1 Native Range and Status in the United States

Native Range
From Froese and Pauly (2017):


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

Means of Introduction into the United States
This species has not been reported as introduced in the United States.
Remarks
From Bousso and Lalèyè (2010):

“[…] it is impacted by agriculture, mining, deforestation, pollution and urbanisation. The species EOO [extent of occurrence] is less than 5,000 km², and the AOO [area of occupancy] is less than 500 km², and it therefore qualifies as Endangered.”

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 alluaudi Pellegrin, 1933”

“Current Standing: valid”

Size, Weight, and Age Range
From Froese and Pauly (2017):

“Max length : 13.5 cm SL male/unsexed; [Lévêque and Daget 1984]”

“Maximum TL was recorded at 16.5 cm [Lévêque and Daget 1984].”

Environment
From Froese and Pauly (2017):

“Freshwater; benthopelagic.”
From Pezold et al. (2016):

“*Labeo alluaudi* [...] are associated with second or third order streams and higher.”

**Climate/Range**
From Froese and Pauly (2017):

“Tropical”

**Distribution Outside the United States**
Native
From Froese and Pauly (2017):


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 (2017):

“Wealalas 12-14; Anal soft rays: 7. Diagnosis: body very elongate; back nearly straight from head to caudal gin, a feature unique for this species; body depth 1.8-2.0x SL; depth of caudal peduncle 0.8-1.1x its length; 42 (50-150mm) gill rakers; scale formula 4.5-5/34-36/5.5-6; 2.5-3 scales between lateral line and pelvic-fin base; 16 scales around caudal peduncle; 9-10 dorsal fin branched rays; known from Eastern Liberia and Western Côte d’Ivoire [Lévêque 1990, 2003].”

**Biology**
From Stiassny (1991):

“Nine specimen [sic] [...] were seined from a small pool (ca. 1.5 m deep) immediately below the waterfall. The pool had a coarse, sandy bottom with scattered boulders exposed (C. B. Schmitt, personal commun.).”
Human Uses
From Bousso and Lalèyè (2010):

“This species is harvested for human consumption.”

Diseases
From Guégan et al. (1992):

“Species of currents, such as Labeo alluaudi and Garra ornata show also little or no infestation by monogenean species.”

From Guegan and Lambert (1991):

“Dactylogyrids from Labeo parvus Boulenger, 1902, L. alluaudi Pellegrin, 1933, and L. rouaneti, Daget, 1962, were studied in Atlantic coastal basins in West Africa. Nine species (6 new) of Dactylogyridae were found: [including] Dactylogyrus longiphalloides sp. n. and Dogielius kabaensis sp. n. from L. alluaudi in the river Bagbwe in Sierra Leone […] Labeo alluaudi from the rivers Cavally and Nipoue in Cote d'Ivoire and Liberia were not parasitized.”

Threat to Humans
From Froese and Pauly (2017):

“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. alluaudi*. Map from GBIF Secretariat (2017).

5 Distribution within the United States

*L. alluaudi* has not been reported within the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) was medium in southern Florida and in scattered locations along the Gulf Coast of Texas. All other areas of the contiguous U.S. showed low climate match. Climate6 score indicated that the contiguous U.S. has a low climate match overall. The range of scores indicating a low match are those 0.005 and below; Climate6 score for *Labeo alluaudi* was 0.000.
Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red; Liberia and Ivory Coast) and non-source locations (gray) for *L. alluaudi* climate matching. Source locations from GBIF Secretariat (2017).
The “High”, “Medium”, and “Low” climate match categories are based on the following table:

<table>
<thead>
<tr>
<th>Climate 6: Proportion of (Sum of Climate Scores 6-10) / (Sum of total Climate Scores)</th>
<th>Climate Match Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000&lt;X&lt;0.005</td>
<td>Low</td>
</tr>
<tr>
<td>0.005&lt;X&lt;0.103</td>
<td>Medium</td>
</tr>
<tr>
<td>≥0.103</td>
<td>High</td>
</tr>
</tbody>
</table>

7 Certainty of Assessment

Limited information is available on the biology, ecology, and distribution of *Labeo alluaudi*. The species has not been reported as introduced outside its native range, so any impacts of introduction remain unknown. Certainty of this assessment is low.
8 Risk Assessment

Summary of Risk to the Contiguous United States

*Labeo alluaudi* is a carp native to the West African countries of Sierra Leone, Liberia, and Ivory Coast (Côte d'Ivoire). The species is designated as endangered on the IUCN Red List. No introductions of *L. alluaudi* have been reported, so any impacts of introduction remain unknown. Climate match to the contiguous U.S. is low overall, with areas of medium match in Florida and Texas. The overall risk assessment category for *L. alluaudi* is uncertain because of the lack of information about this species and its potential invasiveness.

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.


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.


