Cirrhinus rubirostris (a carp, no common name) Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, October 2012 Revised, November 2018 Web Version, 7/29/2019



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

"Asia: known only from the Tenasserim River basin of southeastern Myanmar."

From Vidthayanon (2012):

"The species is only known from the (Tanintharyi) Tenasserim River, southeastern Myanmar. Further research is required, and the species could be present in associated streams in western Thailand."

Status in the United States

No records of Cirrhinus rubirostris in the wild or in trade in the United States were found.

Means of Introductions in the United States

No records of *Cirrhinus rubirostris* in the wild in the United States were found.

Remarks

A previous version of this ERSS was published in 2012.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From Fricke et al. (2018):

"Current status: Valid as Cirrhinus rubirostris Roberts 1997."

From ITIS (2018):

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"Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Actinoptergii
Class Teleostei
Superorder Ostariophysi
Order Cypriniformes
Superfamily Cyprinoidea
Family Cyprinidae
Genus Cirrhinus
Species Cirrhinus rubirostris Roberts, 1997"
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Size, Weight, and Age Range

From Froese and Pauly (2018):

"Max Length: 17.2 cm SL male/unsexed; [Roberts 1997]"

Environment

From Froese and Pauly (2018):

"Freshwater; demersal."

Climate/Range

From Froese and Pauly (2018):

Distribution Outside the United States

Native

From Froese and Pauly (2018):

"Asia: known only from the Tenasserim River basin of southeastern Myanmar."

From Vidthayanon (2012):

"The species is only known from the (Tanintharyi) Tenasserim River, southeastern Myanmar. Further research is required, and the species could be present in associated streams in western Thailand."

Introduced

No records of Cirrhinus rubirostris introductions were found.

Means of Introduction Outside the United States

No records of *Cirrhinus rubirostris* introductions were found.

Short Description

From Froese and Pauly (2018):

"Dorsal spines (total): 0; Dorsal soft rays (total): 10; Vertebrae: 35. *Cirrhinus rubirostris* differs from all other *Cirrhinus* in having both sexes with well developed rostral tubercles, and rostral tubercles and snout pinkish or rosy red. Rostral barbels absent, maxillary barbels present."

Biology

From Froese and Pauly (2018):

"Inhabit rivers."

From Vidthayanon (2012):

"Inhabits mainstreams and larger tributaries in turbid waters."

Human Uses

From Vidthayanon (2012):

"Utilized as local household consumption, and sold in small markets."

[&]quot;Tropical"

Diseases

No information on diseases of *Cirrhinus rubirostris* was found. **No records of OIE-reportable diseases were found for** *C. rubirostris* (**OIE 2019**).

Threat to Humans

From Froese and Pauly (2018):

"Harmless"

3 Impacts of Introductions

No records of *Cirrhinus rubirostris* introductions were found; therefore, there is no information on impacts of introduction.

4 Global Distribution

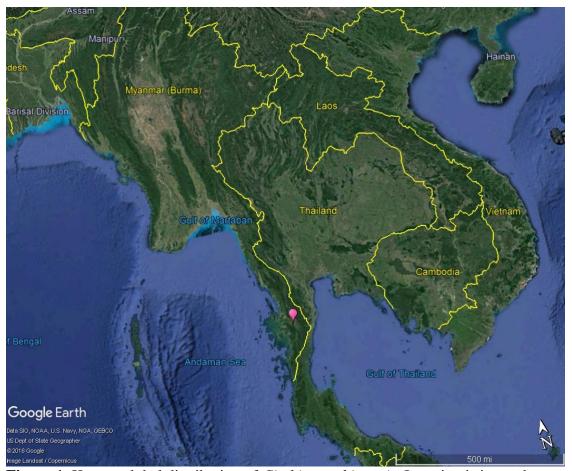


Figure 1. Known global distribution of *Cirrhinus rubirostris*. Location is in south eastern Myanmar. No georeferenced locations were available; source location (southeastern Myanmar) based on listed occurrences within the native range of *C. rubirostris* from GBIF Secretariat (2018), Froese and Pauly (2018) and Vidthayanon (2012).

5 Distribution Within the United States

No records of Cirrhinus rubirostris in the wild in the United States were found.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Cirrhinus rubirostris* was low for the almost all of the contiguous United States. A small portion of south western Florida had a medium climate match. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low (scores between 0.000 and 0.005, inclusive, are classified as low). All States had low individual Climate 6 scores.

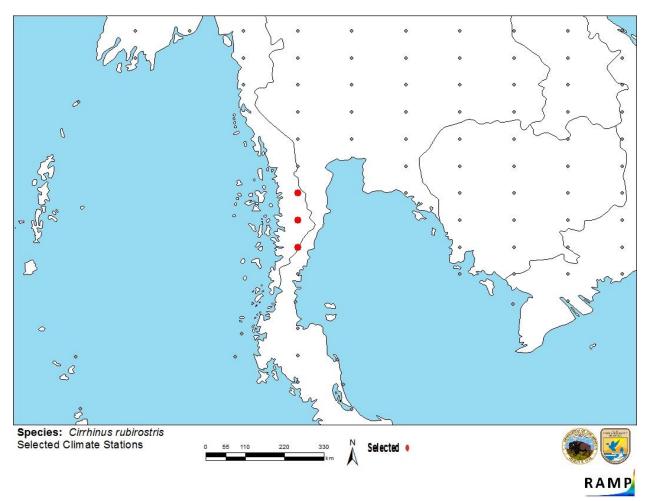


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in southeastern Myanmar selected as source locations (red) and non-source locations (gray) for *Cirrhinus rubirostris* climate matching. Source locations from GBIF Secretariat (2018), Froese and Pauly (2018) and Vidthayanon (2012). Selected source locations are within 100 km of one or more species occurrences, and do not necessarily represent the locations of occurrences themselves.

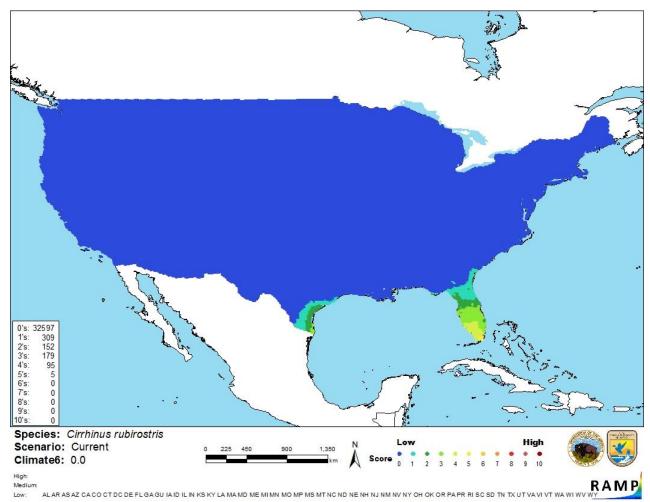


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Cirrhinus rubirostris* in the contiguous United States based on source locations reported by GBIF Secretariat (2018), Froese and Pauly (2018) and Vidthayanon (2012). Counts of climate match scores are tabulated on the left. 0 = Lowest match, 10 = Highest match.

The High, Medium, and Low Climate match Categories are based on the following table:

Climate 6: Proportion of	Climate Match
(Sum of Climate Scores 6-10) / (Sum of total Climate Scores)	Category
0.000\leqX\leq0.005	Low
0.005 <x<0.103< td=""><td>Medium</td></x<0.103<>	Medium
≥0.103	High

7 Certainty of Assessment

There is little information available on *Cirrhinus rubirostris*. There have been no documented introductions of this species outside its native range; therefore there is no information available on impacts of introductions. The certainty of assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Cirrhinus rubirostris is a freshwater fish found only in the Tenasserim River basin of southeastern Myanmar. The history of invasiveness is uncertain. There are no records of this species being found outside of its native range or used in trade. The climate match for Cirrhinus rubirostris is low for the vast majority of the contiguous United States; areas of Florida being the only exception with medium match, yet still scoring an overall low individual score. There is minimal information available for this species causing the certainty of assessment to be low. The overall risk category for Cirrhinus rubirostris is uncertain.

Assessment Elements

- History of Invasiveness (Sec. 3): Uncertain
- Climate Match (Sec. 6): Low
- Certainty of Assessment (Sec. 7): Low
- Remarks/Important additional information: No additional information.
- 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.

- Fricke, R., W. N. Eschmeyer, and R. van der Laan, editors. 2018. Catalog of fishes: genera, species, references. Available: http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp. (December 2018).
- Froese, R., and D. Pauly, editors. 2018. *Cirrhinus rubirostris* Roberts, 1997. FishBase. Available: https://www.fishbase.de/summary/Cirrhinus-rubirostris.html. (December 2018).
- GBIF Secretariat. 2018. GBIF backbone taxonomy: *Cirrhinus rubirostris* Roberts, 1997. Global Biodiversity Information Facility, Copenhagen. Available: https://www.gbif.org/occurrence/583639139. (December 2018).
- ITIS (Integrated Taxonomic Information System). 2018. *Cirrhinus rubirostris* Roberts, 1997. Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=688 899#null. (December 2018).
- OIE (World Organisation for Animal Health). 2019. OIE-listed diseases, infections and infestations in force in 2019. Available: http://www.oie.int/animal-health-in-the-world/oie-listed-diseases-2019/. (July 2019).

- Sanders, S., C. Castiglione, and M. Hoff. 2018. Risk assessment mapping program: RAMP, version 3.1. U.S. Fish and Wildlife Service.
- Vidthayanon, C. 2012. *Cirrhinus rubirostris*. The IUCN Red List of Threatened Species 2012: e.T181345A1724358. Available: https://www.iucnredlist.org/species/181345/1724358. (December 2018).

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.

Roberts, T. R. 1997. Systematic revision of the tropical Asian labeon cyprinid fish genus *Cirrhinus*, with descriptions of new species and biological observations of *C. lobatus*. National History Bulletin of the Siam Society 45:171–203.