

***Peckoltia otali* (a catfish, no common name)**

Ecological Risk Screening Summary

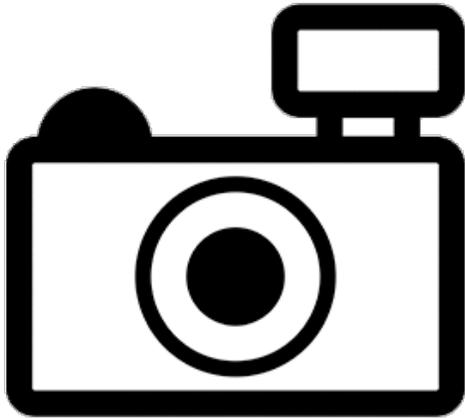
U.S. Fish & Wildlife Service, February 2013

Revised, August 2018

Web Version, 1/4/2021

Organism Type: Fish

Overall Risk Assessment Category: Uncertain



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“South America: upper Maroni River basin in French Guiana and Suriname.”

Status in the United States

No records of *Peckoltia otali* in the wild or in trade in the United States were found.

Peckoltia otali falls within Group I of New Mexico’s Department of Game and Fish Director’s Species Importation List (New Mexico Department of Game and Fish 2010). Group I species “are designated semi-domesticated animals and do not require an importation permit.”

Means of Introductions in the United States

No records of *Peckoltia otali* in the wild in the United States were found.

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

According to Eschmeyer et al. (2018), *Peckoltia otali* (Fisch-Muller and Covain 2012) is the original and current valid name of this species.

From Bailly (2017):

“Biota > Animalia (Kingdom) > Chordata (Phylum) > Vertebrata (Subphylum) > Gnathostomata (Superclass) > [...] Actinopterygii (Class) > Siluriformes (Order) > Loricariidae (Family) > Hypostominae (Subfamily) > *Peckoltia* (Genus) > *Peckoltia otali* (Species)”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 7.7 cm SL male/unsexed; [Fisch-Muller et al. 2012]”

Environment

From Froese and Pauly (2018):

“Freshwater; demersal.”

Climate

From Froese and Pauly (2018):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2018):

“South America: upper Maroni River basin in French Guiana and Suriname.”

Introduced

No records of introductions of *Peckoltia otali* were found.

Means of Introduction Outside the United States

No records of introductions of *Peckoltia otali* were found.

Short Description

From Froese and Pauly (2018):

“Dorsal spines (total): 2; Dorsal soft rays (total): 7; Anal soft rays: 5. This species can be diagnosed from all other congeners by a unique color pattern of adults, [...]. Color pattern consists of numerous blackish-brown spots of irregular size and shape, distributed on head and on entire body except naked ventral areas, resulting in a mottled aspect of dorsum, while spots are aligned to form transverse bands on fins, at least on caudal fin. Juvenile specimens present large transversal blackish bands, or dorsal saddles, on the body that are similar to those characteristic of several *Peckoltia* including the type species *Peckoltia vittata*. Brown spots on posterior part of the body are also present in *Peckoltia oligospila*, *Peckoltia sabaji*, *Peckoltia capitulata* and *Peckoltia simulata*, but in these species spots are rounded, comparatively larger and regularly spaced, and they usually do not form bands on fins. It is further distinguished from these species by having a deeper body (22.5-25.7% SL, [...] at occiput; 12.4-13.8% SL, [...] at caudal peduncle) and a wider body (33.8-37.1% SL, [...] at cleithrum). Differs from *Peckoltia bachi* that is also mottled, by having the eye high on the head (vs. low) and a much narrower interorbital (29.8-34.4% HL, [...], vs. 57.9-59.9, [...]) [Fisch-Muller et al. 2012].”

Biology

From Froese and Pauly (2018):

“In rapids, it occurs mostly in sunny and shallow clear water, swiftly flowing currents, with medium- sized rocks substrate [Fisch-Muller et al. 2012].”

Human Uses

No information on human uses of *Peckoltia otali* was found.

Diseases

No information on diseases of *Peckoltia otali* was found. **No records of OIE-reportable diseases (OIE 2021) were found for *P. otali*.**

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

No records of introductions of *Peckoltia otali* were found, therefore there is no information on impacts of introductions.

4 History of Invasiveness

No records of introductions of *Peckoltia otali* were found, therefore the history of invasiveness is classified as “no known nonnative population.”

5 Global Distribution



Figure 1. Known global distribution of *Peckoltia otali*. Locations are in French Guiana (South America). Map from GBIF Secretariat (2018).

6 Distribution Within the United States

No records of *Peckoltia otali* the wild in the United States were found.

7 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Peckoltia otali* was low across the entire contiguous United States. There were no areas of medium or high match. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low (scores between 0.000 and 0.005, inclusive, are classified as low). All States had a low individual climate score.

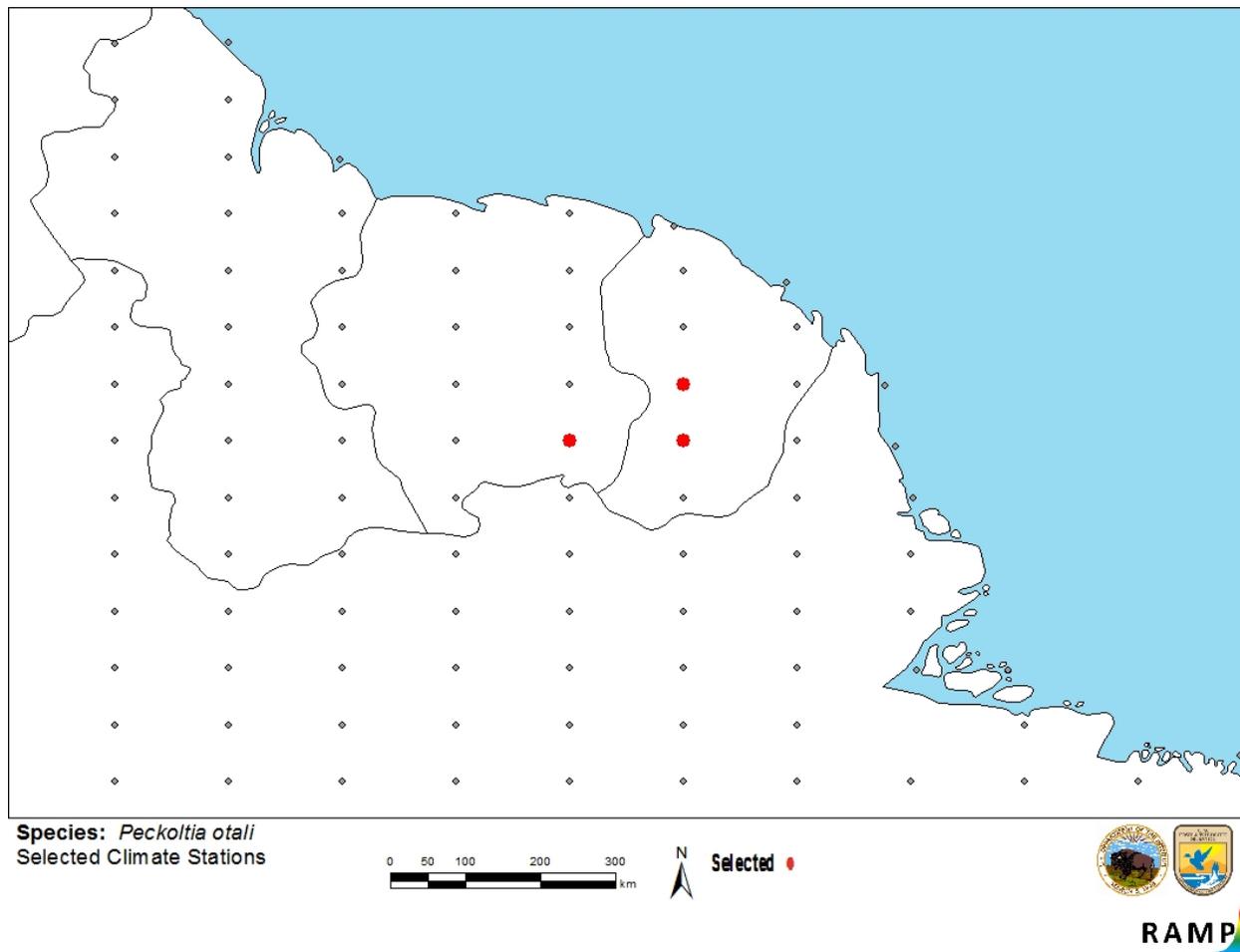


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in northeastern South America selected as source locations (red; Suriname, French Guiana) and non-source locations (gray) for *Peckoltia otali* climate matching. Source locations from GBIF Secretariat (2018). Selected source locations are within 100 km of one or more species occurrences, and do not necessarily represent the locations of occurrences themselves.

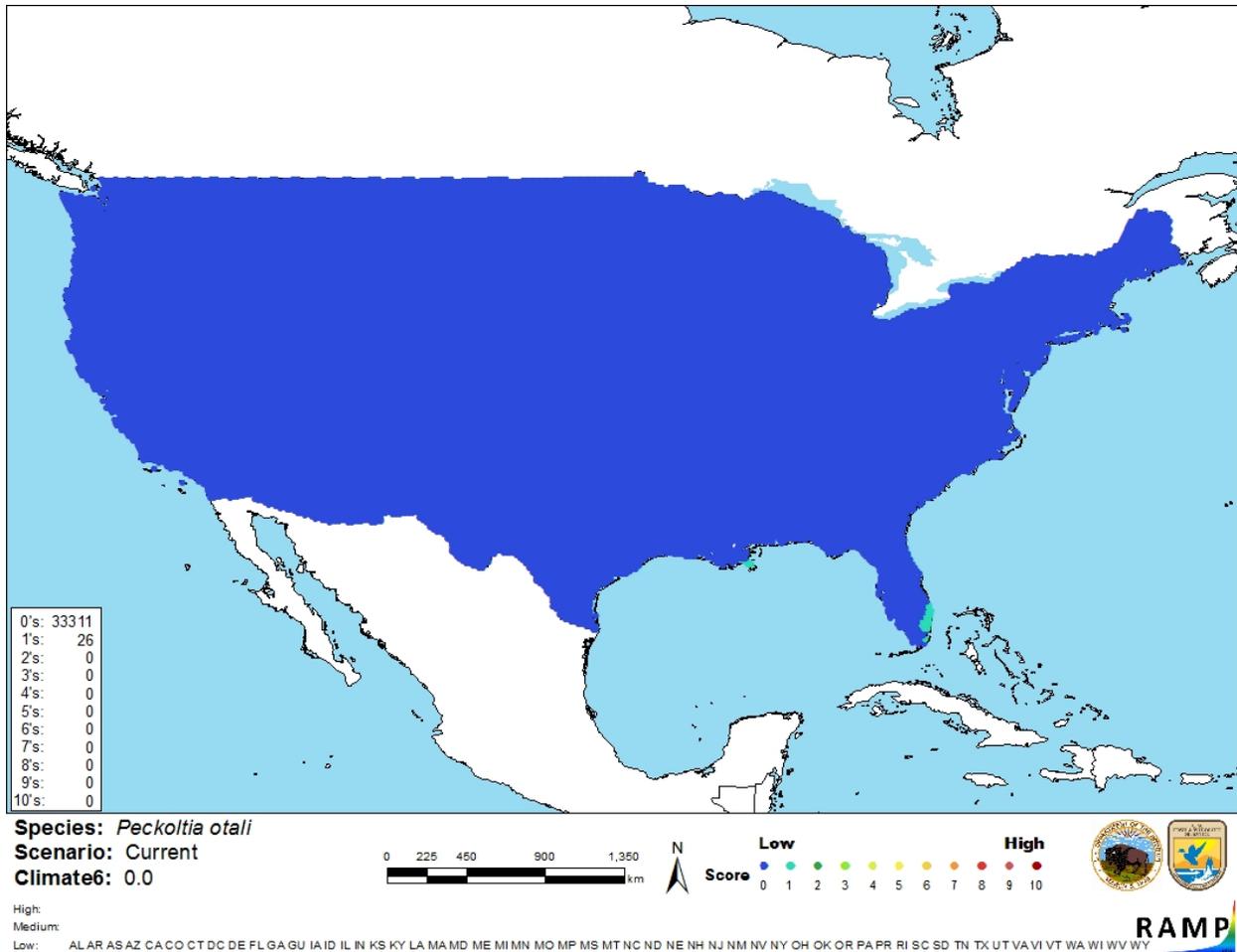


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Peckoltia otali* in the contiguous United States based on source locations reported from GBIF Secretariat (2018). Counts of climate match scores are tabulated on the left. 0/Blue = Lowest match, 10/Red = Highest match.

The High, Medium, and Low Climate match Categories are based on the following table:

Climate 6: (Count of target points with climate scores 6-10)/ (Count of all target points)	Overall Climate Match Category
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

8 Certainty of Assessment

The certainty of assessment is low. There was some general information about the species available from peer-reviewed sources. There were no records of introductions found and therefore there is no information on impacts available to evaluate.

9 Risk Assessment

Summary of Risk to the Contiguous United States

Peckoltia otali is a species of catfish native to French Guiana and Suriname in northern South America. It can be found in clear water rapids in the Maroni River basin. The history of invasiveness is classified as “no known nonnative population.” There were no records of introductions to the wild found and therefore no information on impacts of introduction. The climate match was low. There were no areas of high or medium match in the contiguous United States. The certainty of assessment is low. The overall risk assessment is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 4): No Known Nonnative Population**
- **Overall Climate Match Category (Sec. 7): Low**
- **Certainty of Assessment (Sec. 8): Low**
- **Remarks/Important additional information:** No additional information
- **Overall Risk Assessment Category: Uncertain**

10 Literature Cited

Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 11.

- Bailly N. 2017. *Peckoltia otali*. World Register of Marine Species. Available: <http://www.marinespecies.org/aphia.php?p=taxdetails&id=1007644> (August 2018).
- Eschmeyer WN, Fricke R, van der Laan R, editors. 2018. Catalog of fishes: genera, species, references. California Academy of Science. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp> (August 2018).
- Froese R, Pauly D, editors. 2018. *Peckoltia otali* Fisch-Muller & Covain, 2012. FishBase. Available: <https://www.fishbase.de/summary/Peckoltia-otali.html> (August 2018).
- GBIF Secretariat. 2018. GBIF backbone taxonomy: *Peckoltia otali* (Fisch-Muller & Covain, 2012). Copenhagen: Global Biodiversity Information Facility. Available: <https://www.gbif.org/species/7192990> (August 2018).
- New Mexico Department of Game and Fish. 2010. Director’s species importation list. Santa Fe, New Mexico: New Mexico Department of Game and Fish. Available: http://www.wildlife.state.nm.us/download/enforcement/importation/information/Director-s-Species-Importation-List-08_03_2010.pdf (November 2020).
- [OIE] World Organisation for Animal Health. 2021. OIE-listed diseases, infections and infestations in force in 2020. Available: <http://www.oie.int/animal-health-in-the-world/oie-listed-diseases-2020/> (January 2021).

Sanders S, Castiglione C, Hoff M. 2018. Risk Assessment Mapping Program: RAMP. Version 3.1. U.S. Fish and Wildlife Service.

11 Literature Cited in Quoted Material

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.

Fisch-Muller A, Montoya-Burgos JI, Le Bail P-Y, Covain R. 2012. Diversity of the Ancistrini (Siluriformes: Loricariidae) from the Guianas: the *Panaque* group, a molecular appraisal with descriptions of new species. *Cybium* 36:163–193.