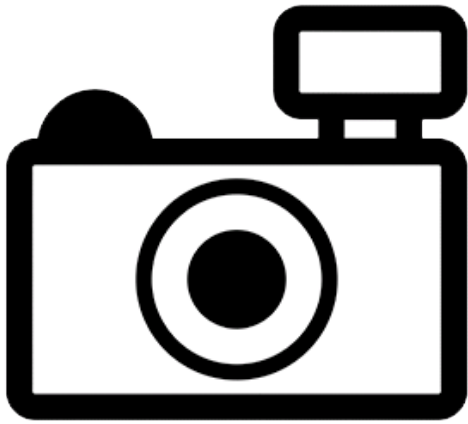


***Chocoheros microlepis* (a cichlid, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, August 2011
Revised, October 2012 and September 2018
Web Version, 12/19/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“South America: Baudó River basin, Pacific slope of Colombia.”

From Mesa-Salazar et al. (2016):

“*Cichlasoma microlepis* has a very restricted range; its extent of occurrence is less than 760 km².”

“Its type locality is Pavarandó, Río Baudó (Dahl 1960).”

Status in the United States

This species has not been reported as introduced or established in the United States. There is no indication that this species is in trade in the United States.

Means of Introductions in the United States

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

Remarks

Both the current valid name for this species, *Chocoheros microlepis*, and its synonym, *Cichlasoma microlepis*, were used when researching in preparation of this report.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2018):

“Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Actinopterygii
Class Teleostei
Superorder Acanthopterygii
Order Perciformes
Suborder Labroidei
Family Cichlidae
Genus *Cichlasoma*
Species *Cichlasoma microlepis* Dahl, 1960”

From Fricke et al. (2018):

“Current status: Valid as *Chocoheros microlepis* (Dahl 1960). Cichlidae: Cichlinae.”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 18.7 cm SL male/unsexed; [Kullander 2003]”

Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2018):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2018):

“South America: Baudó River basin, Pacific slope of Colombia.”

From Mesa-Salazar et al. (2016):

“*Cichlasoma microlepis* has a very restricted range; its extent of occurrence is less than 760 km².”

“Its type locality is Pavarandó, Río Baudó (Dahl 1960).”

Introduced

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

Means of Introduction Outside the United States

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

Short Description

No information available.

Biology

No information available.

Human Uses

From Mesa-Salazar et al. (2016):

“The species is not utilized.”

Diseases

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

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

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

4 Global Distribution



Figure 1. Known global distribution of *Chocoheros microlepis*, reported from Columbia. Map from GBIF Secretariat (2018).

5 Distribution Within the United States

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

6 Climate Matching

Summary of Climate Matching Analysis

The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous United States was 0.0, which is low. A Climate 6 score of 0.005 or below indicates a low climate match. The climate match was uniformly very low across the entire contiguous United States.

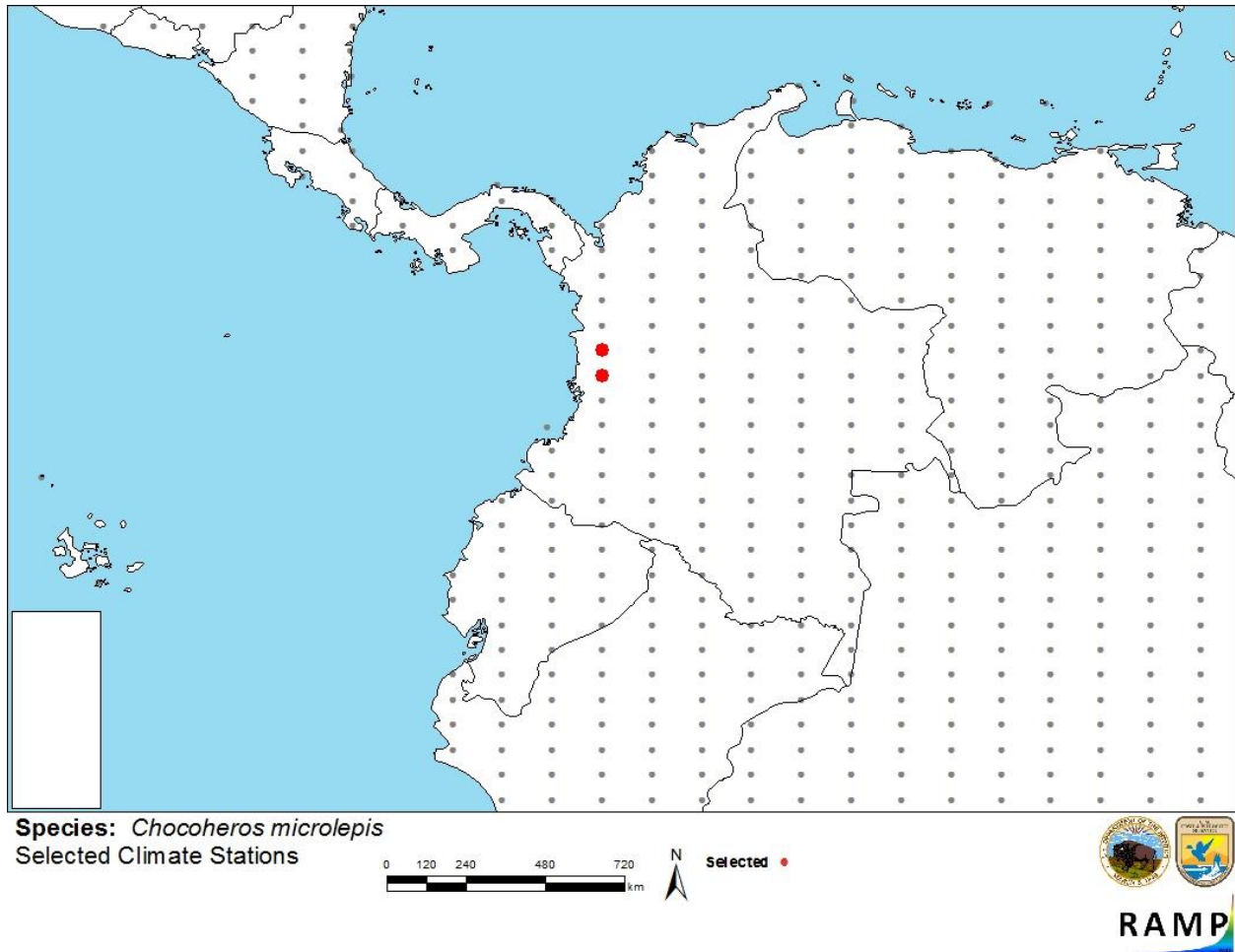


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red; Columbia) and non-source locations (gray) for *Chocoheros microlepis* climate matching. Source locations from GBIF Secretariat (2018).

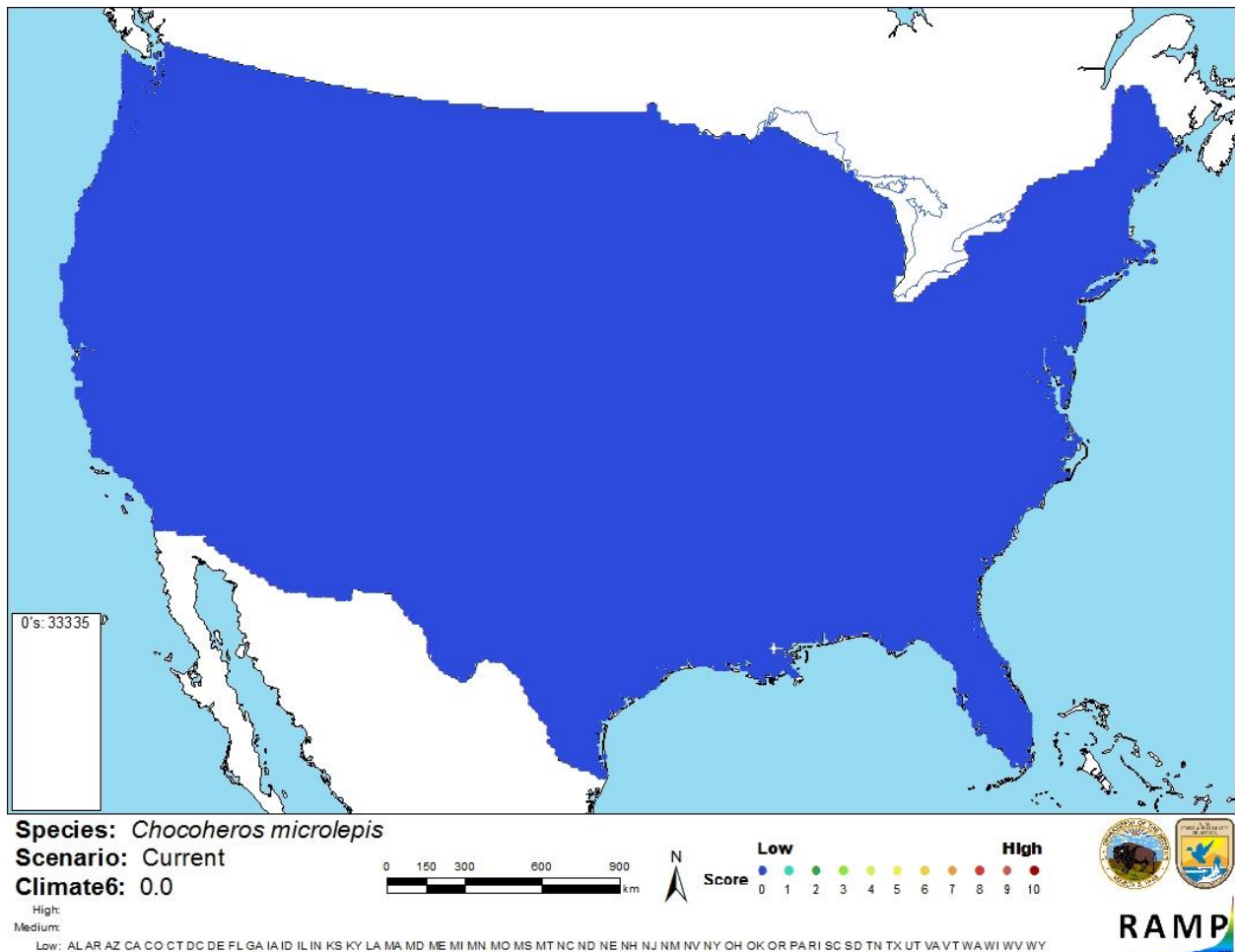


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Chocoheros microlepis* in the contiguous United States based on source locations reported by GBIF Secretariat (2018). 0=Lowest match, 10=Highest match.

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

There is very little information available about *Chocoheros microlepis*. A description of this species is not available, and there is no information available on its biology. It has never been reported as introduced or established outside of its native range, so no information is available from which to assess its risk to the contiguous United States. Certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Chocoheros microlepis is a cichlid species native to the Baudó River basin near the Pacific coast of Colombia. Little information is available about this species, and it has never been reported as introduced or established outside of its native range. History of invasiveness is uncertain.

C. microlepis has a low climate match with the contiguous United States. The climate match is uniformly very low across the entire contiguous United States. Certainty of this assessment is low because of a lack of information from which to base an assessment of the invasive potential of this species. 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**
- **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.

Fricke, R., W. N. Eschmeyer, and R. van der Laan, editors. 2018. Catalog of fishes: genera, species, references. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (September 2018).

Froese, R., and D. Pauly, editors. 2018. *Chocoheros microlepis* (Dahl, 1960). FishBase. Available: <https://www.fishbase.de/summary/52187>. (September 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Chocoheros microlepis*, Dahl, 1960. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/9280637>. (September 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Cichlasoma microlepis* (Dahl, 1960). Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=649457#null. (September 2018).

Mesa-Salazar, L., P. Sanchez-Duarte, and F. Villa-Navarro. 2016. *Cichlasoma microlepis*. The IUCN Red List of Threatened Species 2016: e.T49829585A61473443. Available: <http://www.iucnredlist.org/details/49829585/0>. (September 2018).

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

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.

Kullander, S. O. 2003. Cichlidae (Cichlids). Pages 605-654 *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.