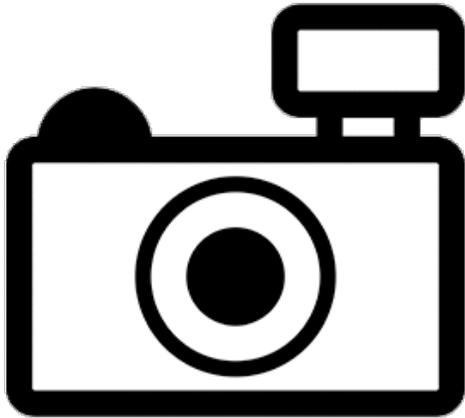


Caribe (*Pristobrycon careospinus*)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, July 2015
Revised, January 2018
Web Version, 1/22/2021

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: Atabapo River in Orinoco river basin, Venezuela.”

Status in the United States

No records of *Pristobrycon careospinus* in the United States were found. No information on trade of this species in the United States was found.

Pristobrycon careospinus is a prohibited species in Alabama (Alabama DCNR 2019). “No person, firm, corporation, partnership, or association shall possess, sell, offer for sale, import, bring, release, or cause to be brought or imported into the State of Alabama” a prohibited species.

Piranhas are prohibited species in Arkansas (Arkansas GFC 2019). *Pristobrycon careospinus* is a species of piranha.

Species of piranha (including *Pristobrycon careospinus*) are prohibited as pets in Georgia (Georgia DNR 2020).

Possession of species of piranha (including *Pristobrycon careospinus*) is prohibited in Louisiana (Louisiana State Legislature 2019).

Pristobrycon careospinus falls within Group IV of New Mexico's Department of Game and Fish Director's Species Importation List (New Mexico Department of Game and Fish 2010). Group IV species "are prohibited for the general public but may be allowed for, scientific study, department approved restoration and recovery plans, zoological display, temporary events/entertainment, use as service animal or by a qualified expert."

Pristobrycon careospinus is a prohibited species in Texas (Texas Parks and Wildlife 2020).

From Virginia DWR (2020):

"A special permit is required, and may be issued by the Department, if consistent with the Department's fish and wildlife management program, to import, possess, or sell the following non-native (exotic) amphibians, fish, mollusks, aquatic invertebrates, and reptiles: [...] piranhas,"

Means of Introductions in the United States

No records of *Pristobrycon careospinus* in the United States were found.

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

Eschmeyer et al. (2018):

"Current status: Valid as *Pristobrycon careospinus* Fink & Machado-Allison 1992."

From ITIS (2018):

Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Osteichthyes

Class Actinopterygii
Subclass Neopterygii
Infraclass Teleostei
Superorder Ostariophysi
Order Characiformes
Family Characidae
Genus *Pristobrycon*
Species *Pristobrycon careospinus* (Fink and Machado-Allison, 1992)

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 11.1 cm SL male/unsexed; [Fink and Machado-Allison 1992]”

Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

Climate

From Froese and Pauly (2018):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2018):

“South America: Atabapo River in Orinoco river basin, Venezuela.”

Introduced

No records of *Pristobrycon careospinus* introductions were found.

Means of Introduction Outside the United States

No records of *Pristobrycon careospinus* introductions were found.

Short Description

From Froese and Pauly (2018):

“Dorsal soft rays (total): 15; Anal soft rays: 31; Vertebrae: 37. Large dark ovate spots on the body side and no preanal spine.”

Biology

Information on biology of *Pristobrycon careospinus* was not found.

Human Uses

Information on human uses of *Pristobrycon careospinus* was not found.

Diseases

There were no records found of OIE-reportable diseases (OIE 2021) for this species. No information on diseases of *Pristobrycon careospinus* was found.

Threat to Humans

From Froese and Pauly (2018):

“Threats to humans
Harmless”

3 Impacts of Introductions

No records of *Pristobrycon careospinus* introductions were found.

P. careospinus is regulated in multiple States.

4 History of Invasiveness

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

5 Global Distribution



Figure 1. Known global distribution of *Pristobrycon careospinus*. Locations are in Venezuela and Colombia. Map from GBIF Secretariat (2018).

6 Distribution Within the United States

No records of *Pristobrycon careospinus* in the United States were found.

7 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Pristobrycon careospinus* was low across the contiguous United States. There were no areas of high or medium 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 low individual climate 6 scores.

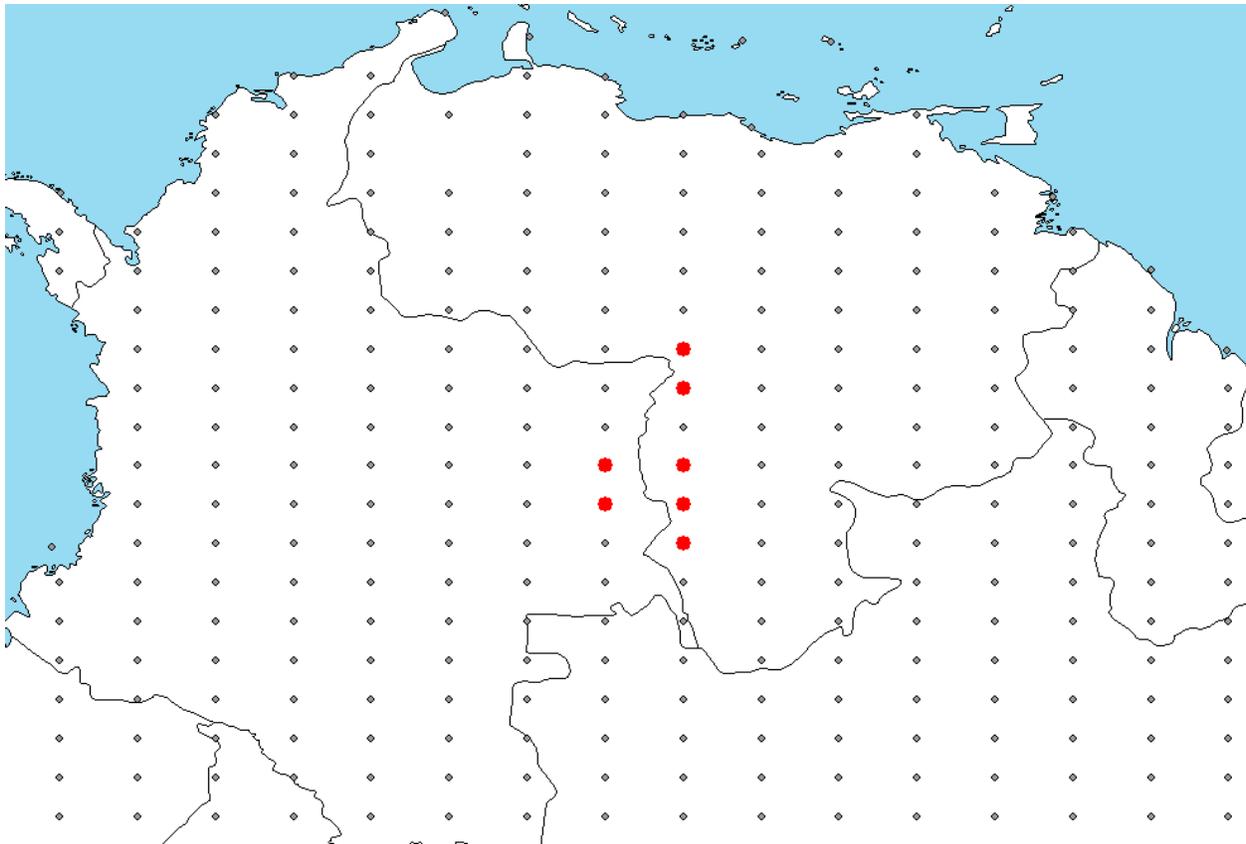


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in northern South America selected as source locations (red; Colombia, Venezuela) and non-source locations (gray) for *Pristobrycon careospinus* climate matching. Source locations from GBIF Secretariat (2021). Selected source locations are within 100 km of one or more species occurrences, and do not necessarily represent the locations of occurrences themselves.

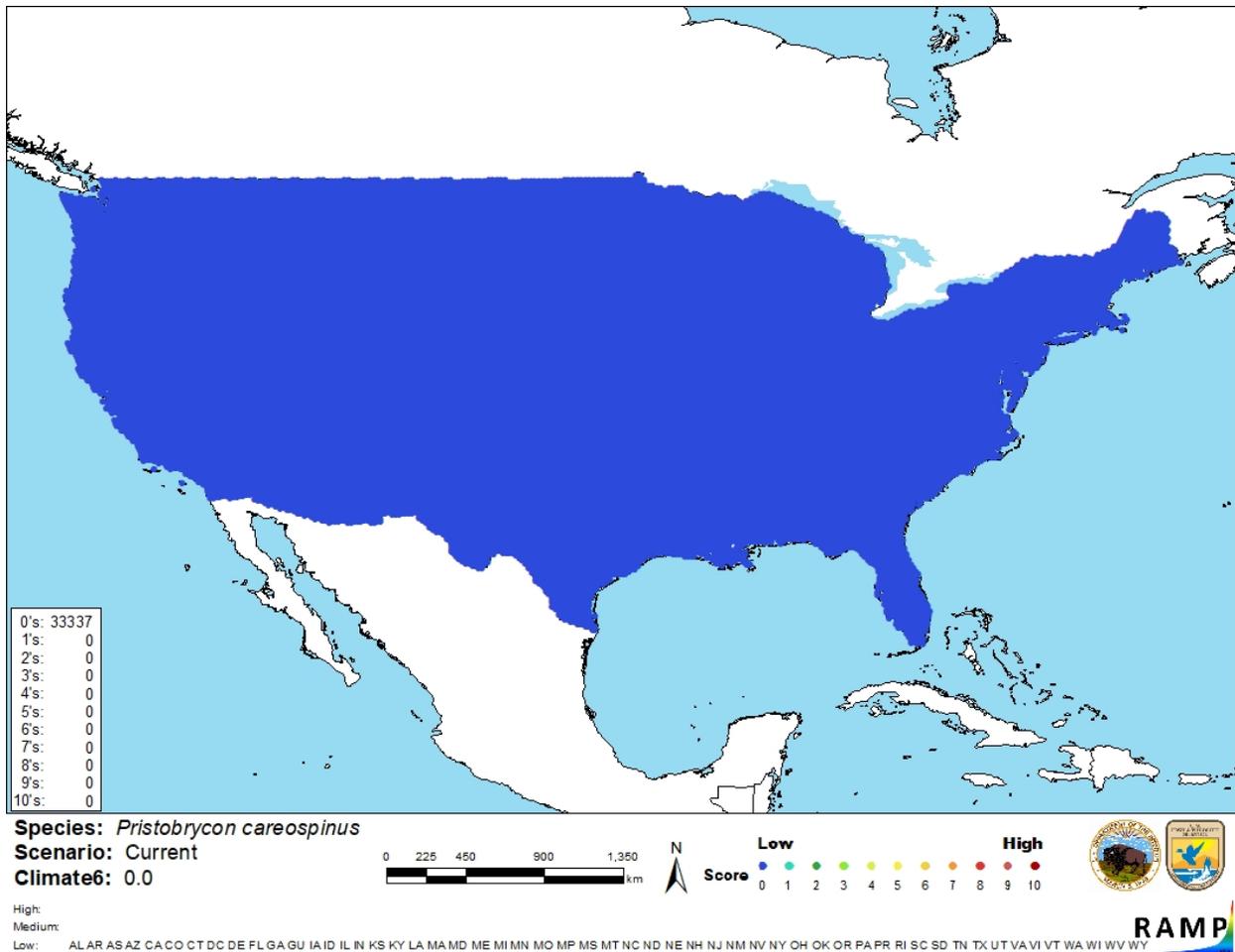


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Pristobrycon careospinus* in the contiguous United States based on source locations reported by GBIF Secretariat (2021). Counts of climate match scores are tabulated on the left. 0/Blue = Lowest match, 10/Red = Highest match.

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 this assessment is low. Little biological and ecological information was available for *Pristobrycon careospinus*. No records of introductions to the wild were found.

9 Risk Assessment

Summary of Risk to the Contiguous United States

Caribe (*Pristobrycon careospinus*) is a species of piranha found in the Orinoco River Basin in northern South America. Not much information is known about this species. The history of invasiveness for *Pristobrycon careospinus* is classified as “No Known Nonnative Population.” *P. careospinus* is native to parts of Venezuela and no records were found of introductions outside of its native range. *P. careospinus* is regulated in multiple States. The climate match is low. There were no areas of high or medium match. The certainty of this assessment is low. The overall risk category 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 remarks.
- **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.

Alabama [DCNR] Department of Conservation and Natural Resources. 2019. Restrictions on possession, sale, importation and/or release of certain animals and fish. Alabama Department of Conservation and Natural Resources Administrative Code, Chapter 220-2-.26.

Arkansas [GFC] Game and Fish Commission. 2019. Certain exotic species prohibited. Arkansas Game and Fish Commission Code of Regulations 26.13.

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> (January 2018).

Froese R, Pauly D, editors. 2018. *Pristobrycon careospinus* Fink & Machado-Allison, 1992. FishBase. Available: <http://www.fishbase.org/summary/Pristobrycon-careospinus.html> (January 2018).

GBIF Secretariat. 2021. GBIF backbone taxonomy: *Pristobrycon careospinus* Fink & Machado-Allison, 1992. Copenhagen: Global Biodiversity Information Facility. Available: <https://www.gbif.org/species/2354207> (January 2021).

- Georgia [DNR] Department of Natural Resources. 2020. Wild animals/exotics. Social Circle, Georgia: Georgia Department of Natural Resources Law Enforcement Division. Available: <http://gadnrle.org/exotics> (November 2020).
- [ITIS] Integrated Taxonomic Information System. 2018. *Pristobrycon careospinus* (Fink and Machado-Allison, 1992). Reston, Virginia: Integrated Taxonomic Information System. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=641594#null (January 2018).
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- 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/Directors-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-2021/> (January 2021).
- Sanders S, Castiglione C, Hoff M. 2018. Risk Assessment Mapping Program: RAMP. Version 3.1. U.S. Fish and Wildlife Service.
- Texas Parks and Wildlife. 2020. Invasive, prohibited and exotic species. Austin, Texas: Texas Parks and Wildlife. Available: https://tpwd.texas.gov/huntwild/wild/species/exotic/prohibited_aquatic.phtml (November 2020).
- Virginia [DWR] Department of Wildlife Resources. 2020. Nongame fish, reptile, amphibian and aquatic invertebrate regulations. Henrico, Virginia: Virginia Department of Wildlife Resources. Available: <https://dwr.virginia.gov/fishing/regulations/nongame/> (November 2020).

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.

- Fink WL, Machado-Allison A. 1992. Three new species of piranhas from Brazil and Venezuela (Teleostei: Characiformes). *Ichthyological Exploration of Freshwaters* 3:55–71.