# *Cyprinus longipectoralis* (a carp, no common name)

## Ecological Risk Screening Summary

**U.S. Fish & Wildlife Service, September 2011**
**Revised, November 2018**
**Web Version, 1/30/2019**

Photo: Chinese Academy of Fishery Sciences. Licensed under Creative Commons BY-NC 3.0 Unported. Available: http://www.fishbase.org/photos/PicturesSummary.php?ID=14472&what=species. (2011).

# 1 Native Range and Status in the United States

## Native Range

From Froese and Pauly (2018):

"Asia: endemic to Erhai Lake in Yunnan Province, China."

## Status in the United States

No records of *Cyprinus longipectoralis* in the wild or in trade in the United States were found.

## Means of Introductions in the United States

No records of *Cyprinus longipectoralis* in the wild in the United States were found.

## Remarks

No additional information.

# 2 Biology and Ecology

## Taxonomic Hierarchy and Taxonomic Standing

According to Fricke et al. (2018), *Cyprinus longipectoralis* (Chen and Huang 1977) is the valid and the original name for this species.

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 *Cyprinus*
Species *Cyprinus longipectoralis* Chen and Huang, 1977"

## Size, Weight, and Age Range

From Froese and Pauly (2018):

"Max length : 35.0 cm OT male/unsexed; [Hwang et al. 1988]"

## Environment

From Froese and Pauly (2018):

"Freshwater; benthopelagic."

## Climate/Range

From Froese and Pauly (2018):

"High altitude"

## Distribution Outside the United States

Native

From Froese and Pauly (2018):

"Asia: endemic to Erhai Lake in Yunnan Province, China."

Introduced
No records of introductions of *Cyprinus longipectoralis* were found.

## Means of Introduction Outside the United States
No records of introductions of *Cyprinus longipectoralis* were found.

## Short Description
From Froese and Pauly (2018):

"Body gray or yellowish black, top of body black and white on abdomen; scales on upper sides of body with markedly black spots. Barbels 1 or 2 pairs and rostral one degenerated or less developed."

## Biology
From Froese and Pauly (2018):

"Inhabits lake [Hwang et al. 1988]. […] Stays in the open water area of the lake. Feeds mainly on zoobenthos, insect larva and plants. Spawning period from March to April. Local people call it "Chun-Yu" (spring fish), as it spawns early [Wang 1998]."

From Tang et al. (2013):

"As an example, the cyprinid fishes (*C. carpio, C. chilia, C. longipectoralis*) in Erhai Lake lay viscous eggs that are attached to aquatic plants (Chu and Chen, 1990)."

## Human Uses
From Froese and Pauly (2018):

"Fisheries: commercial"

## Diseases
No information on diseases of *Cyprinus longipectoralis* was found. **No records of OIE-reportable diseases were found.**

## Threat to Humans
From Froese and Pauly (2018):

"Harmless"

# 3 Impacts of Introductions

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

# 4 Global Distribution

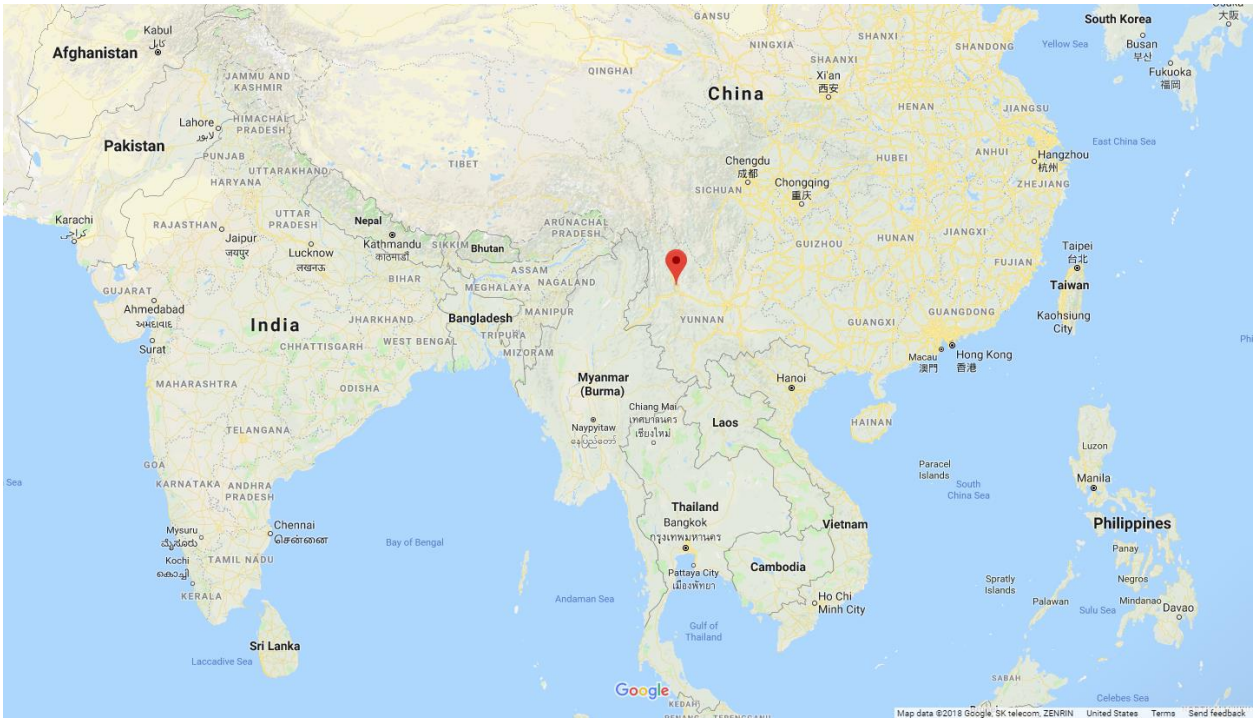


**Figure 1**. Map showing the location of Lake Erhai in southern China. *Cyprinus longipectoralis* is endemic to Lake Erhai (Froese and Pauly 2018). Map from Google, Inc. (2018).

# 5 Distribution Within the United States

No records of *Cyprinus longipectoralis* in the wild in the United States were found.

# 6 Climate Matching

## Summary of Climate Matching Analysis

The climate match for *Cyprinus longipectoralis* was low for most of the contiguous United States. There were small areas of medium match in southern Florida, Texas, and Arizona. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low. The range for a low climate score is from 0.0 to 0.005, inclusive. All states had low individual climate scores.

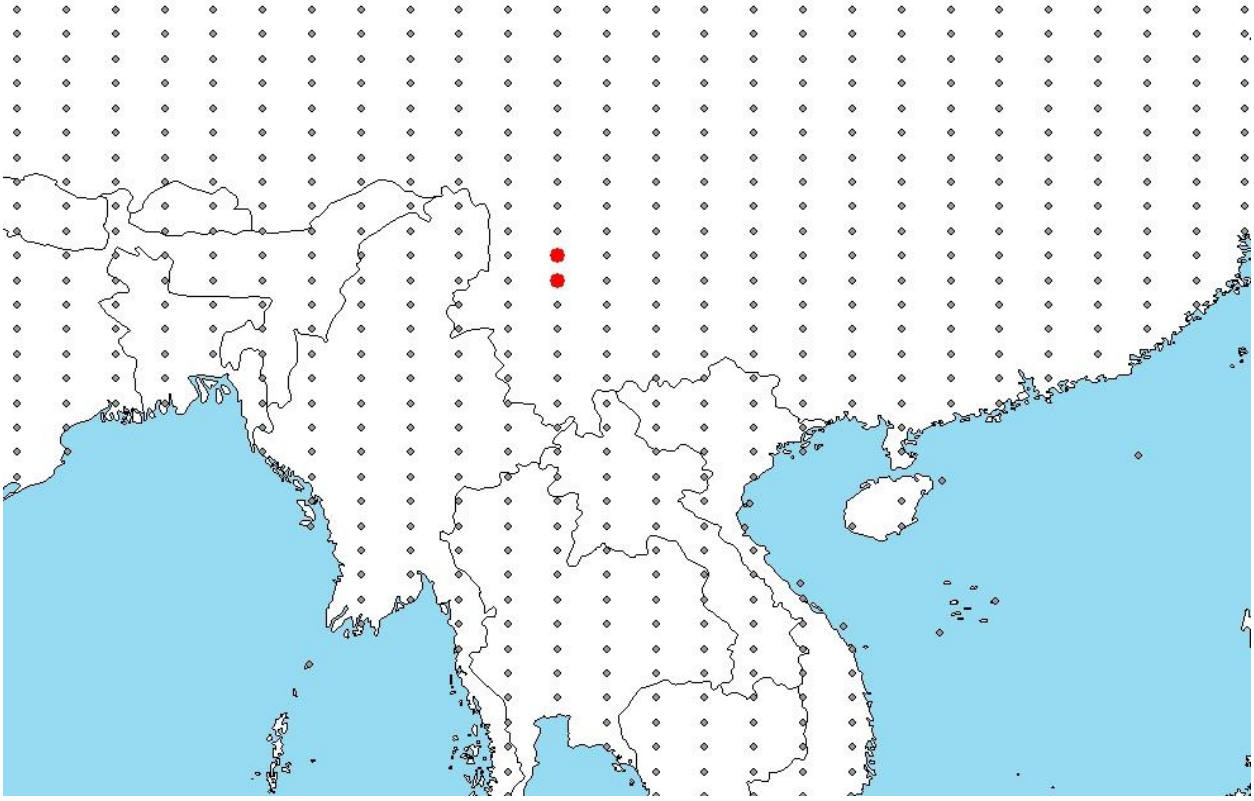

**Figure 2**. RAMP (Sanders et al. 2018) source map showing weather stations in southern China selected as source locations (red) and non-source locations (gray) for *Cyprinus longipectoralis* climate matching. Source locations from Froese and Pauly (2018).

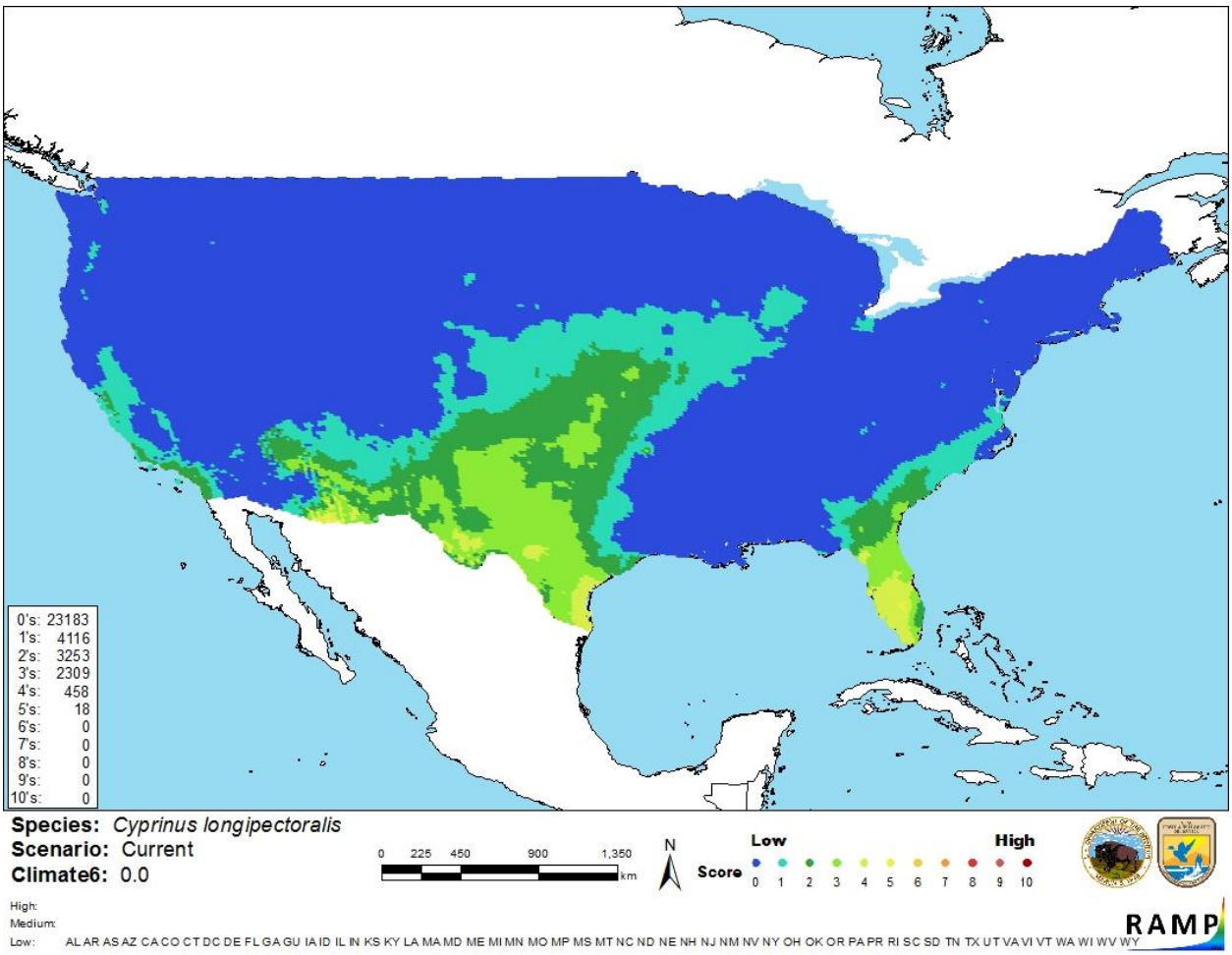


**Figure 3**. Map of RAMP (Sanders et al. 2018) climate matches for *Cyprinus longipectoralis* in the contiguous United States based on source locations reported by Froese and Pauly (2018). 0 = Lowest match, 10 = Highest match.

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

The certainty of assessment for *Cyprinus longipectoralis* is low. There is minimal information available for this species. No georeferenced observations were available; the climate match was based on the text description of the species range. No records of introduction were found; therefore, there is no information on impacts of introduction to evaluate.

# 8 Risk Assessment

## Summary of Risk to the Contiguous United States

*Cyprinus logipectoralis* is a species of carp native to Lake Erhai in southern China. There is commercial fishing of this species. The history of invasiveness is uncertain. No records of introduction were found. The climate match for the contiguous United States is low. There were small areas of medium match in Florida, Texas, and Arizona. The certainty of assessment is low. There is minimal information available for the species. 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**
- **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. (November 2018).

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Google, Inc. 2018. Map of Lake Erhai, China. Available: https://www.google.com/maps/place/Erhai+Lake/@24.7705358,98.4724695,5z/data=!4m5!3m4!1s0x3727bf6d59732bf3:0xb4288374da6970b5!8m2!3d25.8006596!4d100.1927389. (November 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Cyprinus longipectoralis* Chen and Huang, 1977. Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=688959#null. (November 2018).

Sanders, S., C. Castiglione, and M. Hoff. 2018. Risk assessment mapping program: RAMP, version 3.1. U.S. Fish and Wildlife Service.

Tang, J., S. Ye, W. Li, J. Liu, T. Zhang, Z. Guo, F. Zhu, and Z. Li. 2013. Status and historical changes in the fish community in Erhai Lake. Chinese Journal of Oceanology and Limnology 31(4):712–723.

# 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.**

Chen, H.-L., and H.-Q. Huang. 1977 Cyprininae. Pages 395–438 *in*: H.-W. Wu, editor. Zhongguo like yulei zhi. [The cyprinid fishes of China], volume 2. Science Press, Peking.

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Wang, S. 1998. China red data book of endangered animals. Pisces. National Environmental Protection Agency. Endangered Species Scientific Commission. Science Press, Beijing.