

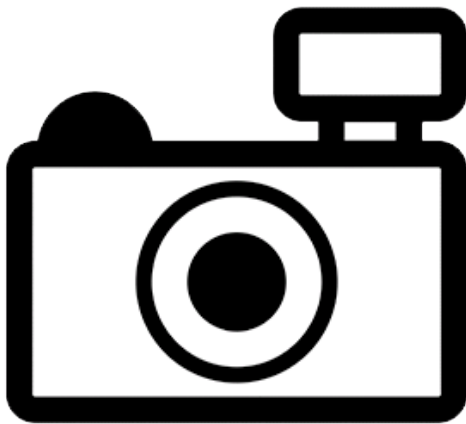
***Ammoglanis diaphanus* (a catfish, no common name)**

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, March 2015

Revised, September 2017, October 2017

Web Version, 8/21/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2015):

“South America: stream tributary to Javaés River, Araguaia River basin in Brazil.”

Status in the United States

No records of *Ammoglanis diaphanus* in the wild or in trade in the United States were found.

The Florida Fish and Wildlife Conservation Commission has listed the parasitic catfish *A. diaphanus* as a prohibited species. Prohibited nonnative species (FFWCC 2018), “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.”

Means of Introductions in the United States

No records of *Ammoglanis diaphanus* in the United States were found.

Remarks

Ammoglanis diaphanus is on the Florida Fish and Wildlife Conservation Commission's Prohibited Species List (FFWCC 2018).

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

According to Eschmeyer et al. (2017), *Ammoglanis diaphanus* Costa 1994 is the valid name for this species.

From ITIS (2015):

“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 Sarcoglanidinae
Genus *Ammoglanis*
Species *Ammoglanis diaphanus* Costa, 1994”

Size, Weight, and Age Range

From Froese and Pauly (2015):

“Max length: 1.9 cm SL male/unsexed; [de Pinna and Wosiacki 2003]”

Environment

From Froese and Pauly (2015):

“Freshwater; demersal.”

Climate/Range

From Froese and Pauly (2015):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2015):

“South America: stream tributary to Javaés River, Araguaia River basin in Brazil.”

Introduced

No records of *Ammoglanis diaphanus* introductions were found.

Means of Introduction Outside the United States

No records of *Ammoglanis diaphanus* introductions were found.

Short Description

From Froese and Pauly (2015):

“Dorsal soft rays (total): 10; Anal soft rays: 8; Vertebrae: 33. Vertebrae, 33, excluding Weberian complex and compound caudal centrum.”

Biology

From Froese and Pauly (2015):

“Inhabits shallow, narrow, clear water, moderately swift-flowing stream. Found buried in the sand. Feeds on Diptera larvae and a cladoceran species.”

From Zuanon et al. (2006):

“The following freshwater fish species from South America may doubtless be referred as strictly psammophilous. Four species of the crenuchid *Characidium* (*C. pellucidum*, *C. pteroides*, *C. steindachneri*, plus one undescribed – Buckup, 1993a); two species of the trichomycterid *Ammoglanis* Costa (*A. diaphanus* Costa and *A. pulex*), [...]”

Human Uses

Information on any human uses of *Ammoglanis diaphanus* was not found.

The Florida Fish and Wildlife Conservation Commission has listed the parasitic catfish *A. diaphanus* as a prohibited species. Prohibited nonnative species (FFWCC 2018), “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.”

Diseases

Information on diseases and parasites of *Ammoglanis diaphanus* was not found.

Threat to Humans

From Froese and Pauly (2015):

“Harmless”

3 Impacts of Introductions

No records of *Ammoglanis diaphanus* introductions were found.

4 Global Distribution



Figure 1. Known global distribution of *Ammoglanis diaphanus* in Brazil. Map from GBIF Secretariat (2015).

5 Distribution Within the United States

No records of *Ammoglanis diaphanus* in the United States were found.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Ammoglanis diaphanus* was medium for southern Florida and low everywhere else. The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low, and no States had an individually high climate match.

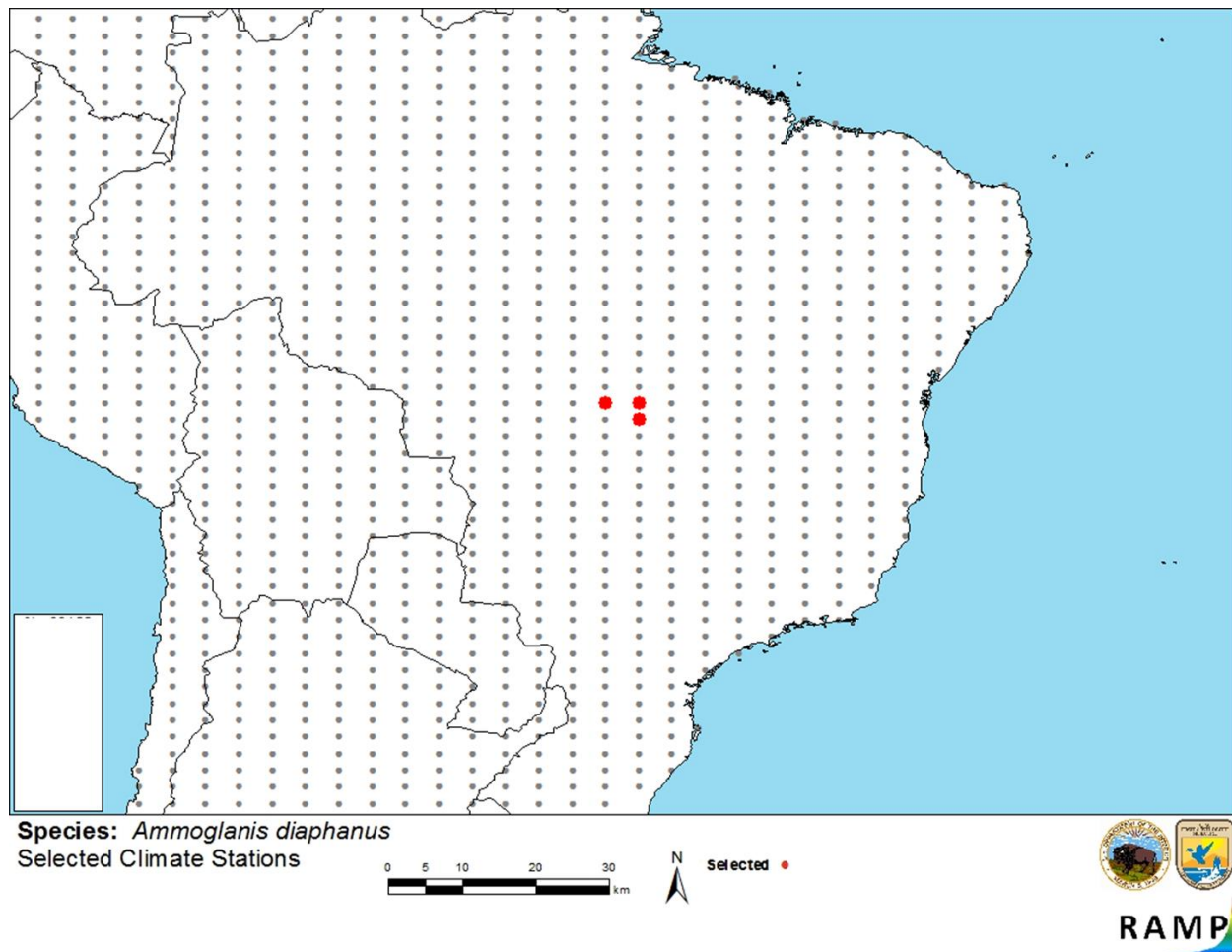


Figure 2. RAMP (Sanders et al. 2014) source map of central South America showing weather stations selected as source locations (red; Brazil) and non-source locations (grey) for *Ammoglanis diaphanus* climate matching. Source locations from GBIF Secretariat (2015).

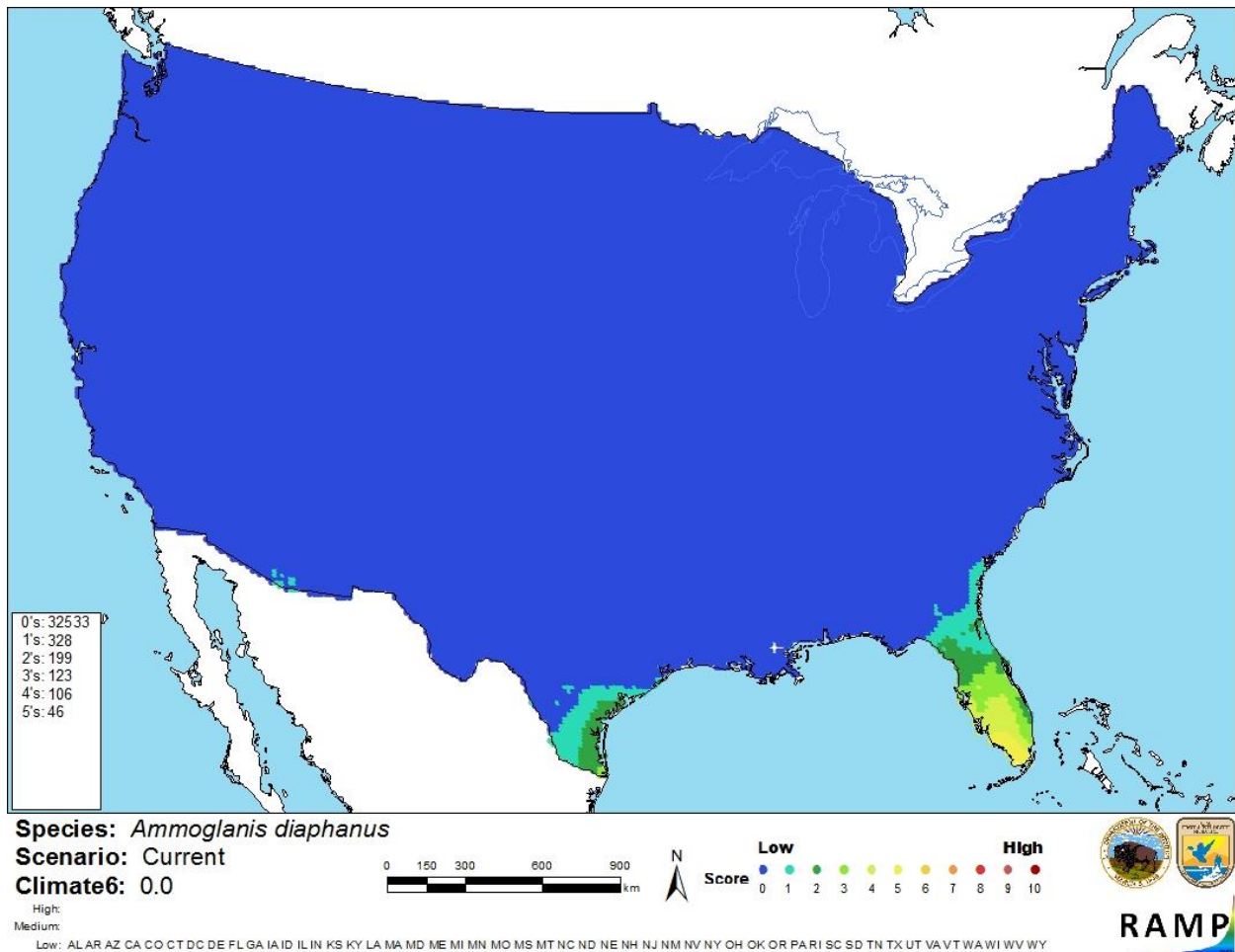


Figure 3. Map from RAMP (Sanders et al. 2014) of a current climate match for *Ammoglanis diaphanus* in the contiguous United States based on source locations reported by GBIF Secretariat (2015). 0 = Lowest match, 10 = Highest match.

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

The certainty of this assessment is low. Limited information was available for *Ammoglanis diaphanus*. No records of introduction were found.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Ammoglanis diaphanus is a species of parasitic catfish native to Brazil. The history of invasiveness is uncertain. No records of introduction were found for *Ammoglanis diaphanus*. However, this species is on the Florida Fish and Wildlife Conservation Commission's Prohibited Species List (FWC 2015). Climate match is low; the Climate 6 score was 0.000. The certainty of assessment is low. The 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** *Ammoglanis diaphanus* is on the Florida Fish and Wildlife Conservation Commission's Prohibited Species List (FWC 2018).
- **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.

Eschmeyer, W. N., R. Fricke, and R. van der Laan, editors. 2017. Catalog of fishes: genera, species, references. Available:
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<http://myfwc.com/wildlifehabitats/nonnatives/regulations/prohibited/>. (August 2018).

Froese, R., and D. Pauly, editors. 2015. *Ammoglanis diaphanus* Costa, 1994. FishBase. Available: <http://fishbase.us/summary/Ammoglanis-diaphanus.html>. (March 2015).

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<http://www.gbif.org/species/2343347>. (March 2015).

ITIS (Integrated Taxonomic Information System). 2015. *Ammoglanis diaphanus* Costa, 1994. Integrated Taxonomic Information System, Reston, Virginia. Available:
http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=682095. (March 2015).

Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk assessment mapping program: RAMP. U.S. Fish and Wildlife Service.

Zuanon, J., F. A. Bockmann, and I. Sazima. 2006. A remarkable sand-dwelling fish assemblage from central Amazonia, with comments on the evolution of psammophily in South American freshwater fishes. *Neotropical Ichthyology* 4(1):107–118.

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.

Buckup, P. A. 1993a. Phylogenetic interrelationships and reductive evolution in Neotropical characidiin fishes (Characiformes, Ostariophysi). *Cladistics* 9(3):305–341.

de Pínna, M. C. C., and W. Wosiacki. 2003. Trichomycteridae (pencil or parasitic 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.