

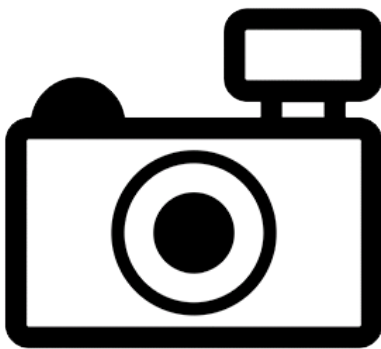
***Labeo nasus* (a carp, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, May 2012

Revised, May 2018

Web Version, 6/14/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

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

From Moelants (2010):

“*Labeo nasus* is known from Pool Malebo (Stanley Pool), and from the Lower and Central reaches of the Congo River basin. It is also known from just upstream Kisangani on the Lualaba River as well.”

All places mentioned by Moelants (2010) are within the Democratic Republic of the Congo.

Status in the United States

This species has not been reported 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 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 nasus* Boulenger, 1899”

“Current Standing: valid”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 19.0 cm TL male/unsexed; [Lévêque and Daget 1984]”

Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

From Moelants (2010):

“*Labeo nasus* is a benthopelagic species. It occurs in rapid water habitats (Reid 1985).”

From Pwema Kiamfu et al. (2011):

“Three species: *Labeo sorex*, *L. nasus* and *L. macrostomus* prefer deep, rocky sites with fast current and high dissolved oxygen concentration. These species are thus considered as rheophilic.”

Climate/Range

From Froese and Pauly (2018):

“Tropical; 5°N - 10°S”

Distribution Outside the United States

Native

From Froese and Pauly (2018):

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

From Moelants (2010):

“*Labeo nasus* is known from Pool Malebo (Stanley Pool), and from the Lower and Central reaches of the Congo River basin. It is also known from just upstream Kisangani on the Lualaba River as well.”

All places mentioned by Moelants (2010) are within the Democratic Republic of the Congo.

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): 10-11; Vertebrae: 31 - 32. Lips with transverse plicae; snout pointed and very prominent, with a fleshy upwards turned small transverse appendix; eyes very small in superolateral (almost dorsolateral) position; sometimes a darkish spot is found on the squamous caudal fin. Can be distinguished from *L. sorex* but for the snout length, eye diameter and postocular length [Tshibwabwa and Teugels 1995].”

From Roberts and Stewart (1976):

“*Labeo nasus* dark blue on back and sides, dusky ventrally”

Biology

From Froese and Pauly (2018):

“Occurs in rapid water habitats [Reid 1985].”

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

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

4 Global Distribution



Figure 1. Reported global distribution of *Labeo nasus*. 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. 2014; 16 climate variables, Euclidean Distance) was high in southeastern Florida in the vicinity of Miami, and medium across the rest of peninsular Florida and along the Gulf Coast. The climate match was low through the remainder of the contiguous United States. Climate 6 score indicated that the contiguous United States has low climate match overall. Scores of 0.005 and below are classified as low match; Climate 6 score for *Labeo nasus* was 0.004.

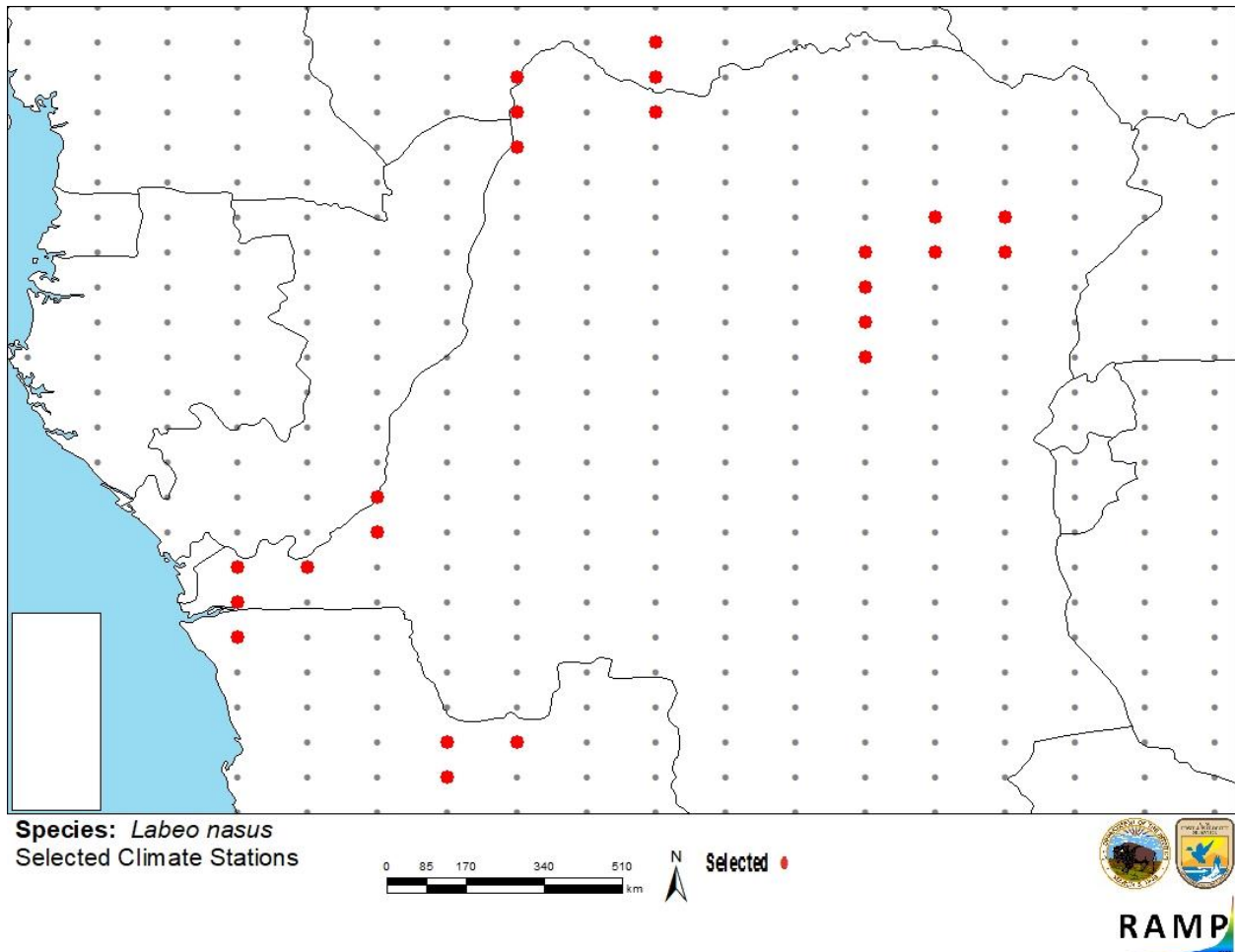


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations in the Democratic Republic of the Congo and surrounding countries selected as source locations (red) and non-source locations (gray) for *Labeo nasus* climate matching. Source locations from GBIF Secretariat (2017).

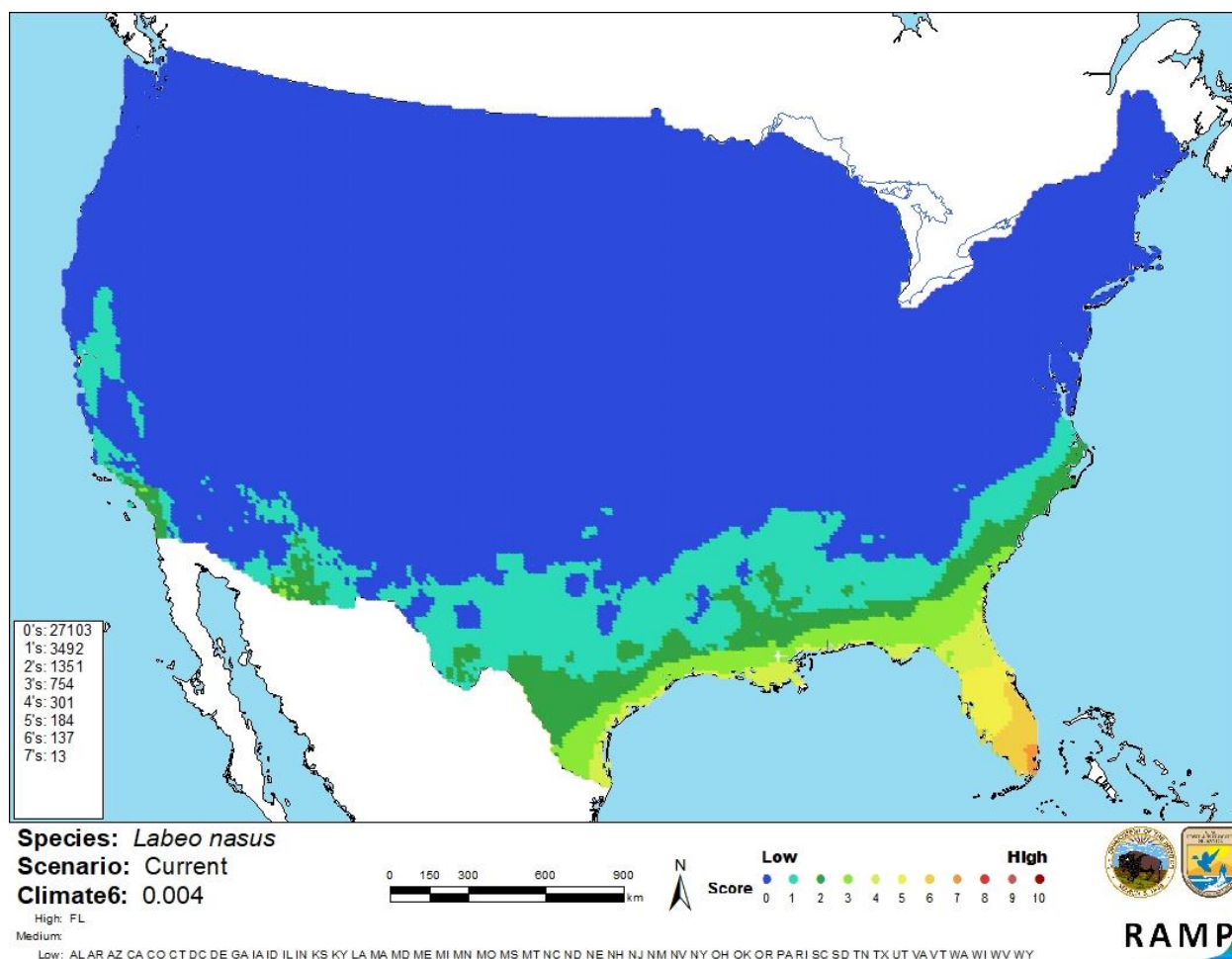


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Labeo nasus* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 0=Lowest match, 10=Highest match. Counts of climate match scores are tabulated on the left.

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

Limited information is available on the biology, ecology, and distribution of *Labeo nasus*. No introductions of this species have been reported, so no information is available on impacts of introduction. Certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Labeo nasus is a cyprinid fish native to the Congo River basin in central Africa. *L. nasus* is harvested for human consumption, but there is no evidence that the species is in trade in the United States. No introductions of *L. nasus* have been reported, so potential impacts of its introduction to the contiguous United States remain unknown, and certainty of assessment is low. Climate match to the contiguous United States is low overall, but high in southeastern Florida. Overall risk assessment category for *L. nasus* 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 nasus* Boulenger, 1899. FishBase. Available: <http://www.fishbase.se/summary/Labeo-nasus.html>. (May 2018).
- GBIF Secretariat. 2017. GBIF backbone taxonomy: *Labeo nasus* Boulenger, 1899. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/5206038>. (May 2018).
- ITIS (Integrated Taxonomic Information System). 2018. *Labeo nasus* Boulenger, 1899. Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=689318#null. (May 2018).
- Moelants, T. 2010. *Labeo nasus*. The IUCN Red List of Threatened Species 2010: e.T182213A7833056. Available: <http://www.iucnredlist.org/details/full/182213/0>. (May 2018).
- Pwema Kiamfu, V., N. Mbomba Bekeli, L.-M. Pigneur, Takoy Lomema, and J.-C. Micha. 2011. Environmental variables structuring *Labeo* species (Pisces, Cyprinidae) in Malebo Pool, Congo River. *International Journal of Biological and Chemical Sciences* 5(2):507-514.
- Roberts, T. R., and D. J. Stewart. 1976. An ecological and systematic survey of fishes in the rapids of the Lower Zaïre or Congo River. *Bulletin Museum of Comparative Zoology* 147(6): 239-317.

Sanders, S., C. Castiglione, and M. 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.

Reid, G. M. 1985. A revision of African species of *Labeo* (Pisces: Cyprinidae) and a re-definition of the genus. Verlag von J. Cramer, Braunschweig, Germany.

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