

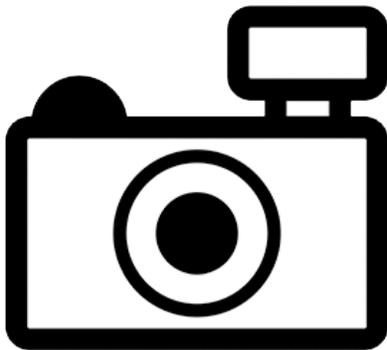
Labeo simpsoni (a carp, no common name)

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, February 2012

Revised, July 2018

Web Version, 7/31/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“Africa: middle and upper Congo River basin in Cameroon, Central African Republic, Angola, Democratic Republic of the Congo and Zambia [Tshibwabwa 1997].”

From Moelants et al. (2010):

“*Labeo simpsoni* is known from the Lower, Central and Upper reaches of the Congo River, including Cafunfo and the Kwango River (Angola) and the Dja River (Cameroon).”

“**Native:** Angola; Cameroon; Central African Republic; Congo, The Democratic Republic of the; Zambia”

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.

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 simpsoni* Ricardo-Bertram, 1943”

“Current Standing: valid”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 22.0 cm SL male/unsexed; [Tshibwabwa 1997]”

Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2018):

“Tropical; 7°N - 15°S”

Distribution Outside the United States

Native

From Froese and Pauly (2018):

“Africa: middle and upper Congo River basin in Cameroon, Central African Republic, Angola, Democratic Republic of the Congo and Zambia [Tshibwabwa 1997].”

From Moelants et al. (2010):

“*Labeo simpsoni* is known from the Lower, Central and Upper reaches of the Congo River, including Cafunfo and the Kwango River (Angola) and the Dja River (Cameroon).”

“**Native:** Angola; Cameroon; Central African Republic; Congo, The Democratic Republic of the; Zambia”

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): 9-10; Vertebrae: 29 - 30. Lips plicate; dorsal fin falciform with 4 simple and 9 to 10 branched rays; snout rounded, very prominent and provided with a large, deep transverse furrow and a fleshy appendix at the end, numerous tubercles on the snout and the rostral lobe; eyes in superolateral position; body elongated with a dark lateral brown band on the flanks, broadens at the base of the caudal fin; genital orifice very far from origin of the anal fin [Tshibwabwa 1997].”

Biology

No information available.

Human Uses

No information available.

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 *Labeo simpsoni*, reported from central Africa. Map from GBIF Secretariat (2017). No georeferenced occurrences were available in GBIF Secretariat (2017) for *L. simpsoni* in Angola or the Central African Republic.

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 match (Sanders et al. 2018; 16 climate variables; Euclidean Distance) for *L. simpsoni* was low throughout the contiguous United States except for medium matches in

southern Florida, southern coastal Louisiana, and southern coastal Texas. Climate 6 score indicated that the contiguous United States has a low climate match overall. Scores of 0.005 and below indicate a low match; Climate 6 score for *L. simpsoni* was 0.000.

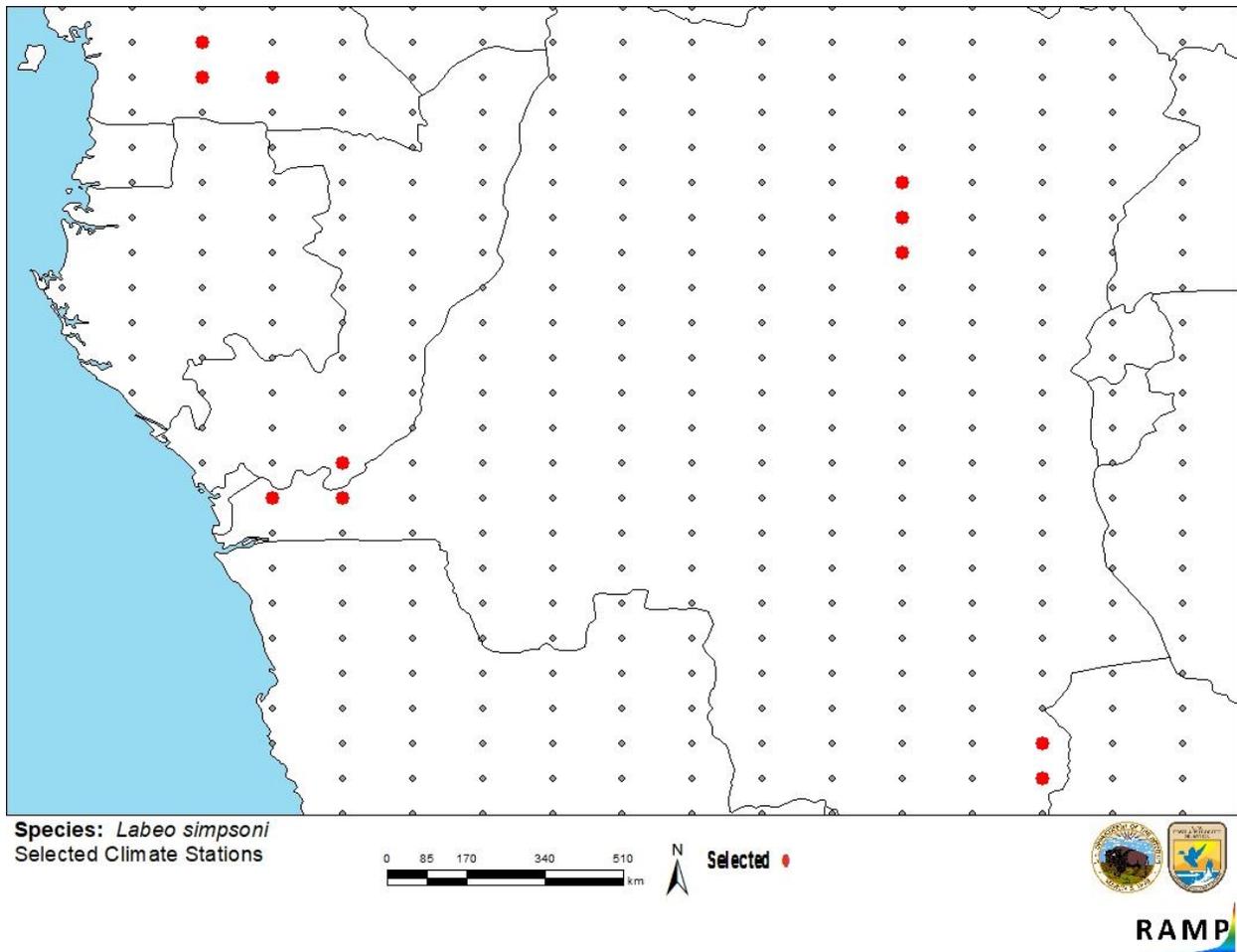


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in central Africa selected as source locations (red; Cameroon, Republic of the Congo, Democratic Republic of the Congo) and non-source locations (gray) for *L. simpsoni* climate matching. Source locations from GBIF Secretariat (2017).

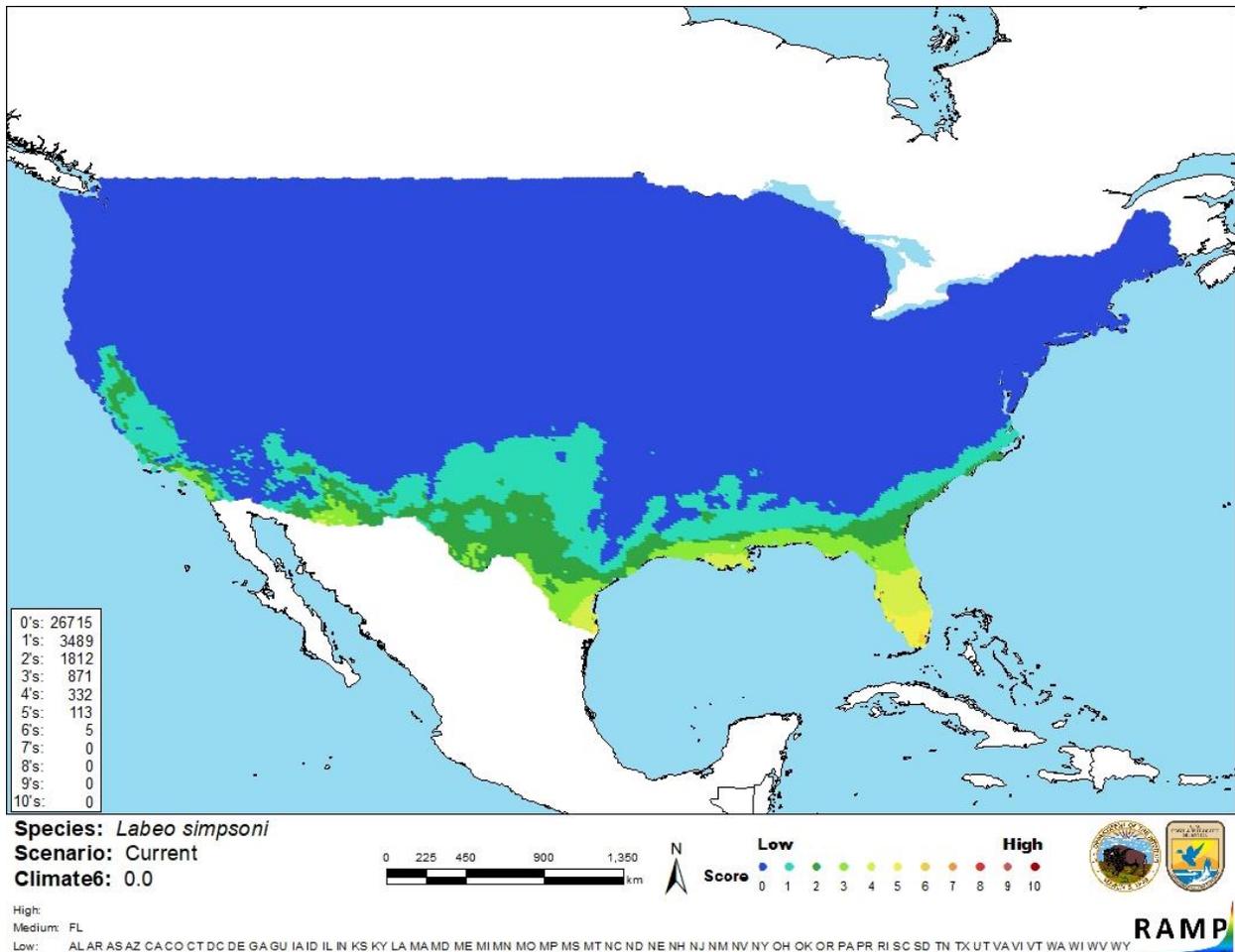


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *L. simpsoni* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 0=Lowest match, 10=Highest match.

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 simpsoni*. No information is available on impacts of introduction of this species because no introductions have been reported. Without further information, certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Labeo simpsoni is a species of carp native to the Congo River basin. This species has not been reported as introduced outside its native range, so any negative impacts of introduction remain unknown. *L. simpsoni* had an overall low climate match to the contiguous United States, with medium matches in southern Florida, southern Louisiana, and southern Texas. Certainty of assessment is low. Because of the lack of introduction history and low climate match, overall risk posed by *L. simpsoni* to the 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 simpsoni* Ricardo-Bertram, 1943. FishBase. Available: <http://www.fishbase.us/summary/SpeciesSummary.php?ID=50745&genusname=Labeo&speciesname=simpsoni&AT=labeo+simpsoni&lang=English>. (July 2018).
- GBIF Secretariat. 2017. GBIF backbone taxonomy: *Labeo simpsoni* Ricardo-Bertram, 1943. Global Biodiversity Information System, Copenhagen. Available: <https://www.gbif.org/species/5206024>. (July 2018).
- ITIS (Integrated Taxonomic Information System). 2018. *Labeo simpsoni* Ricardo-Bertram, 1943. Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=689343#null. (July 2018).
- Moelants, T., J. Snoeks, P. Laleye, and T. Contreras-MacBeath. 2010. *Labeo simpsoni*. The IUCN Red List of Threatened Species 2010: e.T169470A6636216. Available: <http://www.iucnredlist.org/details/full/169470/0>. (July 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.

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.