

Agassiz's Corydoras (*Corydoras agassizii*)

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, Web Version – 1/4/2018



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1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2014):

“South America: Amazon River basin near border of Peru and Brazil.”

Status in the United States

No records of *Corydoras agassizii* in the United States were found.

Means of Introductions in the United States

No records of *Corydoras agassizii* in the United States were found.

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2014):

“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 Callichthyidae
Subfamily Corydoradinae
Genus *Corydoras* Lacepède, 1803
Species *Corydoras agassizii* Steindachner, 1876

Taxonomic Status: Current Standing: verified”

From Eschmeyer et al. (2017):

“*agassizii*, *Corydoras* Steindachner [F.] 1876:138 [90], Pl. 12 (figs. 2-2a) [Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe v. 74 (1. Abth.)] Amazon River near Tabatinga, Amazonas, Brazil. Lectotype: NMW 61112 [ex NMW 46697]. Paralectotypes: NMW 46697 (1); ZMA 110465 [ex NMW 46697] (1). Type catalog: Nijssen et al. 1982:42, Ferraris 2007:112. On p. 90 of separate. Lectotype selected by Nijssen & Isbrücker 1980:195. •Valid as *Corydoras agassizii* Steindachner 1876 -- (Nijssen & Isbrücker 1980:195, Burgess 1989:365, Grant 1998:45, Isbrücker 2001:219, Reis in Reis et al. 2003:294 dated 1877, Ferraris 2007:112 dated 1877). **Current status:** Valid as *Corydoras agassizii* Steindachner 1876. Callichthyidae: Corydoradinae.”

Size, Weight, and Age Range

From Froese and Pauly (2014):

“Max length: 5.2 cm SL male/unsexed; [Reis 2003]”

Environment

From Froese and Pauly (2014):

“Freshwater; demersal; pH range: 6.0 - 8.0; dH range: 2 - 25. [...]; 22°C - 26°C [assumed to be recommended aquarium water temperature] [Riehl and Baensch 1996]”

Climate/Range

From Froese and Pauly (2014):

“Tropical; [...]”

Distribution Outside the United States

Native

From Froese and Pauly (2014):

“South America: Amazon River basin near border of Peru and Brazil.”

Introduced

No records of *Corydoras agassizii* introductions were found.

Means of Introduction Outside the United States

No records of *Corydoras agassizii* introductions were found.

Short Description

A short description of *Corydoras agassizii* was not available.

Biology

From Froese and Pauly (2014):

“Omnivorous.”

“The female holds 2-4 eggs between her pelvic fins, where the male fertilizes them for about 30 seconds. Only then the female swims to a suitable spot, where she attaches the very sticky eggs. The pair repeats this process until about 100 eggs have been fertilized and attached [Riehl and Baensch 1991].”

Human Uses

From Froese and Pauly (2014):

“Aquarium: commercial”

From Tavares-Dias et al. (2009):

“Principal freshwater ornamental fish species exported from the Amazonas State, Brazil in 2007 (Ibama, 2008) [...] *Corydoras agassizii* Catfish corydoras 138,283”

Diseases

No records of OIE reportable diseases were found.

From Froese and Pauly (2014):

“Bacterial Infections (general), Bacterial diseases”

Threat to Humans

From Froese and Pauly (2014):

“Harmless”

3 Impacts of Introductions

No records of *Corydoras agassizii* introductions were found.

4 Global Distribution

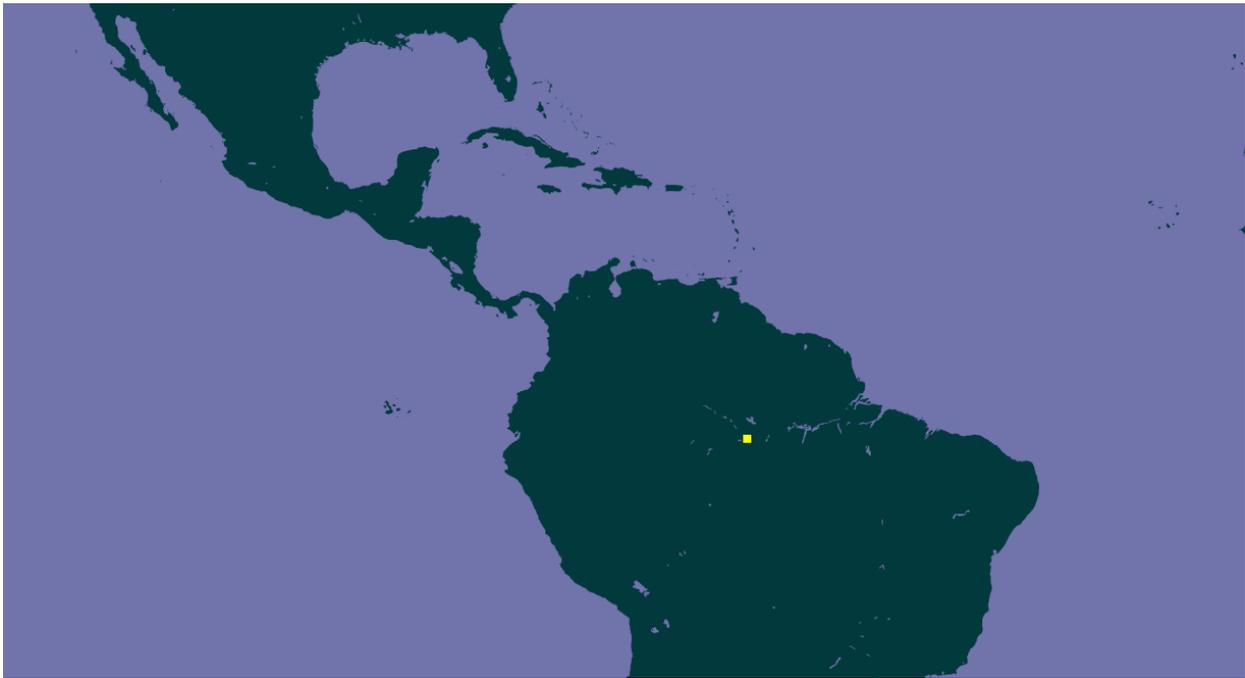


Figure 1. Map showing known global distribution of *Corydoros agassizii* in South America. Map from GBIF Secretariat (2017).



Figure 2. Map of South America showing known global distribution of *Corydoros agassizii*. Map from VertNet (2017).

5 Distribution Within the United States

No records of *Corydoros agassizii* in the United States were found.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Corydoras agassizii* was low for the entire contiguous United States. 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.

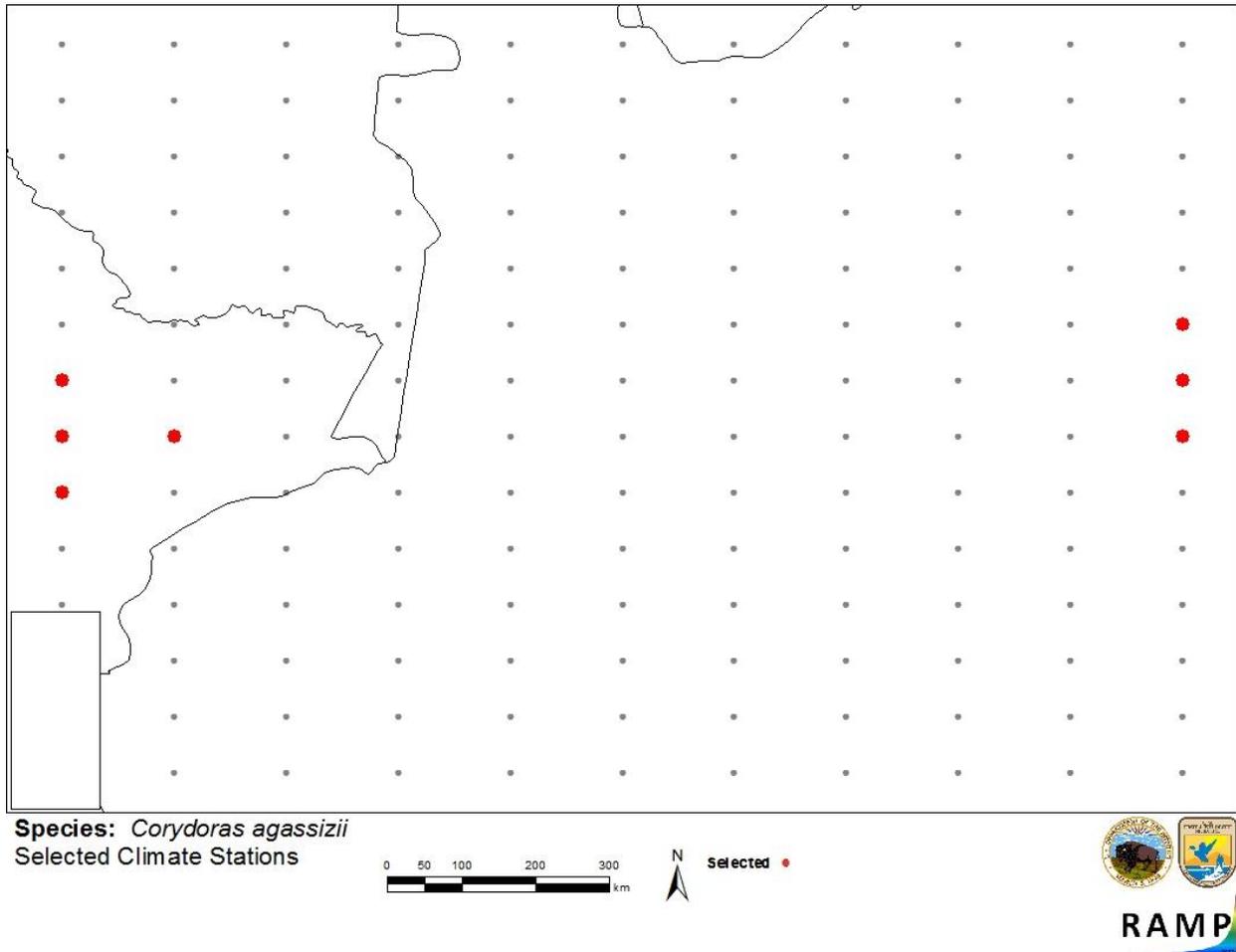


Figure 3. RAMP (Sanders et al. 2014) source map showing weather stations in Brazil and Peru that were selected as source locations (red) and non-source locations (grey) for *Corydoras agassizii* climate matching. Source locations from GBIF Secretariat (2017) and VertNet (2017).

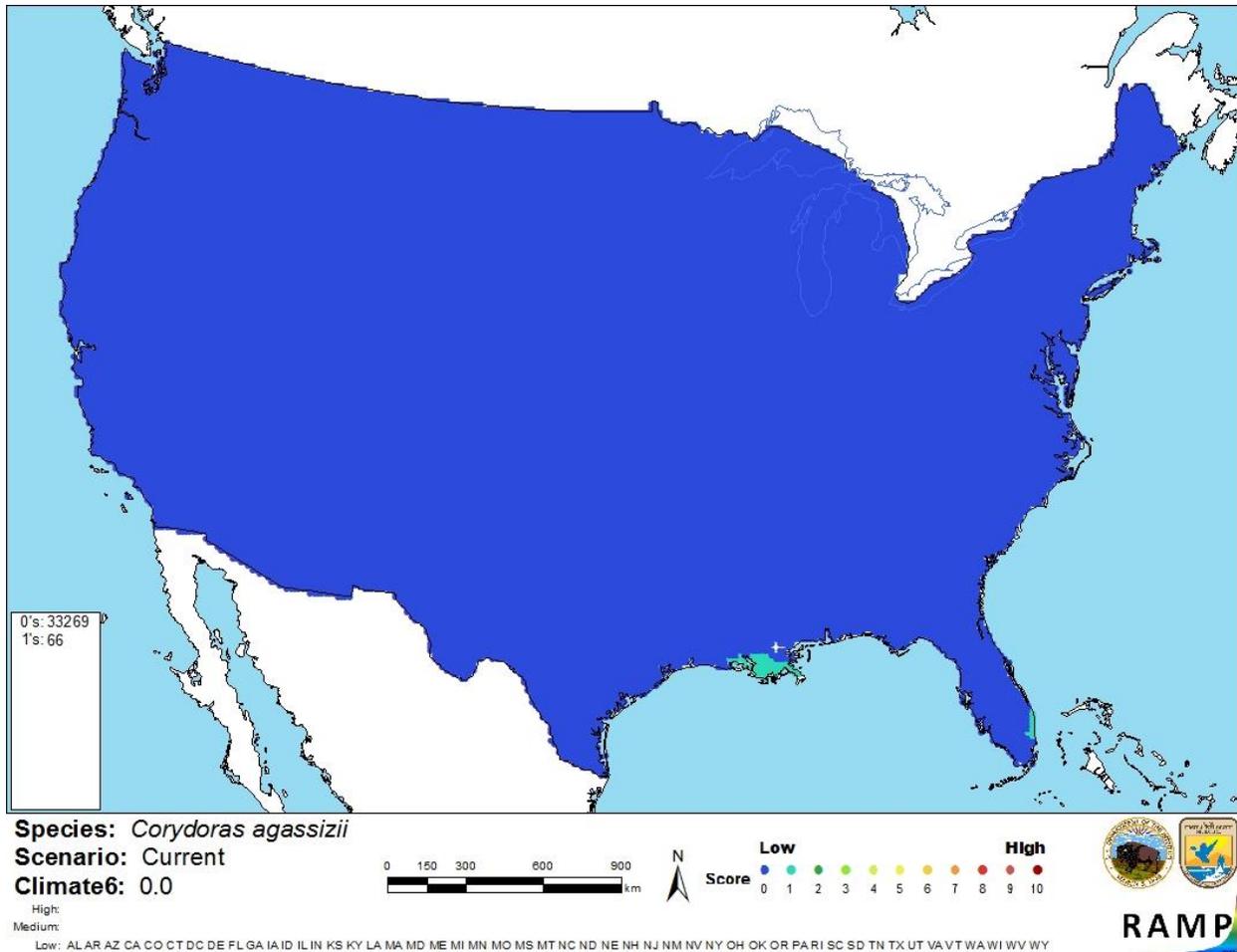


Figure 4. Map of RAMP (Sanders et al. 2014) climate matches for *Corydoras agassizii* in the contiguous United States based on source locations reported by GBIF Secretariat (2017) and VertNet (2017). 0 = Lowest match, 10 = Highest match.

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

7 Certainty of Assessment

There was a minimal amount of ecological information available for *Corydoras agassizii*. While the fish has been known for some time, there has been little research published. No records of introductions were found. The certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

The history of invasiveness for *Corydoras agassizii* is uncertain. There were no records of introductions found for this species. The climate match was very low across the country. The overall risk assessment 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** 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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Tavares-Dias, M., J. R. Gonzaga Lemos, M. Laterça Martins, and G. T. Jerônimo. 2009. Metazoa and Protozoan parasites of freshwater ornamental fish from Brazil. Pages 469–494 in M. Tavares-Dias, editor. 2009. Manejo e Sanidade de Peixes em Cultivo. Embrapa Amapá, Macapá, Brazil.

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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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