

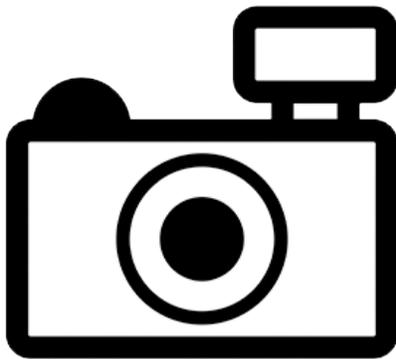
***Labeo quadribarbis* (a carp, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, January 2012

Revised, May 2018

Web Version, 6/29/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“Africa: middle Congo River main course, Kasai, Uélé [Tshibwabwa 1997] and Wagenia Falls [Tshibwabwa 1997; Moelants 2015] in Democratic Republic of the Congo.”

From Moelants (2010):

“*Labeo quadribarbis* is only known from the Central Congo River basin [Democratic Republic of the Congo]: from the Congo River at Yangambi, Kisangani and Isangi and from Gangala-na-Bodio on the Dungu River and from Dilolo (Katanga) (Tshibwabwa 1997).”

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 Introduction into the United States

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

Remarks

From Moelants (2010):

“Synonym(s): *Labeo quadribarbus* Poll & Gosse, 1963”

The above synonym, as well as the accepted scientific name, was used as a search term in looking for information on species introductions and impacts.

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 Ostariophysi
Order Cypriniformes
Superfamily Cyprinoidea
Family Cyprinidae
Genus *Labeo*
Species *Labeo quadribarbis* Poll and Gosse, 1963”

“Current Standing: valid”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 5.0 cm SL male/unsexed; [Poll and Gosse 1963]”

Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2018):

“Tropical; 5°N - 5°S”

Distribution Outside the United States

Native

From Froese and Pauly (2018):

“Africa: middle Congo River main course, Kasai, Uélé [Tshibwabwa 1997] and Wagenia Falls [Tshibwabwa 1997; Moelants 2015] in Democratic Republic of the Congo.”

From Moelants (2010):

“*Labeo quadribarbis* is only known from the Central Congo River basin [Democratic Republic of the Congo]: from the Congo River at Yangambi, Kisangani and Isangi and from Gangala-na-Bodio on the Dungu River and from Dilolo (Katanga) (Tshibwabwa 1997).”

Introduced

No introductions of this species have been reported.

Means of Introduction Outside the United States

No introductions of this species have been reported.

Short Description

From Froese and Pauly (2018):

“Dorsal soft rays (total): 8-10; Vertebrae: 29 - 30. Body nearly rounded; lips plicate; snout rounded, convex, without transverse furrow nor fleshy appendix at the end; eyes in lateral position; genital orifice far from origin of anal fin; two large pairs of barbels; one lateral dark brown band on each flank [Tshibwabwa 1997].”

Biology

No information available.

Human Uses

From Moelants (2010):

“This species is harvested for human consumption.”

Diseases

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

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

No information available. No introductions of this species have been reported.

4 Global Distribution

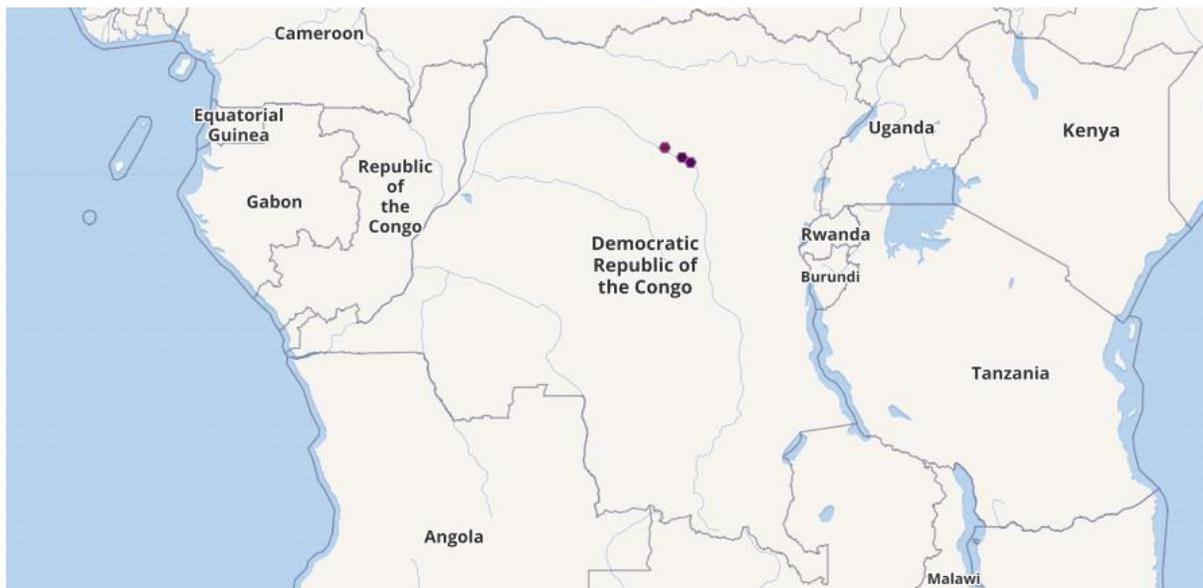


Figure 1. Known global distribution of *L. quadribarbis*, reported from the Democratic Republic of the Congo. Map from GBIF Secretariat (2017).

5 Distribution within the United States

This species has not been reported in the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match (Sanders et al. 2018; 16 climate variables; Euclidean Distance) was low for most of the contiguous United States, with the exception of medium matches in southern Louisiana and southern Florida. Climate 6 score indicated that the contiguous United States has a low climate match overall. The range of scores indicating a low climate match is 0.005 and below; Climate 6 score for *L. quadribarbis* was 0.000.

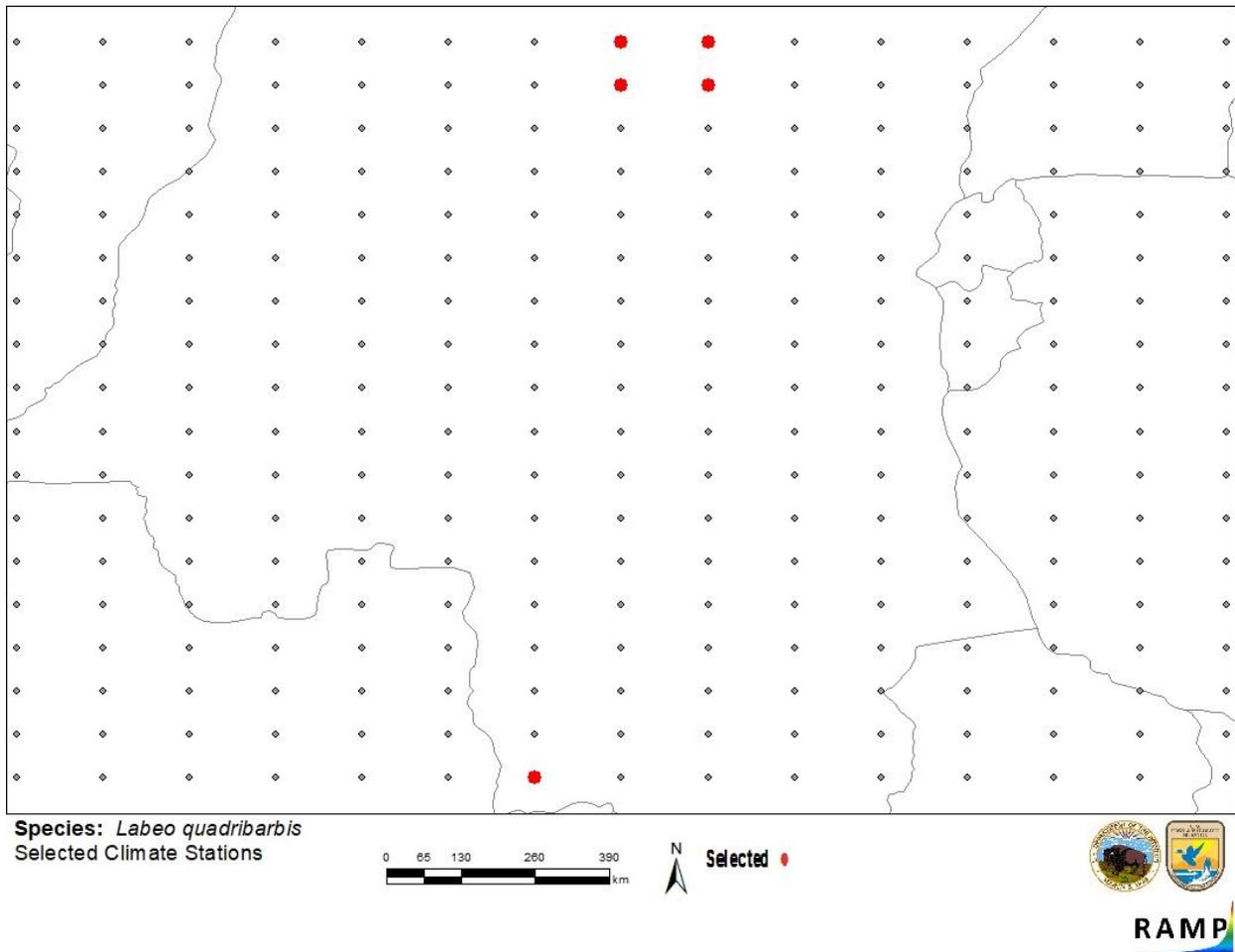


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in central Africa selected as source locations (red; Democratic Republic of the Congo) and non-source locations (gray) for *L. quadribarbis* climate matching. Source locations from GBIF Secretariat (2017) and Froese and Pauly (2018).

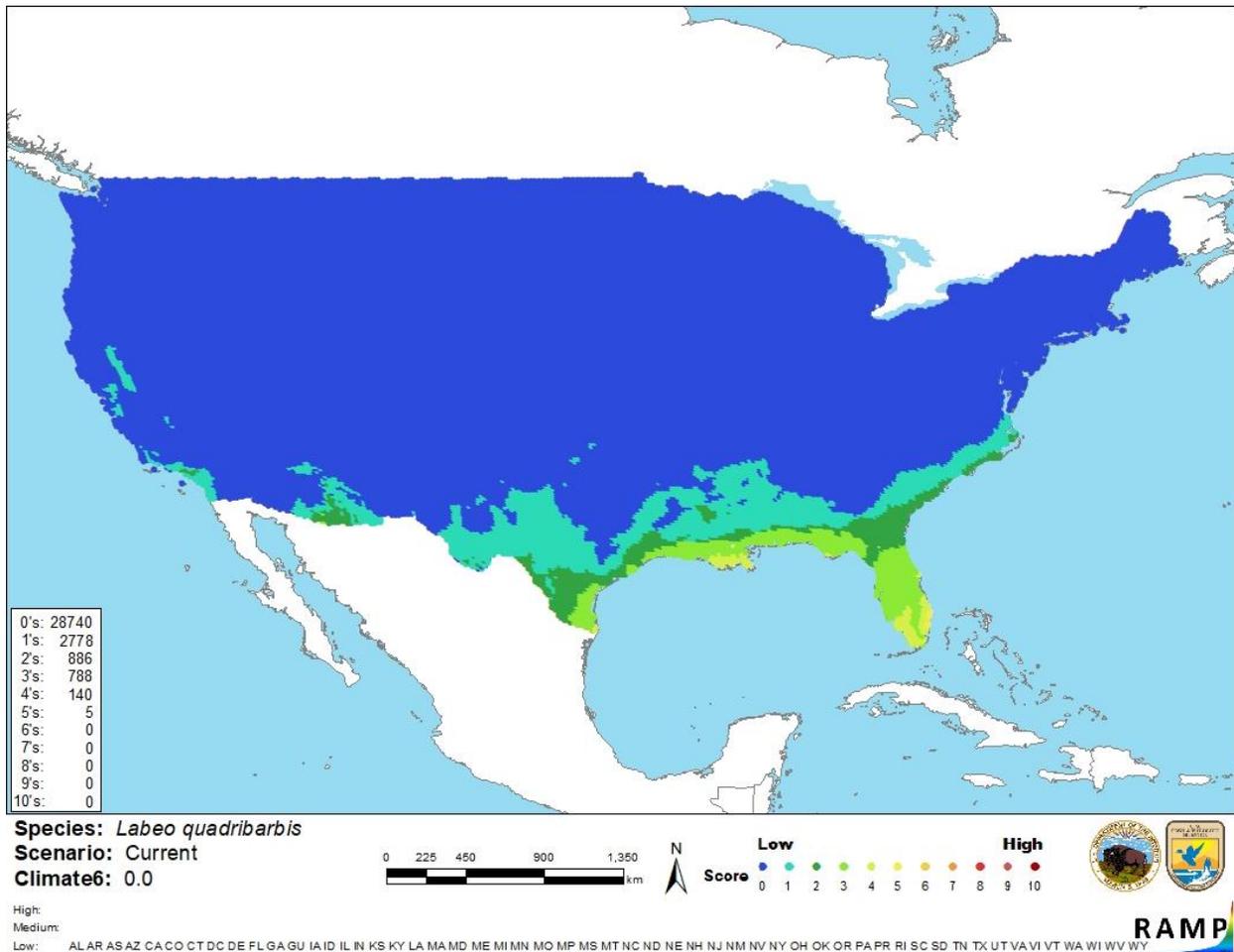


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *L. quadribarbis* in the contiguous United States based on source locations reported by GBIF Secretariat (2017) and Froese and Pauly (2018). 0=Lowest match, 10=Highest match.

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

Very limited information is available on the biology, ecology, and distribution of *Labeo quadribarbis*. No information is available on impacts of introduction of this species because no introductions have been reported. Certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Labeo quadribarbis is a species of carp native to the central Congo River basin. It is harvested for human consumption where native, but the species has not been reported as introduced or established anywhere else in the world. Climate match to the contiguous United States is low overall. Without a history of introduction on which to judge potential for impacts of introduction, overall risk posed by *Labeo quadribarbis* to the contiguous United States is uncertain.

Assessment Elements

- **History of Invasiveness: Uncertain**
- **Climate Match: Low**
- **Certainty of Assessment: 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.

- Froese, R., and D. Pauly, editors. 2018. *Labeo quadribarbis* Poll & Gosse, 1963. FishBase. Available: <https://www.fishbase.de/summary/Labeo-quadribarbis.html>. (June 2018).
- GBIF Secretariat. 2017. GBIF backbone taxonomy: *Labeo quadribarbis* Poll & Gosse, 1963. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/5206167>. (June 2018).
- ITIS (Integrated Taxonomic Information System). 2018. *Labeo quadribarbis* Poll and Gosse, 1963. Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=689331#null. (June 2018).
- Moelants, T. 2010. *Labeo quadribarbis*. The IUCN Red List of Threatened Species 2010: e.T182300A7854324. Available: <http://www.iucnredlist.org/details/full/182300/0>. (June 2018).
- Sanders, S., C. Castiglione, and M. Hoff. 2018. Risk Assessment Mapping Program: RAMP, version 3.1. 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.

Moelants, T. 2015. Diversity and ecology of the ichthyofauna of the Middle and Upper Congo basin: a case-study in the region of the Wagenia falls (Democratic Republic of the Congo). KU Leuven, Faculty of Science, Leuven, Belgium.

Poll, M., and J. P. Gosse. 1963. Contribution à l'étude systématique de la faune ichthyologique du Congo central. Annales du Musée Royal de l'Afrique Centrale: Sciences Zoologiques, série in-8°, 116:43-110.

Tshibwabwa, S. M. 1997. Systématique des espèces africaines du genre *Labeo* (Teleostei, Cyprinidae) dans les régions ichthyogéographiques de Basse-Guinée et du Congo II. Doctoral thesis. Presses Universitaires de Namur, Namur, Belgium.