

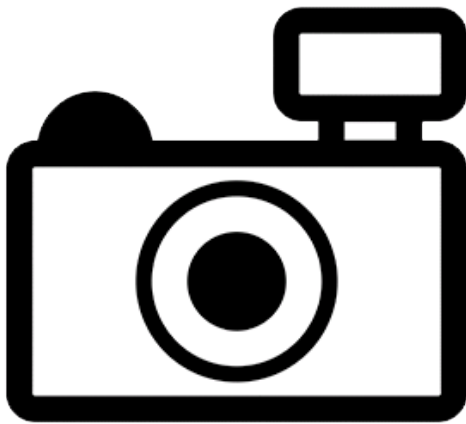
***Mayaheros stenozoneus* (a cichlid, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, August 2011

Revised, August 2018

Web Version, 1/2/2020



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“Central America: probably Atlantic slope of southern Mexico.”

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

This species was previously known as *Cichlasoma stenozoneum*. Both this name and the currently accepted name, *Mayaheros stenozoneus*, 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 stenozonum* Hubbs, 1936”

From Eschmeyer et al. (2018):

“Current status: Valid as *Mayaheros stenozonus* (Hubbs 1936). Cichlidae: Cichlinae.”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 11.0 cm TL 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):

“Central America: probably Atlantic slope of southern Mexico.”

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

No information available.

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. Map of Mexico. According to Froese and Pauly (2018), the distribution of *Mayaheros stenozoneus* is “Central America: probably Atlantic slope of southern Mexico.” No other distribution information is available. Map from Addicted04, Wikimedia Commons. Licensed under Creative Commons BY-SA 3.0. Available: https://commons.wikimedia.org/wiki/File:Mexico_topographic_map-blank.svg. (August 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 0.014, which is a medium climate match. The climate match was high in Florida, medium in Texas, and low in all other states.

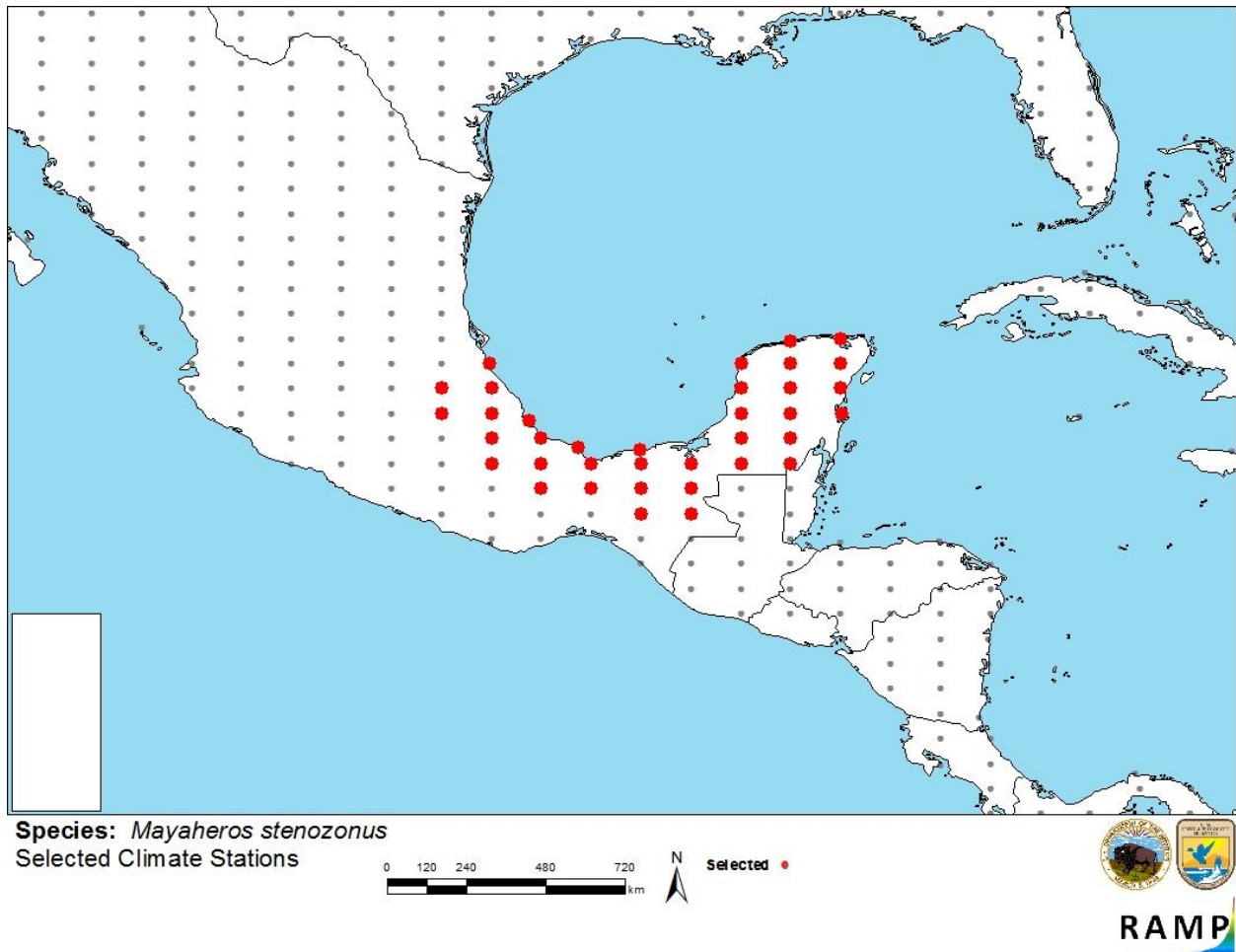


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red; Mexico) and non-source locations (gray) for *Mayaheros stenozoneus* climate matching. Source locations from description of range by Froese and Pauly (2018).

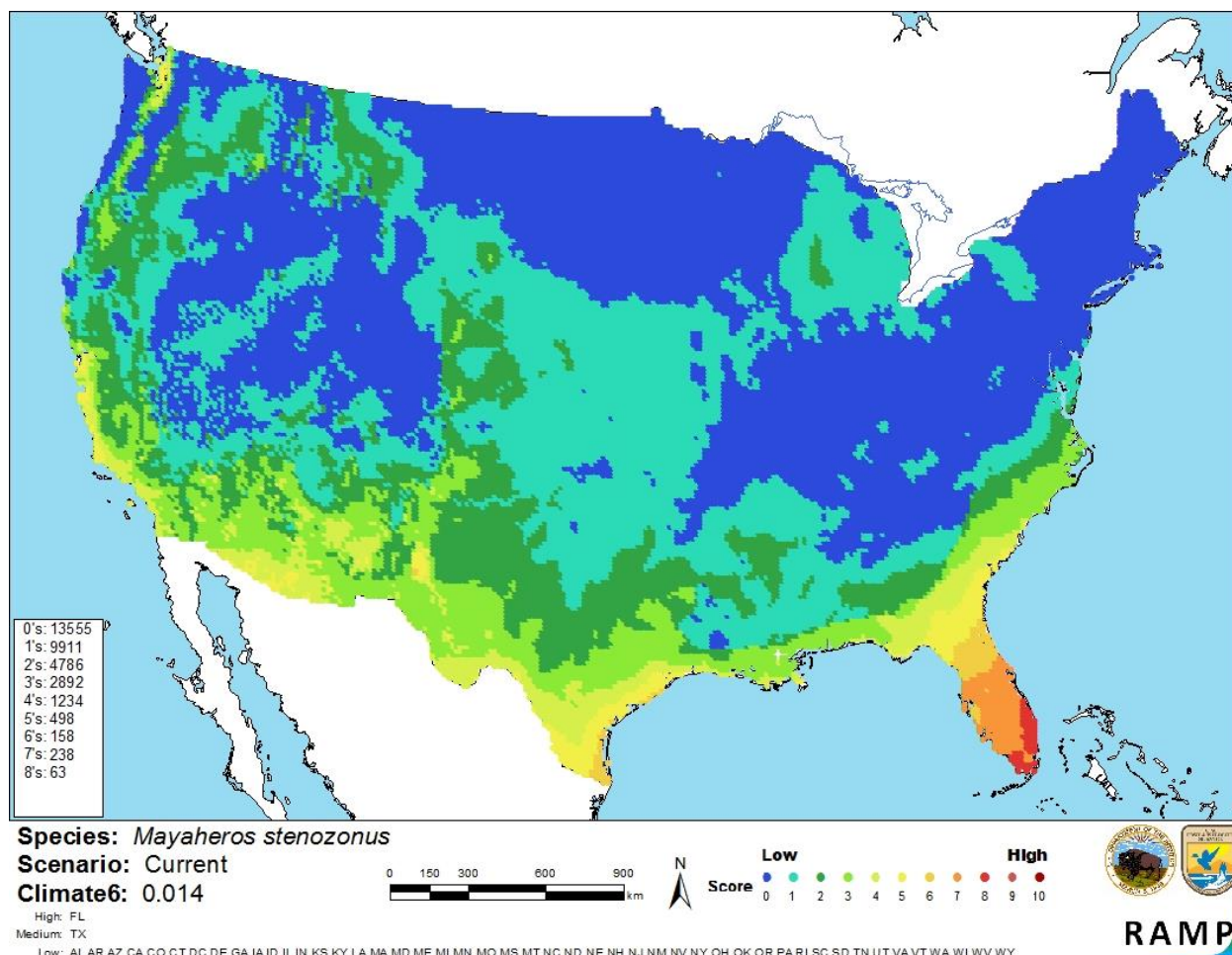


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Mayaheros stenozoneus* in the contiguous United States based on source locations selected following description of the species' range by Froese and Pauly (2018). Counts of climate match scores are tabulated on the left. 0=Lowest match, 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 *Mayaheros stenozoneus*. There were no georeferenced distribution points available for this species. Even the general description of the species' range is not certain, so the accuracy of the climate matching analysis is unknown. Further information about the biology, range, and invasive potential of *M. stenozoneus* is needed

to adequately assess the risk this species poses to the contiguous United States. Certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Mayaheros stenozoneus is a cichlid species probably native to the Atlantic slope of southern Mexico, although exact range information for this species is not available. There is no indication that this species is used in trade. *M. stenozoneus* has a low climate match with the contiguous United States. It has never been reported as introduced or established anywhere outside of its native range. Because information about this species is so lacking, certainty of this assessment is low. The overall risk assessment category is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 3): Uncertain**
- **Climate Match (Sec. 6): Medium**
- **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.

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

Froese, R., and D. Pauly, editors. 2018. *Mayaheros stenozoneus* (Hubbs, 1936). FishBase. Available: <https://www.fishbase.de/summary/Mayaheros-stenozoneus.html>. (August 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Cichlasoma stenozoneum*, Hubbs, 1936. Integrated Taxonomic Information System, Reston, Virginia. Available:
https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=649462#null. (August 2018).

Sanders, S., C. Castiglione, and M. H. Hoff. 2014. Risk Assessment Mapping Program: RAMP. US 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.