Whiptail Loricaria (*Rineloricaria fallax*)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, July 2017
Revised, August 2017
Web Version, 12/11/2017

Photo: J. Zuanon. Licensed under CC BY-NC. Available: http://eol.org/pages/220259/overview. (July 2017).

1 Native Range and Status in the United States

Native Range

From Eschmeyer et al. (2017):

"Upper Rupununi and Branco River basins: Brazil and Guyana."

Status in the United States

This species has not been documented as introduced or established in the United States. This species is in trade in the United States.

From Bluegrass Aquatics (2017):

"Whiptail Loricaria Catfish – regular size
[…] IN STOCK
$9.98"

Means of Introductions in the United States

This species has not been documented as introduced or established in the United States.

Remarks

From Seriously Fish (2017):

"In 2002 it was briefly placed in the resurrected genus *Hemiloricaria*, but this lasted less than twelve months, after which it was transferred back to *Rineloricaria*. Currently only *Rineloricaria* is valid, but you'll still see it being referred to as *Hemiloricaria* quite often."

The common name 'Whiptail loricaria' is applied to multiple species in the genus *Rineloricaria*.

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 Actinopterygii
Class Teleostei
Superorder Ostariophysi
Order Siluriformes
Family Loricariidae
Subfamily Loricariinae
Genus *Rineloricaria*
Species *Rineloricaria fallax* (Steindachner, 1915) – whiptailed loricaria"

From Eschmeyer et al. (2017):

"Current status: Valid as *Rineloricaria fallax* (Steindachner 1915). Loricariidae: Loricariinae."

Size, Weight, and Age Range

From Froese and Pauly (2017):

"Max length : 15.7 cm SL male/unsexed; [Ferraris 2003]"

Environment

From Froese and Pauly (2017):

"Freshwater; demersal; pH range: 5.8 - 7.8; dH range: ? - 20."

"15°C - 25°C [Riehl and Baensch 1991; assumed to be recommended aquarium temperatures]"

Climate/Range

From Froese and Pauly (2017):

"Subtropical […]"

Distribution Outside the United States

Native

From Eschmeyer et al. (2017):

"Upper Rupununi and Branco River basins: Brazil and Guyana."

Introduced

This species has not been documented as introduced or established outside of its native range.

Means of Introduction Outside the United States

This species has not been documented as introduced or established outside of its native range.

Short Description

From Vera-Alcaraz et al. (2012):

"[…] five lateral plate series in longitudinal rows below the dorsal fin, the mid-dorsal series present and consisting in two to ten keeled plates situated below the dorsal series and beginning around insertion of the first dorsal-fin ray […]"

"[…] caudal fin dark brown with vertical darker bars on rays in *R. fallax* […]"

"[…] dorsum with a single predorsal spot in *R. fallax* […]"

"[…] snout tip raised, and lateral margins of the head curved anteriorly were found in *R. fallax* […]"

From Seriously Fish (2017):

“Mature males develop odontotes [*sic*] on the head and pectoral rays, which are lacking in females.”

Biology

From Froese and Pauly (2017):

“Needs 3-4cm wide and 20 cm long caves for spawning in which the female lays the eggs. The male tends the clutch and helps freeing the fry from their eggs [Riehl and Baensch 1991].”

From Seriously Fish (2017):

“It’s almost always found living amongst leaf litter over sandy substrates in shallow, flowing waters.”

“Feeds on aufwuchs and small aquatic crustaceans in nature.”

Human Uses

From Froese and Pauly (2017):

“Aquarium: commercial”

Diseases

No information available. No OIE-reportable diseases have been documented for this species.

Threat to Humans

From Froese and Pauly (2017):

“Harmless”

3 Impacts of Introductions

This species has not been documented as introduced or established outside of its native range.

4 Global Distribution

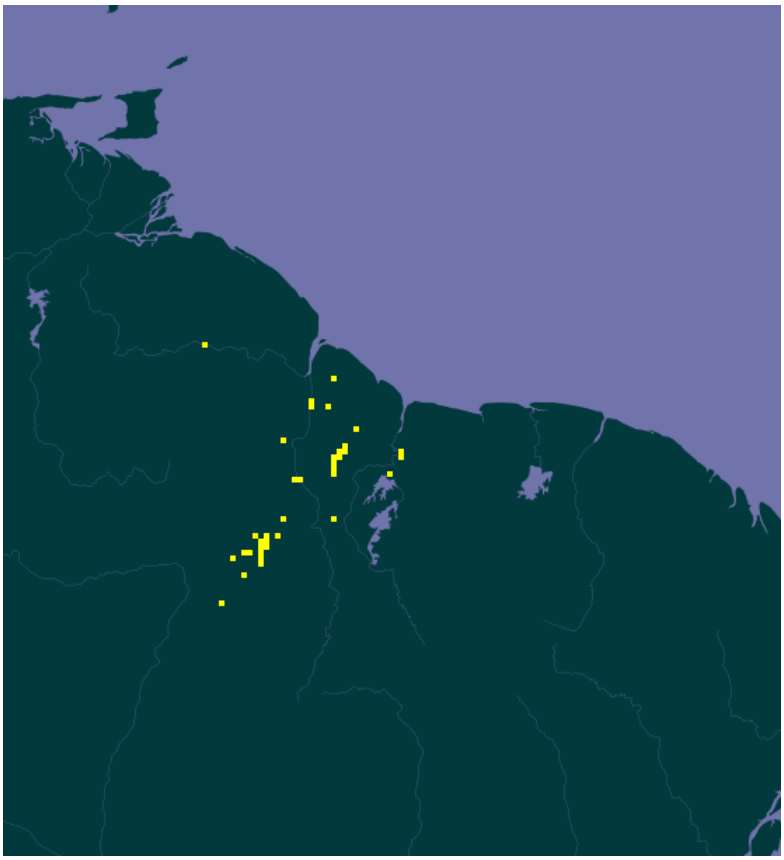

Figure 1. Known global distribution of *Rineloricaria fallax*. Map from GBIF (2016). Points outside the Rupununi River and the Branco River basins (Brazil and Guyana) were excluded from this map and the climate matching analysis because these basins represent the extent of the described range of *R. fallax* (Froese and Pauly 2017; see Distribution Outside the United States).

5 Distribution Within the United States

This species has not been documented as introduced or established 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 the contiguous U.S. except for a small region of southeastern Florida that showed medium match. Climate 6 score supported the characterization of overall low climate match for the contiguous U.S. Scores of 0.005 or less indicate a low match; Climate 6 score for *R. fallax* was 0.000.

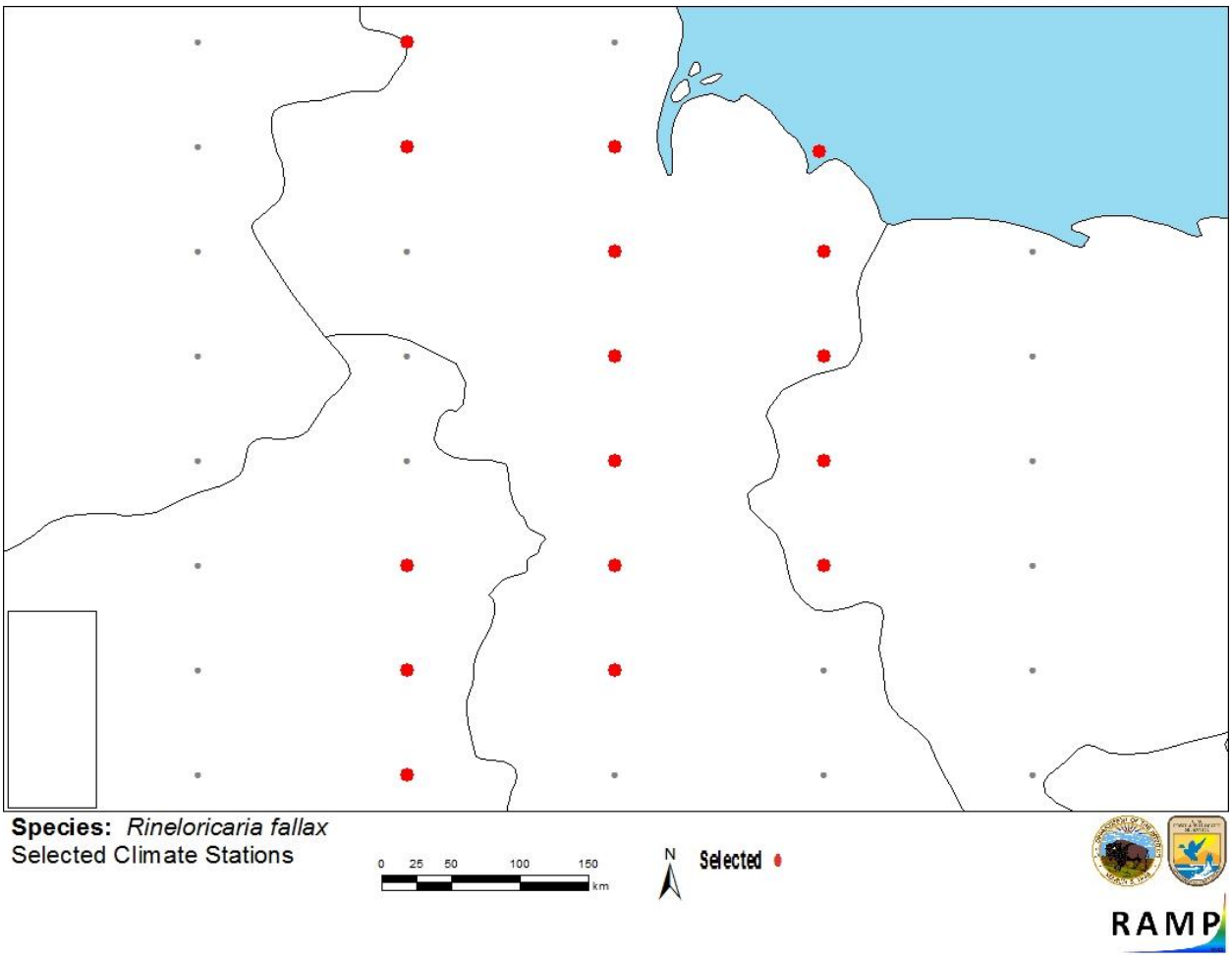

Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations in and around Guyana selected as source locations (red) and non-source locations (gray) for *Rineloricaria fallax* climate matching. Source locations from GBIF (2016).

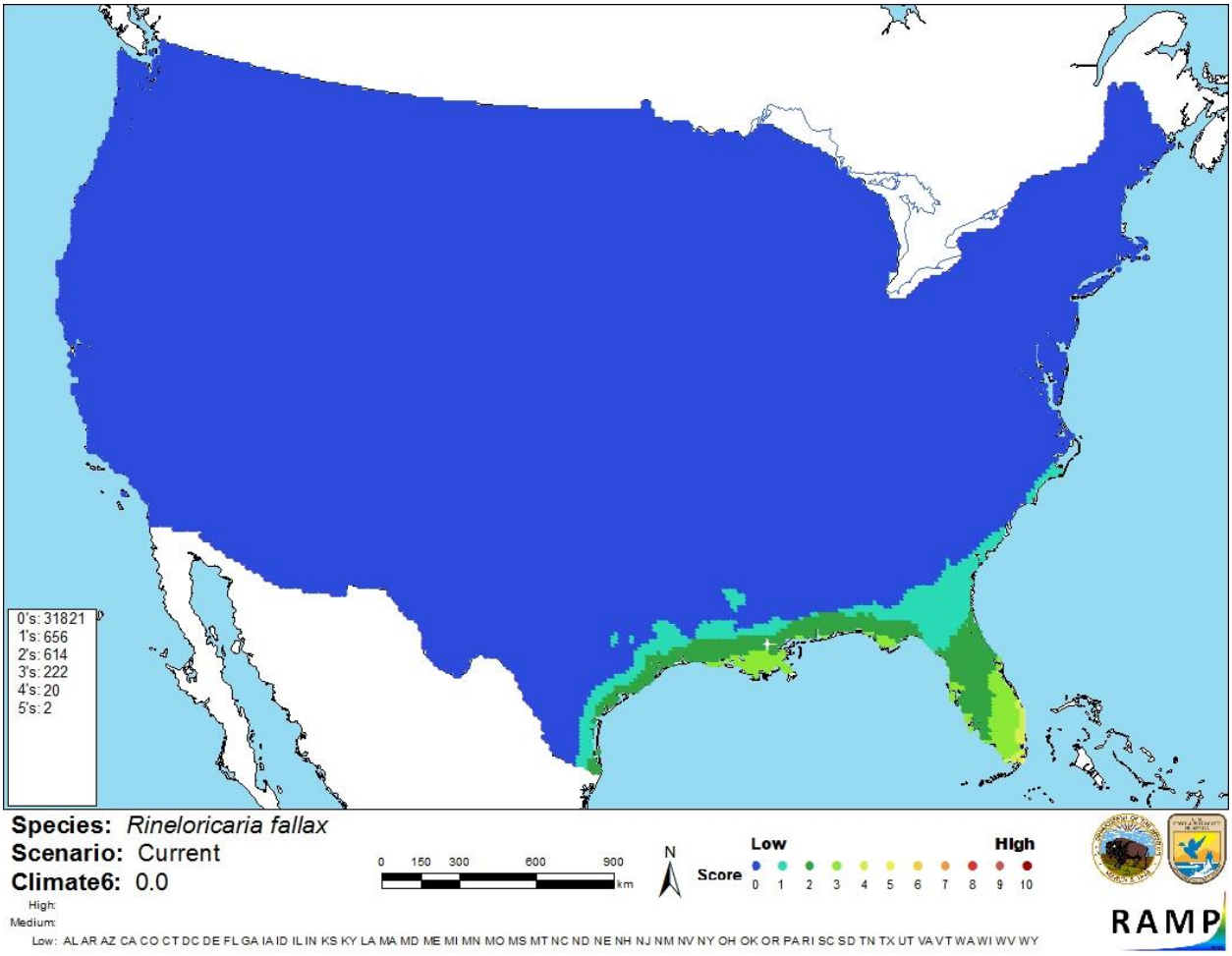

Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Rineloricaria fallax* in the contiguous United States based on source locations reported by GBIF (2016). 0=Lowest match, 10=Highest match.

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≤X≤0.005	Low
0.005<X<0.103	Medium
≥0.103	High

7 Certainty of Assessment

There is only sparse information available on *Rineloricaria fallax*, including its biology and habitat preferences. This species has never been reported outside of its native range, so there is no information available on impacts of its introduction. Because of this paucity of information, certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Rineloricaria fallax is a catfish native to northeastern South America. This species has a low climate match with the contiguous United States, with the location of highest match occurring in Florida. *R. fallax* is present in the aquarium trade, but has never been reported as introduced or established outside of its native range. There is little scientifically credible information available on this species. 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**
- **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.

Bluegrass Aquatics. 2017. Whiptail loricaria catfish – regular size. Bluegrass Aquatics, Louisville, Kentucky. Available: https://bluegrassaquatics.com/whiptail-loricaria-catfish-regular-size.html. (August 2017).

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Froese, R., and D. Pauly, editors. 2017. *Rineloricaria fallax* (Steindachner, 1915). FishBase. Available: http://www.fishbase.se/summary/Rineloricaria-fallax.html. (July 2017).

GBIF (Global Biodiversity Information Facility). 2016. GBIF backbone taxonomy: *Rineloricaria fallax* (Steindachner, 1915). Global Biodiversity Information Facility, Copenhagen. Available: http://www.gbif.org/species/2339147. (July 2017, August 2017).

ITIS (Integrated Taxonomic Information System). 2017. *Rineloricaria fallax* (Steindachner, 1915). Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=164380#null. (July 2017).

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

Seriously Fish. 2017. *Rineloricaria fallax* (whiptail catfish). Seriously Fish. Available: http://www.seriouslyfish.com/species/rineloricaria-fallax/. (August 2017).

Vera-Alcaraz, H. S., C. S. Pavanelli, and C. H. Zawadzki. 2012. Taxonomic revision of the *Rineloricaria* species (Siluriformes: Loricariidae) from the Paraguay River basin. Neotropical Ichthyology 10(2):285-311.

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.

Ferraris, C. J., Jr. 2003. Loricariidae - Loricariinae (armored catfishes). Pages 330-350 *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.

Riehl, R., and H. A. Baensch. 1991. Aquarien Atlas, volume 1. Mergus, Verlag für Natur-und Heimtierkunde, Melle, Germany.