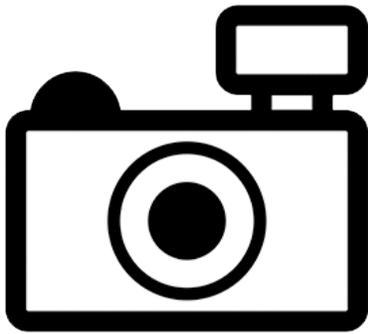


Trichomycterus conradi (a catfish, no common name)

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, December 2016
Revised, May 2017
Web Version, 5/1/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2016):

“South America: River drainages in Guyana and Venezuela.”

Status in the United States

This species has not been reported as introduced 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. [...] [The list of prohibited nonnative species includes] *Trichomycterus conradi*”

Means of Introductions in the United States

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

Remarks

From Romero and Paulson (2001):

“Major synonyms: *Pygidium conradi* (original description); *T. guianensis* (Galan, 1995).”

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 Ostariophysi
Order Siluriformes
Family Trichomycteridae
Subfamily Trichomycterinae
Genus *Trichomycterus*
Species *Trichomycterus conradi* Eigenmann, 1912”

“Current Standing: valid”

Size, Weight, and Age Range

From Froese and Pauly (2016):

“Max length: 8.0 cm male/unsexed; [de Pínna and Wosiacki 2003]”

Environment

From Froese and Pauly (2016):

“Freshwater; benthopelagic.”

From Romero and Paulson (2001):

“Venezuela, Monagas state, Cueva del Guácharo [...] is a large cave in which [this] fish can be found through most of its waters.”

Climate/Range

From Froese and Pauly (2016):

“Tropical, preferred ?”

Distribution Outside the United States

Native

From Froese and Pauly (2016):

“South America: River drainages in Guyana and Venezuela.”

Introduced

No introductions of this species have been reported.

Means of Introduction Outside the United States

No introductions of this species have been reported.

Short Description

From Romero and Paulson (2001):

“It has reduced eyes and variable pigmentation (Nalbant and Linares 1987). Many of the morphological differences reported by Andreani Armas (1990) may be influenced by the natural variability of this species; some of those are typical of epigean species whose hypogean population is in status nascendi.”

Biology

From Romero and Paulson (2001):

“This fish has the tendency to burrow in the sediment, which may make its observation difficult (Romero 1987). [...] Agonistic behavior for this species has been reported (Romero op. cit.)”

From Trajano (2001):

“Stream-dwelling trichomycterines such as *Trichomycterus conradi* from Cueva del Guácharo [...] feed largely on insects, complemented by crustaceans and oligochaetes (Andreani-Armas 1990, Trajano 1989, Trajano [1997]).”

Human Uses

No information available.

Diseases

No information available.

Threat to Humans

From Froese and Pauly (2016):

“Harmless”

3 Impacts of Introductions

No introductions of this species have been reported.

The Florida Fish and Wildlife Conservation Commission (FFWCC 2016) has listed the parasitic catfish *Trichomycterus conradi* as a prohibited species.

4 Global Distribution



Figure 1. Known global established locations of *T. conradi*, reported from northeast South America. Map from GBIF (2016).

5 Distribution Within the United States

This species has not been reported in the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) was low throughout nearly all of the contiguous U.S. The climate match was medium in a small area of southeastern Florida. Climate 6 score indicated a low climate match overall for the contiguous U.S. Scores of 0.005 and below are classified as low match; the Climate 6 score for *T. conradi* was 0.0.

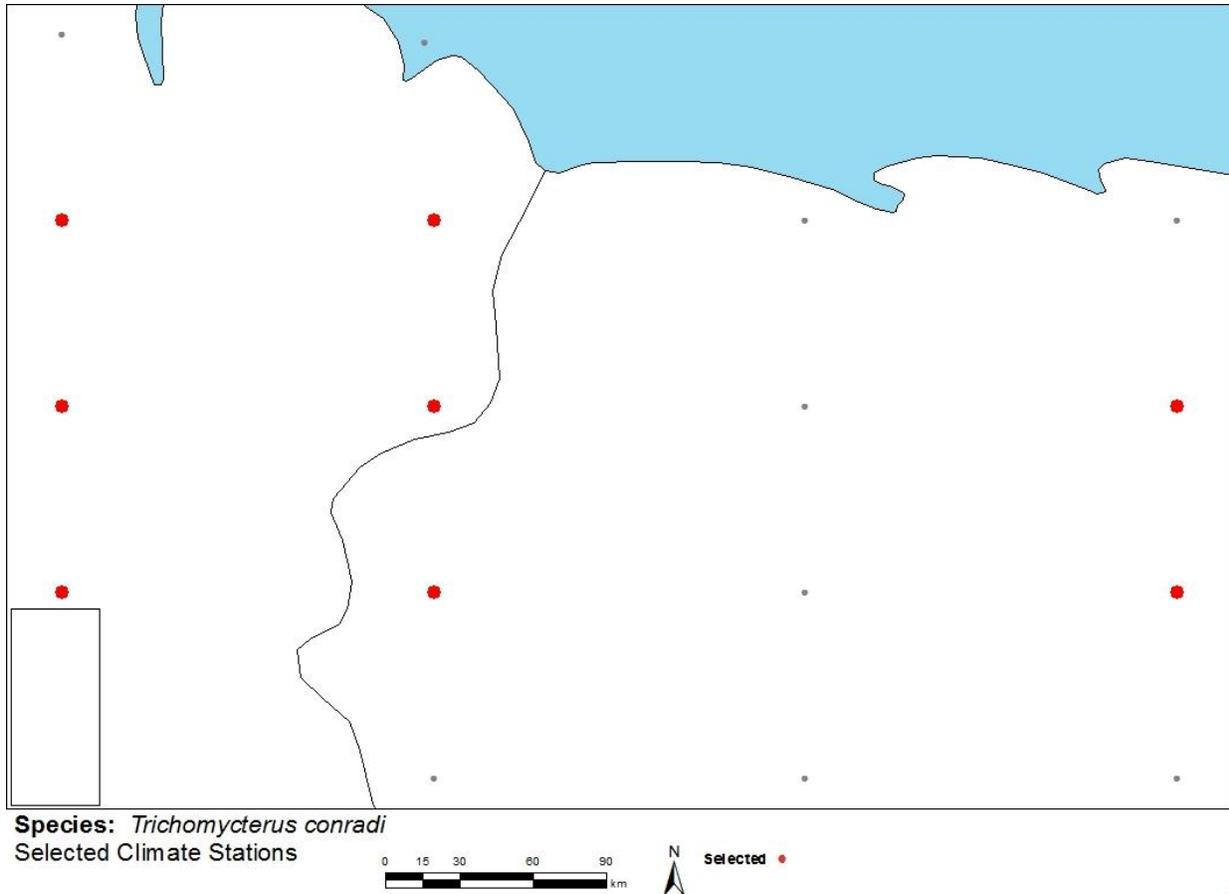


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations in Guyana and Venezuela selected as source locations (red) and non-source locations (gray) for *T. conradi* climate matching. Source locations from GBIF (2016).

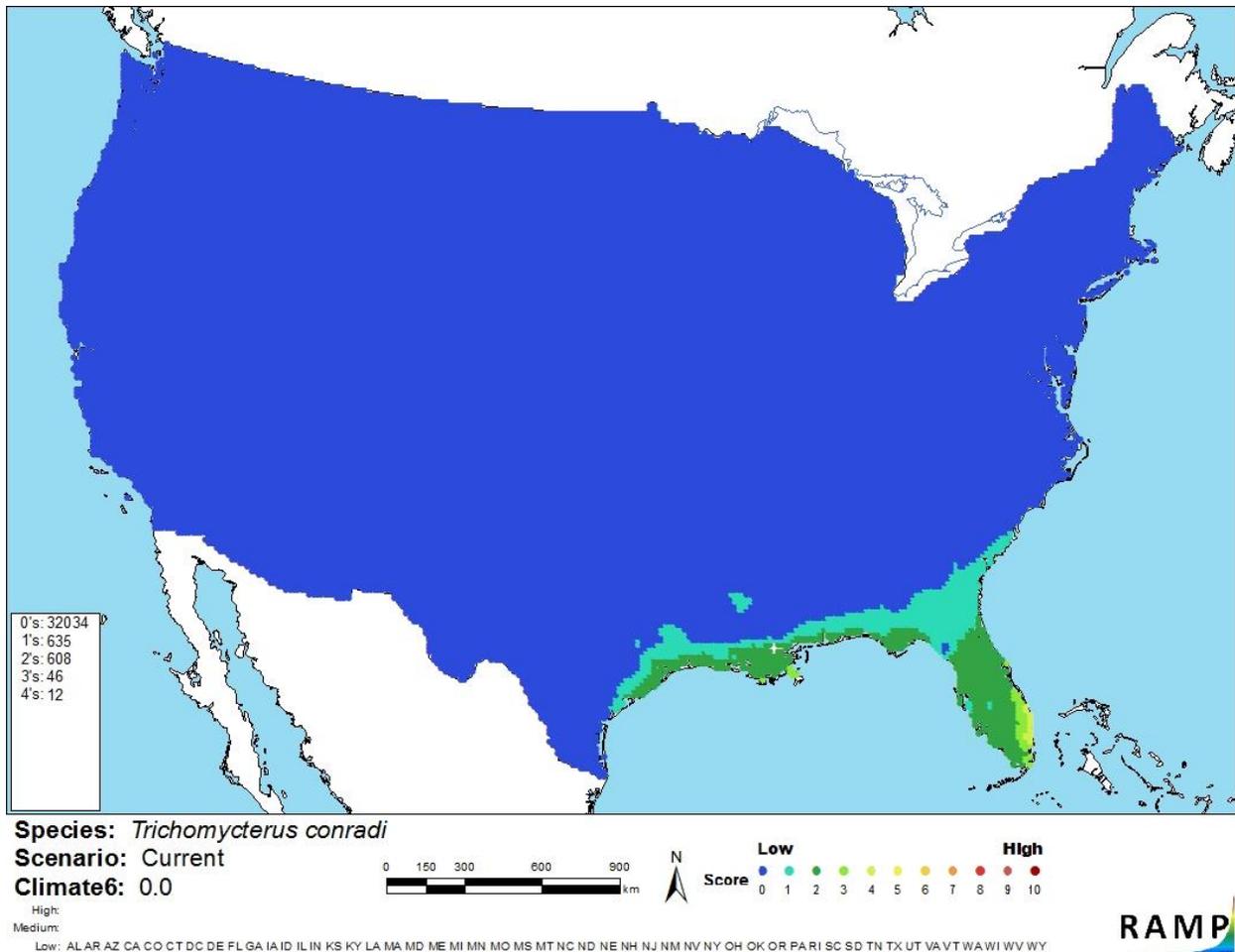


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *T. conradi* in the contiguous United States based on source locations reported by GBIF (2016). 0=Lowest match, 10=Highest match. Counts of climate match scores are tabulated on the left.

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

The biology and ecology of *T. conradi* are poorly known. It has never been reported as introduced outside its native range. The certainty of this assessment is low because of the lack of information about the species and potential impacts of its introduction.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Trichomycterus conradi is a cave-dwelling fish species known from Guyana and Venezuela. It has not been reported as introduced outside of its native range. Without being able to observe introductions in other parts of the world, it is impossible to know the potential impacts of introduction of *T. conradi* if introduced to the U.S. The Florida Fish and Wildlife Conservation Commission has listed the parasitic catfish *T. conradi* as a prohibited species. Climate match to the contiguous U.S. is low. The overall risk of 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.

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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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Trajano, E. 1989. Estudo do comportamento espontâneo e alimentar e da dieta do bagre cavernícola, *Pimelodella kronei*, e seu provável ancestral epígeo, *Pimelodella transitoria* (Siluriformes, Pimelodidae). *Revista Brasileira de Zoologia* 49:757-769.

Trajano, E. 1997. Food and reproduction of *Trichomycterus itacarambiensis*, cave catfish from south-eastern Brazil. *Journal of Fish Biology* 51:53-63.