

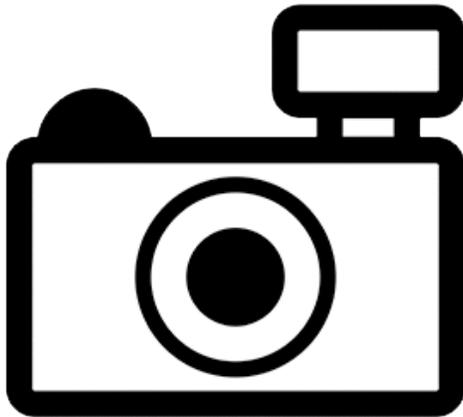
***Labeo mokotoensis* (a carp, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, April 2012

Revised, May 2018

Web Version, 6/15/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“Africa: only known from Lake Ndaraga (upper Lova drainage, upper Congo River basin) in Democratic Republic of the Congo [Lévêque and Daget 1984, Poll 1939]”

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.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From GBIF Secretariat (2018):

“Kingdom Animalia
Phylum Chordata
Class Actinopterygii
Order Cypriniformes
Family Cyprinidae
Genus *Labeo* Cuvier, 1816
Species *Labeo mokotoensis* Poll, 1939”

From Eschmeyer et al. (2018):

“Current status: Valid as *Labeo mokotoensis* Poll 1939. Cyprinidae: Labeoninae.”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 18.0 cm TL male/unsexed; [Lévêque and Daget 1984]”

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):

“Africa: only known from Lake Ndaraga (upper Lova drainage, upper Congo River basin) in Democratic Republic of the Congo [Lévêque and Daget 1984, Poll 1939]”

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

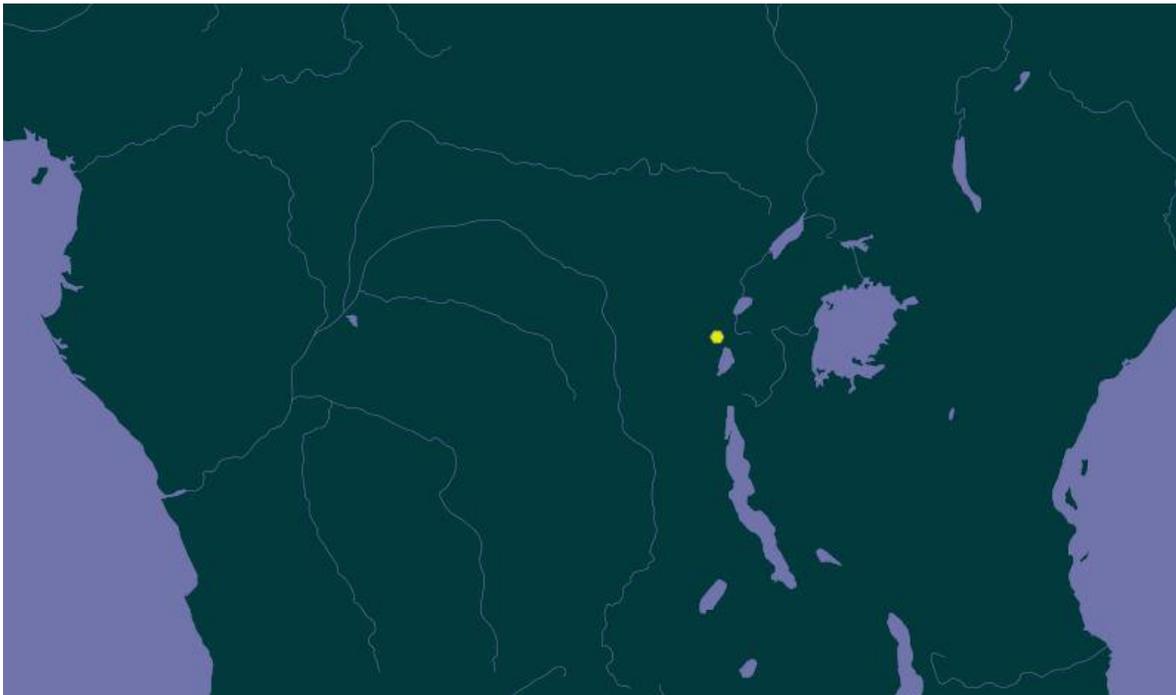


Figure 1. Known global distribution of *Labeo mokotoensis*, reported from the Democratic Republic of the Congo. Map from GBIF Secretariat (2018).

5 Distribution Within the United States

This species has not been reported as introduced or established in the U.S.

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 a low climate match. The range for a low climate match is from 0.0 to 0.005, inclusive. The climate match was very low across most of the contiguous United States. There was a medium match along parts of the Gulf of Mexico coast and along the Atlantic coast of Florida. Since *L. mokotoensis* has only been reported from one location, if it is later found elsewhere, the climate match may be an underestimate.

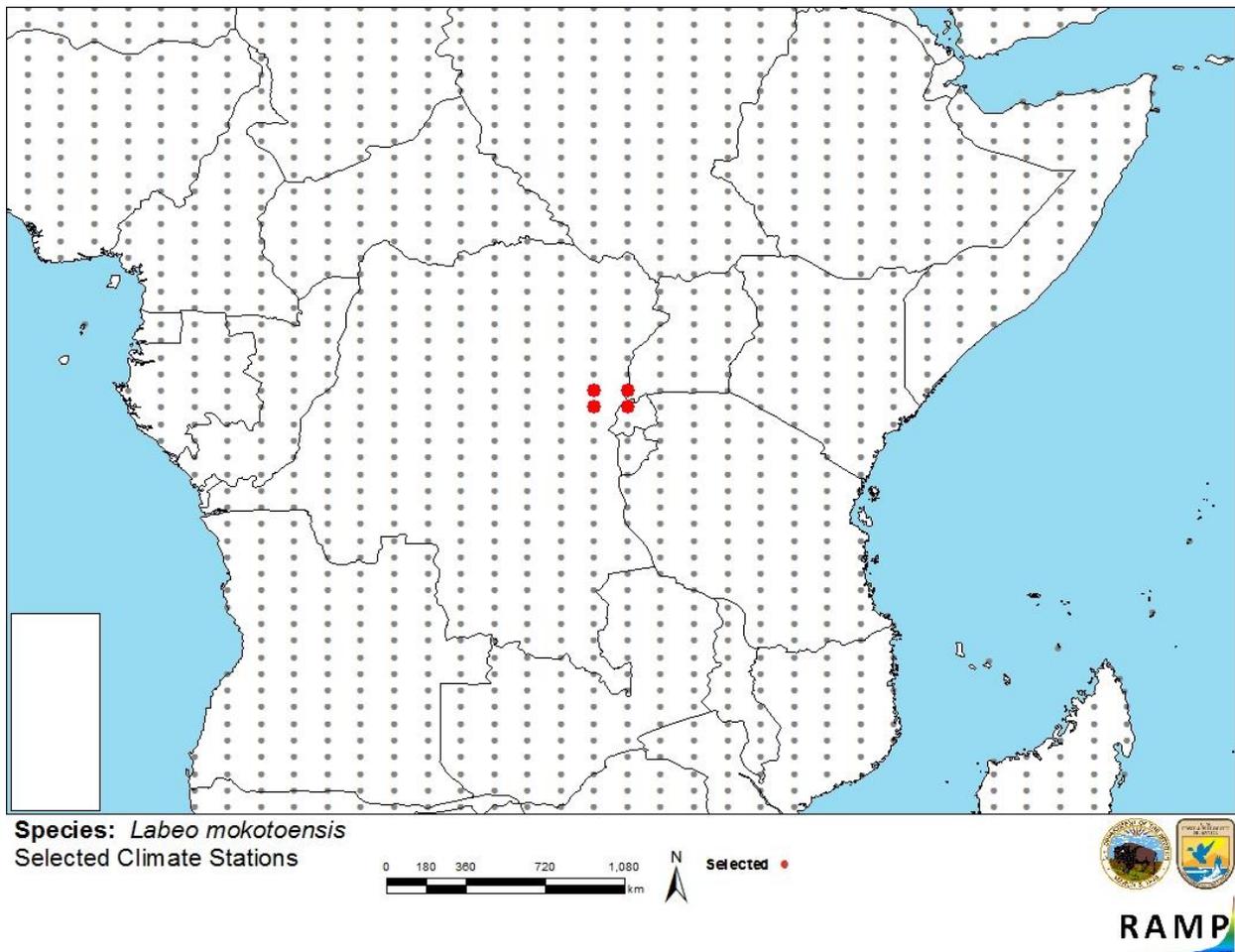


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations in the Democratic Republic of the Congo selected as source locations (red) and non-source locations (gray) for *Labeo mokotoensis* climate matching. Source location from GBIF Secretariat (2018).

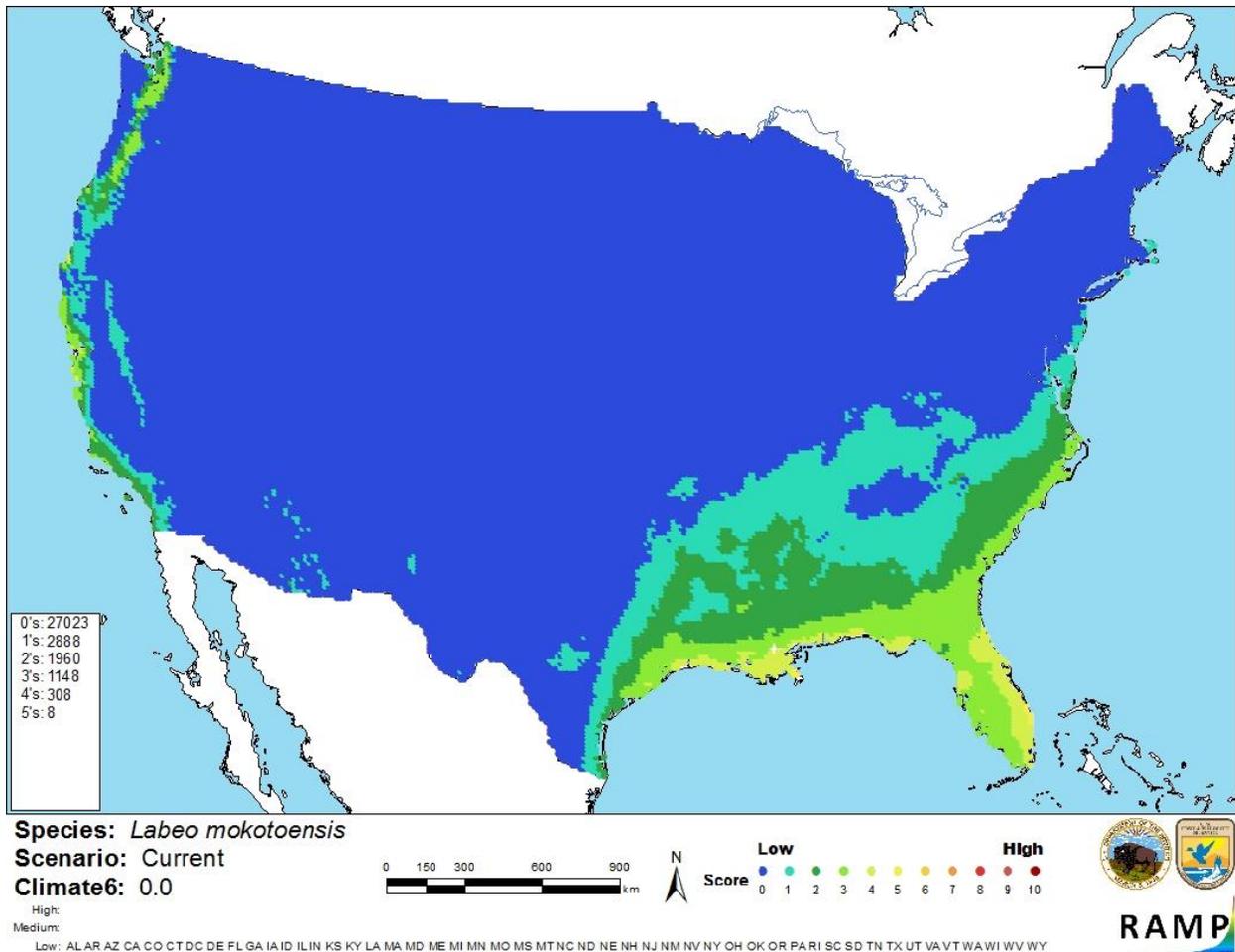


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Labeo mokotoensis* in the contiguous United States based on source locations reported by GBIF Secretariat (2018). 0=Lowest match, 10=Highest match.

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
$0.000 < X < 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

7 Certainty of Assessment

There is almost no information available about *Labeo mokotoensis*. This species has never been reported as introduced outside of its native range, so there is no information available on impacts of introductions of this species from which to base an assessment of risk. There was only one species occurrence point from which to base the climate match. Certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Labeo mokotoensis is a species of carp native to Lake Ndaraga in the Democratic Republic of the Congo. This species has never been reported as introduced or established outside of its native range. *L. mokotoensis* has a low climate match with the contiguous U.S. Since *L. mokotoensis* has only been reported from one location, the climate match is based on only one collection location. Further information is needed to adequately assess the risk this species poses, so the 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): 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.

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>. (May 2018).

Froese, R., and D. Pauly, editors. 2018. *Labeo mokotoensis* (Poll, 1939). FishBase. Available: <https://www.fishbase.de/summary/Labeo-mokotoensis.html>. (May 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Labeo mokotoensis*, Poll, 1939. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/5206084>. (May 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.

Lévêque, C., and J. Daget. 1984. Cyprinidae. Pages 217-342 in J. Daget, J.-P. Gosse and D. F. E. Thys van den Audenaerde, editors. Check-list of the freshwater fishes of Africa (CLOFFA). Volume 1. ORSTOM, Paris and MRAC, Tervuren, Belgium.

Poll, M. 1939. Exploration du Parc National Albert. Mission G.F. de Witte (1933-1935).
Fascicule 24. Poissons. Institut des Parcs Nationaux du Congo belge, Brussels, Belgium.