Ecuador were not used in climate matching because they outlie the described native range of the species (see Distribution Outside the United States, above).

5 Distribution within the United States

This species has not been reported within the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) for *Ituglanis laticeps* was medium near Seattle and San Francisco, but low elsewhere. Climate 6 proportion indicated that the contiguous U.S. is a low climate match overall. The range of proportions indicating a low climate match is 0.000-0.005, the Climate 6 proportion for *I. laticeps* was 0.0.

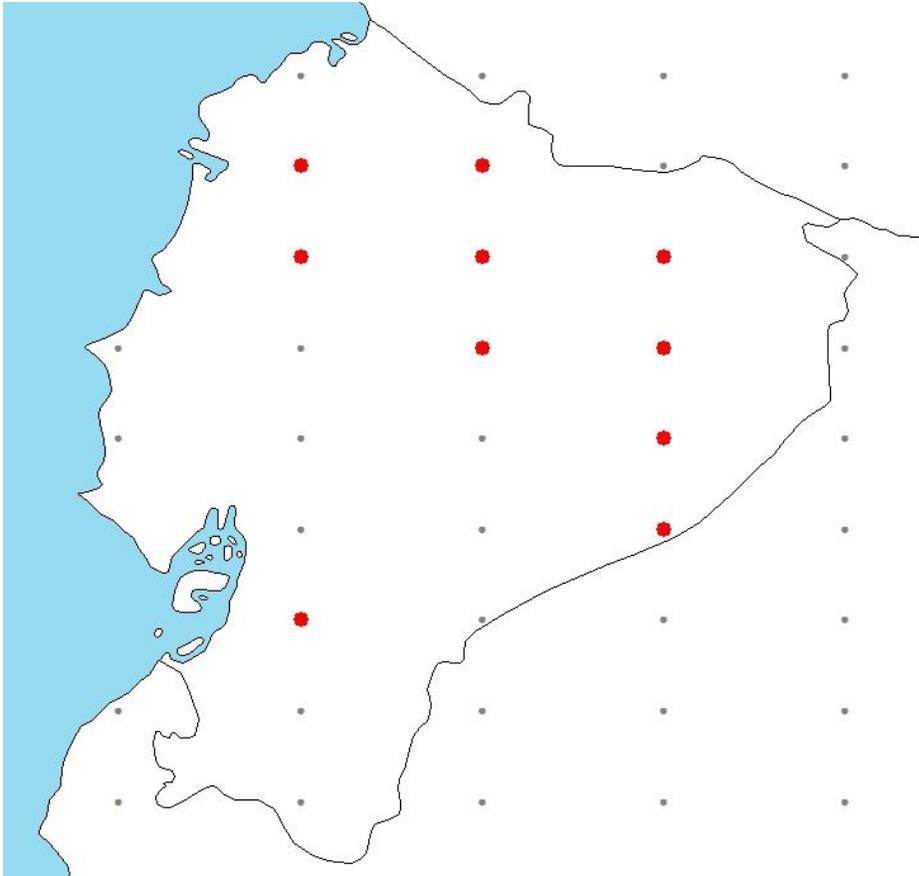


Figure 2. RAMP (Sanders et al. 2014) source map of Ecuador showing weather stations selected as source locations (red) and non-source locations (gray) for *Ituglanis laticeps* climate matching. Source locations from GBIF (2016) and VertNet (2016).

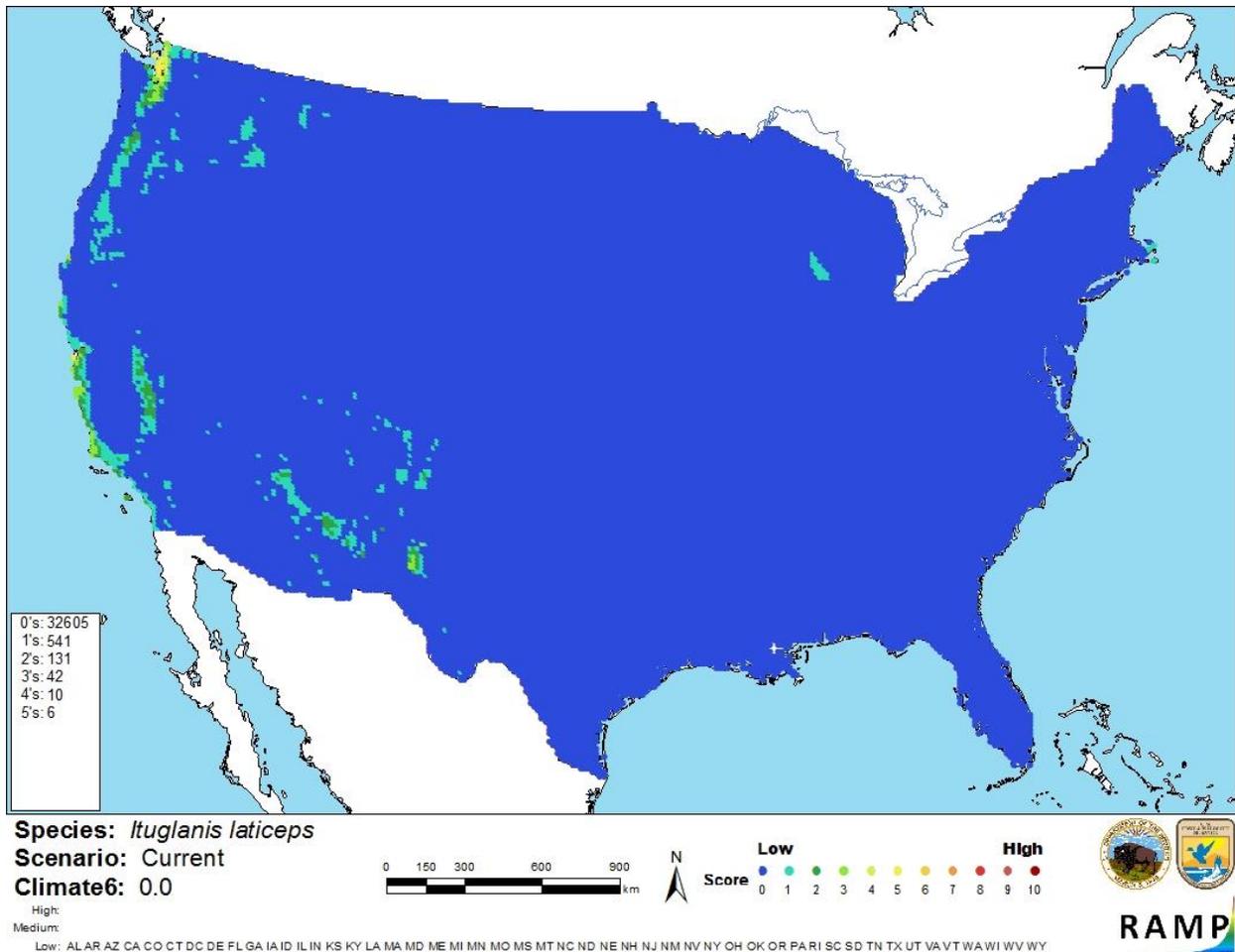


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Ituglanis laticeps* in the contiguous United States based on source locations reported by GBIF (2016) and VertNet (2016). 0= Lowest match, 10=Highest match. Counts of climate match scores are tabulated on the left.

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

There was limited information available on the biology of the species *Ituglanis laticeps*. This species has not been reported outside of its native range so impacts of introduction are unknown. Certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Ituglanis laticeps is a trichomycterid catfish native to Ecuador. This omnivorous species is common within its native range. There have been no reports of *I. laticeps* outside of its native range. Due to its low climate match and absence of introduction history, the overall risk posed by *I. laticeps* 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.

- FFWCC (Florida Fish and Wildlife Conservation Commission). 2016. Prohibited species list. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida. Available: <http://myfwc.com/wildlifehabitats/nonnatives/regulations/prohibited/#nogo>. (December 2016).
- Froese, R., and D. Pauly, editors. 2016. *Ituglanis laticeps* (Kner, 1863). FishBase. Available: <http://www.fishbase.org/summary/Ituglanis-laticeps.html>. (December 2016).
- GBIF (Global Biodiversity Information Facility). 2016. GBIF backbone taxonomy: *Ituglanis laticeps* (Kner, 1863). Global Biodiversity Information Facility, Copenhagen. Available: <http://www.gbif.org/species/2342926>. (December 2016).
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- VertNet. 2016. VertNet. Available: <http://www.vertnet.org/index.html>. (February 2017).

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.

Barriga, R. 1989. Peces de la Reserva Etnica y Forestal AWA. Ecuador Noroccidental. Politecnica Nacional 14(2). Escuela Politecnica Nacional, Quito, Ecuador.

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Eigenmann, C. H. 1922. The fishes of western South America, part I. The fresh-water fishes of northwestern South America, including Colombia, Panama, and the Pacific slopes of Ecuador and Peru, together with an appendix upon the fishes of the Rio Meta in Colombia. Memoirs of the Carnegie Museum 9(1):1-347.

Ferraris 2007 [*Source did not provide complete citation for this reference.*]

Glodek, G. S. 1978. The freshwater fishes of western Ecuador. Master's thesis. Northern Illinois University, DeKalb, Illinois.

Laaz and Torres 2010 [*Source did not provide complete citation for this reference.*]

Ovchynnyk, M. 1971. Freshwater fishes of Ecuador and perspectives for development of fish cultivation. Monograph Series no. 1. Latin American Studies Center, Michigan State University, East Lansing, Michigan.