

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

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, April 2012

Revised, April 2018

Web Version, 6/6/2018

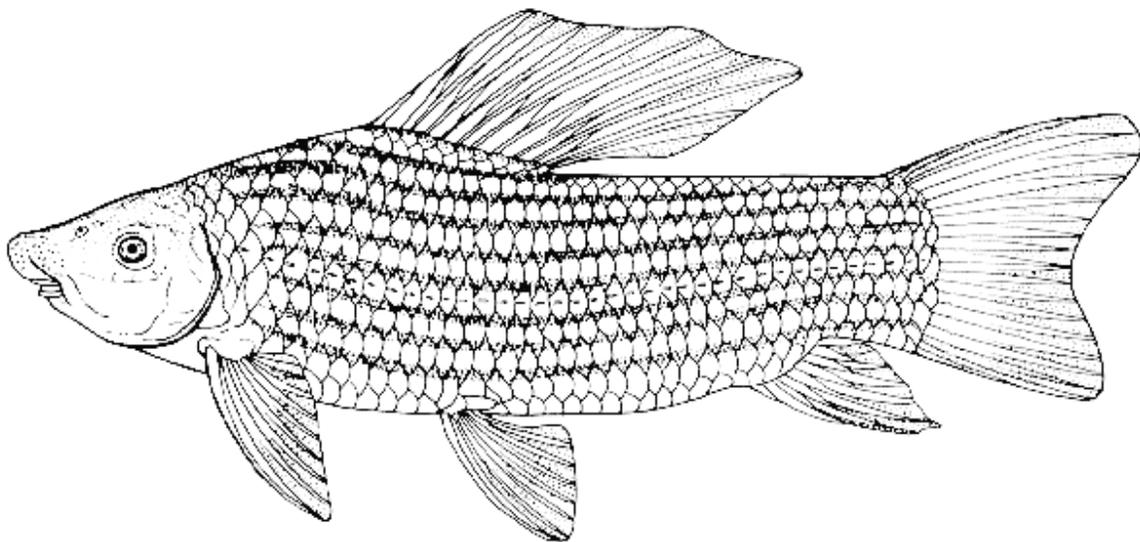


Photo: FAO. Licensed under CC BY-NC 3.0. Available: http://eol.org/data_objects/20859579. (April 2018).

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“Africa: lectotype and paralectotype locality of *Labeo degeni*: “Kinshasa, near the rapids” [Democratic Republic of the Congo; Tshibwabwa 1997]. Distribution of this species in the Congo basin as given in [Tshibwabwa 1997], with reports from the marine lower Congo, Kasai, Ubangi, Wagenia Falls and upper Lualaba [Democratic Republic of the Congo], is questionable.”

Status in the United States

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

Means of Introductions in the United States

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

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 degeni* Boulenger, 1920”

From Eschmeyer et al. (2018):

“Current status: Valid as *Labeo degeni* Boulenger 1920. Cyprinidae: Labeoninae.”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 68.0 cm SL male/unsexed; [Eccles 1992]”

Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2018):

“Tropical; 5°N - 10°S”

Distribution Outside the United States

Native

From Froese and Pauly (2018):

“Africa: lectotype and paralectotype locality of *Labeo degeni*: "Kinshasa, near the rapids" [Democratic Republic of the Congo; Tshibwabwa 1997]. Distribution of this species in the Congo basin as given in [Tshibwabwa 1997], with reports from the marine lower Congo, Kasai, Ubangi, Wagenia Falls and upper Lualaba [Democratic Republic of the Congo], is questionable.”

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

From Froese and Pauly (2018):

“Dorsal soft rays (total): 9-10; Vertebrae: 31. Lips with transverse plicae on inner surface; upper edge of dorsal fin convex or (feebly) straight; eyes in a lateral position [Tshibwabwa and Teugels 1995].”

Biology

From Moelants (2010):

“It inhabits large rivers (Eccles 1992).”

Human Uses

From Moelants (2010):

“This species is harvested for human consumption.”

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 degeni*, 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 U.S. was 0.0, which is a low climate match. The climate match was low across the entire contiguous U.S. except for Southern Florida, which had a medium to medium-low climate match, and Southern Texas, which had a small area of medium-low climate match.

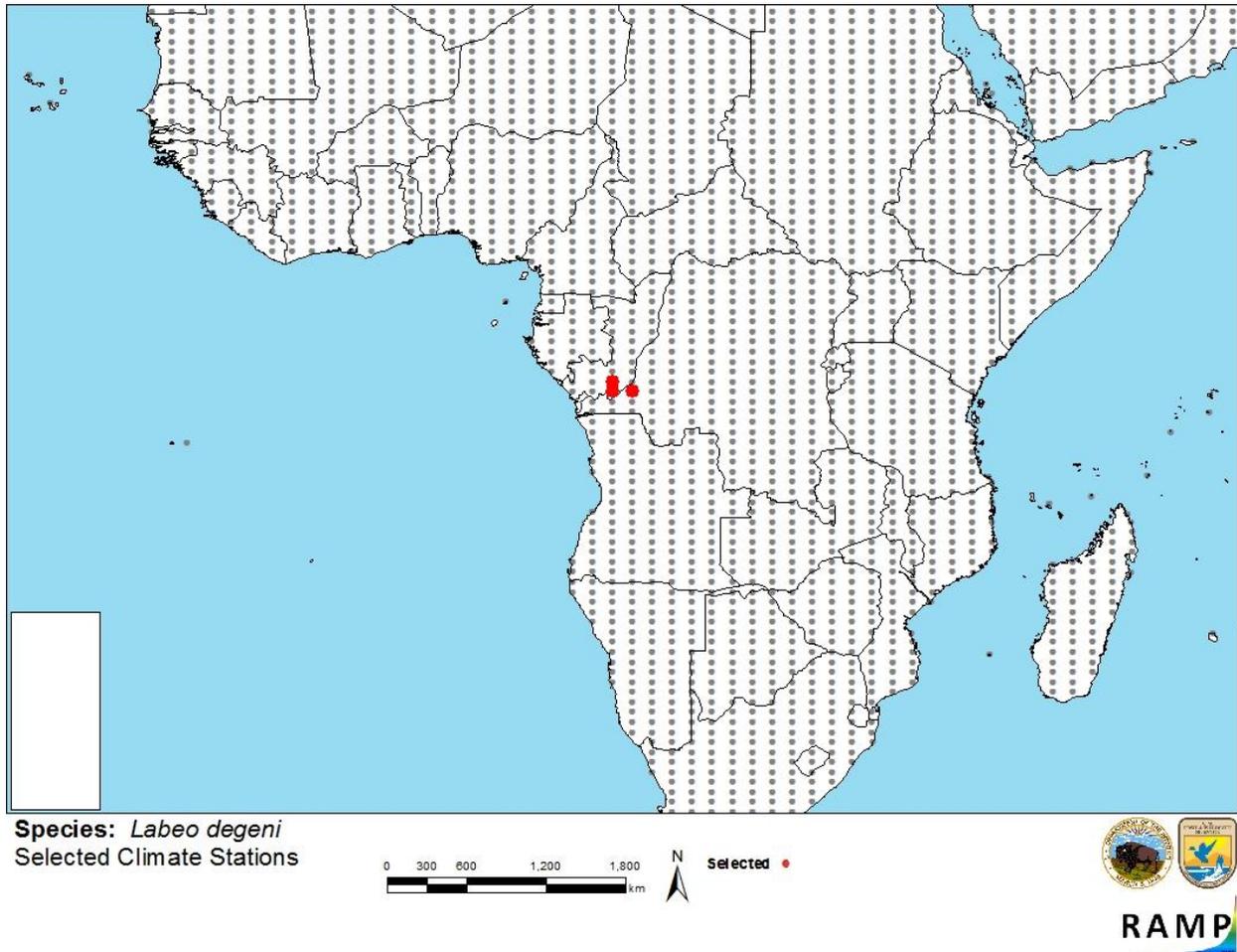


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *Labeo degeni* climate matching. Source locations from GBIF Secretariat (2018).

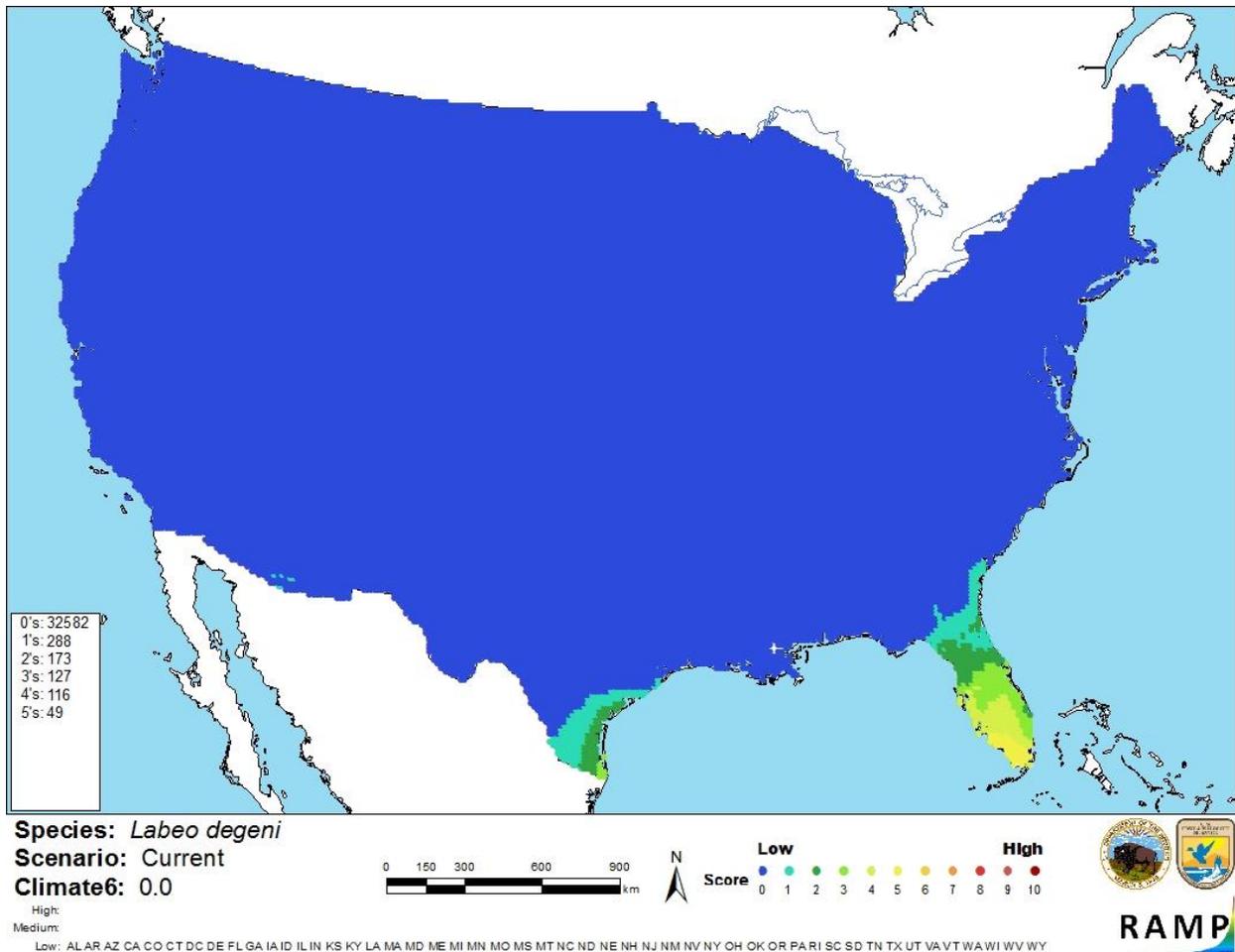


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Labeo degeni* in the contiguous United States based on source locations reported by GBIF Secretariat (2018). 0=Lowest match, 10=Highest match.

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 little information available about *Labeo degeni*. No introductions of this species outside of its native range have been documented. Because of this, no impacts of introductions have been documented, so certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Labeo degeni is a carp native to central Africa. This species has never been reported as introduced outside of its native range. *L. degeni* has a low climate match with the contiguous United States. Because of a lack of information from which to base an assessment of invasive potential, 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>. (April 2018).

Froese, R., and D. Pauly, editors. 2018. *Labeo degeni* (Boulenger, 1920). FishBase. Available: <http://www.fishbase.se/summary/Labeo-degeni.html>. (April 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Labeo degeni*, Boulenger, 1920. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/5206134>. (April 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Labeo degeni* (Boulenger, 1920). Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=689283#null. (April 2018).

Moelants, T. 2010. *Labeo degeni*. The IUCN Red List of Threatened Species 2010: e.T181773A7731041. Available: <http://www.iucnredlist.org/details/181773/0>. (April 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.

Eccles, D. H. 1992. FAO species identification sheets for fishery purposes. Field guide to the freshwater fishes of Tanzania. Prepared and published with the support of the United Nations Development Programme (project URT/87/016). FAO, Rome.

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

Tshibwabwa, S. M., and G. G. Teugels. 1995. Contribution to the systematic revision of the African cyprinid fish genus *Labeo*: species from the Lower Zaire river system. *Journal of Natural History* 29:1543-1579.