

Ituglanis metae (a catfish, no common name)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, January 2017

Web Version, 1/29/2018



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<http://fishbase.org/photos/PicturesSummary.php?ID=48709&what=species>. (January 2017).

1 Native Range and Status in the United States

Native Range

From Eschmeyer et al. (2017):

“Orinoco basin, Colombia.”

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 metae”

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 (2017):

“Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Osteichthyes
Class Actinopterygii
Subclass Neopterygii
Infraclass Teleostei
Superorder Ostariophysi
Order Siluriformes
Family Trichomycteridae
Subfamily Trichomycterinae
Genus *Ituglanis*
Species *Ituglanis metae* (Eigenmann, 1917)”

“Taxonomic Status: valid”

Size, Weight, and Age Range

From Froese and Pauly (2016):

“Max length : 7.8 cm NG male/unsexed; [de Pínna and Wosiacki, 2003]”

Environment

From Froese and Pauly (2016):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2016):

“Tropical, preferred ?”

Distribution Outside the United States

Native

From Eschmeyer et al. (2017):

“Orinoco basin, Colombia.”

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 Datovo and de Pínna (2014):

“[...] dark brown spots not coalesced into stripes [...]”

From Lima et al. (2013):

“[...] number of pectoral-fin rays [...] i,5 in [...] *I. metae*”

Biology

From Evers and Seidel (2005):

“Unproblematic, intraspecifically social species which, unfortunately, hardly ever comes into view. Only at feeding time does it appear on the open sand substrate, otherwise, *I. metae* hides in its cave. When well fed, the females ripen and develop such a distended belly as to virtually burst. Oviposition could not be confirmed, but the females did become ‘normal’ again, although no eggs or young could be discovered.”

Human Uses

No information available.

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, so impacts of introductions are unknown.

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 metae”

4 Global Distribution



Figure 1. Reported global locations of *Ituglanis metae*. Map from GBIF (2016). Points outside Colombia do not reflect the known established range of the species (see Distribution Outside the United States, above) and were not included in climate matching.

5 Distribution Within the United States

The presence of *Ituglanis metae* has not been reported within the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean Distance) for *Ituglanis metae* in the contiguous U.S. was low. The range for a low climate match is 0.000-0.005; the Climate 6 score of *Ituglanis metae* was 0.000. The climate match was categorically low everywhere, but the highest matches occurred in peninsular Florida and western Washington.

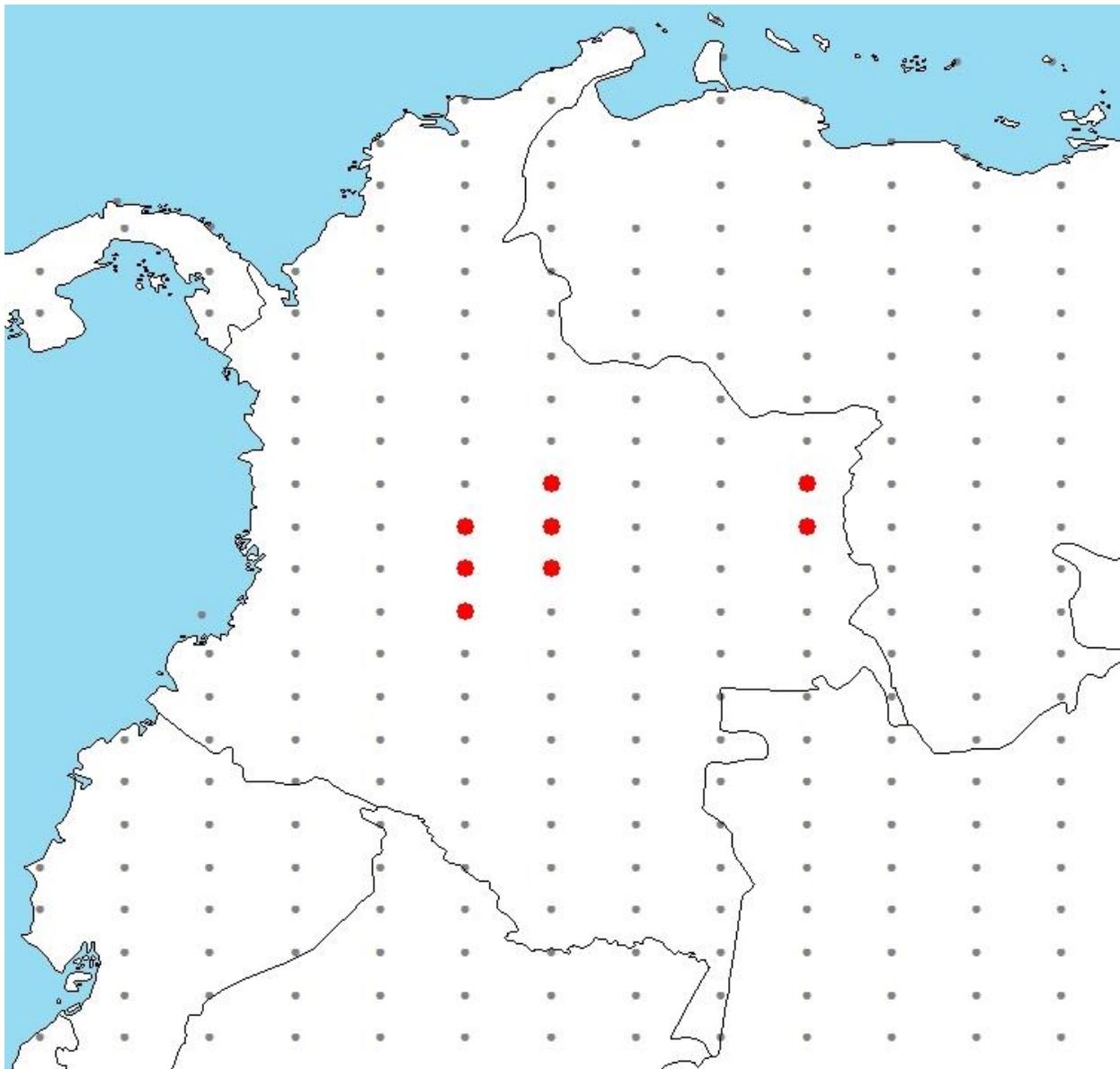


Figure 2. RAMP (Sanders et al. 2014) source map of Colombia showing weather stations selected as source locations (red) and non-source locations (gray) for *Ituglanis metae* climate matching. Source locations from GBIF (2016).

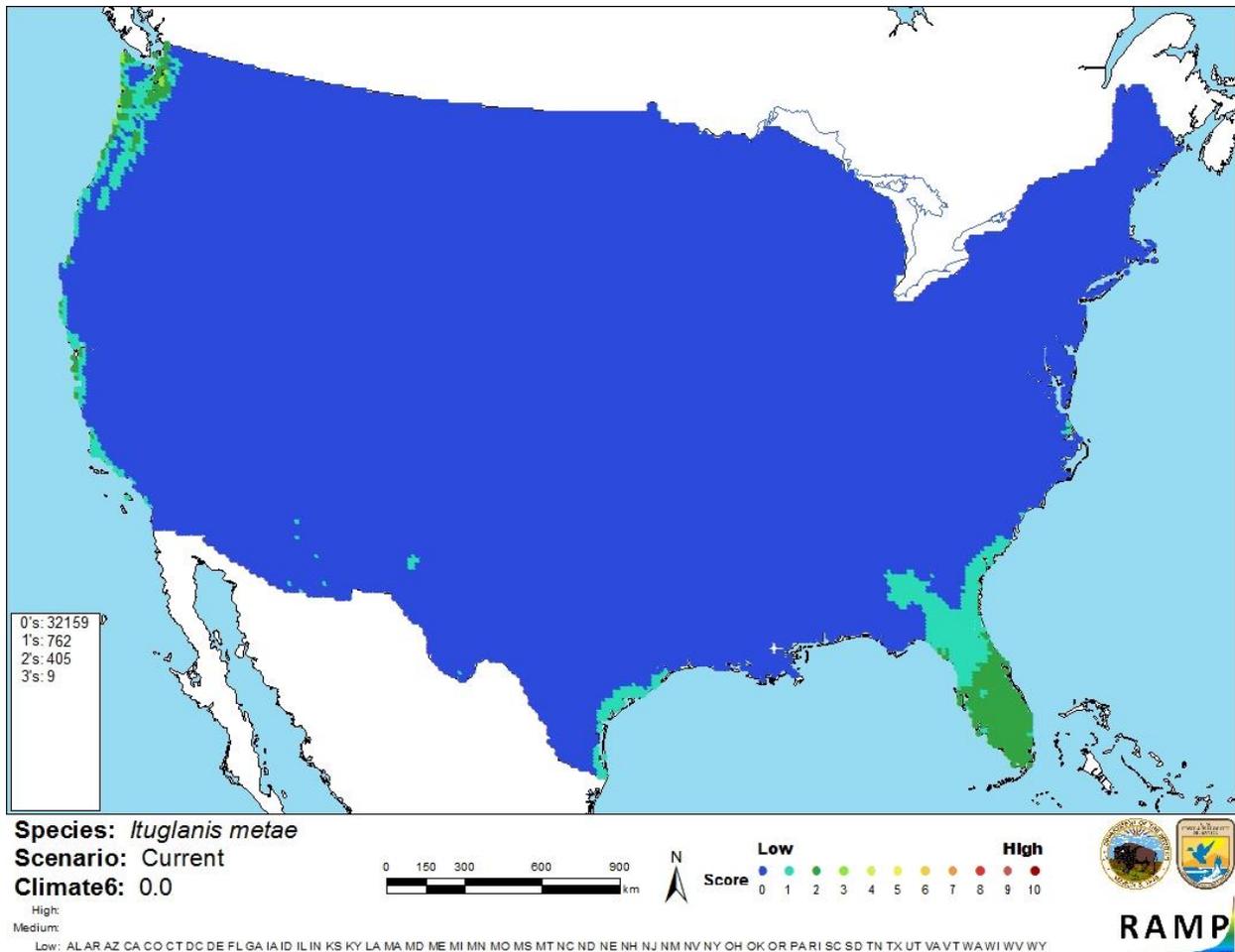


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Ituglanis metae* in the contiguous United States based on source locations reported by GBIF (2016). 0= Lowest match, 10=Highest match.

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

7 Certainty of Assessment

There was limited information available on the species *Ituglanis metae*. This species has not been reported outside of its native range so impacts of introduction are unknown. With such little information known on this species the certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Ituglanis metae is a trichomycterid catfish found in Colombia, South America. Little information is available about this species. Due to its low climate match to the contiguous U.S. and absence of introduction history, the 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.

- Datovo, A., and M. C. C. de Pínna. 2014. A new species of *Ituglanis* representing the southernmost record of the genus, with comments on phylogenetic relationships (Teleostei: Siluriformes: Trichomycteridae). *Journal of Fish Biology* 84:314-327.
- Eschmeyer, W. N., R. Fricke, and R. van der Laan, editors. 2017. *Catalog of fishes: genera, species, references*. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (January 2017).
- Evers, H.-G., and I. Seidel. 2005. *Catfish atlas volume 1: South American catfishes of the families Loricariidae, Cetopsidae, Nematogenyiidae and Trichomycteridae*. MERGUS Verlag GmbH, Melle, Germany.
- 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. 2016. *Ituglanis metae* (Eigenmann, 1917). FishBase. Available : <http://www.fishbase.se/summary/Ituglanis-metae.html>. (January 2017).
- GBIF (Global Biodiversity Information Facility). 2016. GBIF backbone taxonomy: *Ituglanis metae* (Eigenmann, 1917). Global Biodiversity Information Facility, Copenhagen. Available: <http://www.gbif.org/species/2342904>. (January 2017).
- ITIS (Integrated Taxonomic Information System). 2017. *Ituglanis metae* (Eigenmann, 1917). Integrated Taxonomic Information System, Reston, Virginia.

Available:https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=682124#null. (January 2017).

Lima, S. M. Q., C. P. Neves, and R. M. Campos-Paiva. 2013. *Ituglanis agreste*, a new catfish from the rio de Contas basin, northeastern Brazil (Siluriformes: Trichomycteridae). *Neotropical Ichthyology* 11(3):513-524.

Sanders, S., C. Castiglione, and M. H. Hoff. 2014. Risk Assessment Mapping Program: RAMP. 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.

de Pínna, M. C. C., and W. Wosiacki, 2003. Trichomycteridae (pencil or parasite catfishes). Pages 270-290 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.