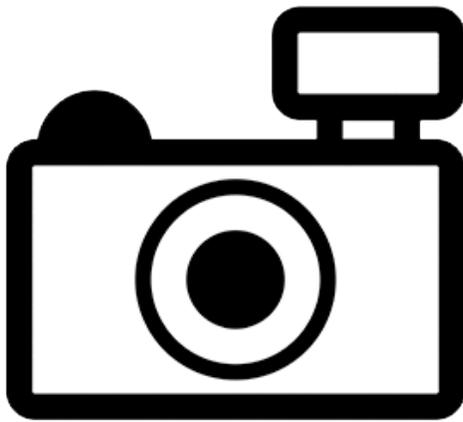


***Cyprinus exophthalmus* (a carp, no common name)**

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, October 2012
Revised, November 2018, December 2018
Web Version, 5/1/2019



No Photo Available

1 Native Range and Status in the United States

Native Range

From Huckstorf (2012):

“The species is presently known only from the Phong Nha-Ke Bang mountain region in the Minh Hoa district, Quang Binh Province, Central Viet Nam (Mai 1978; Ngyuen and Ngo 2001).”

Status in the United States

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

Means of Introductions in the United States

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

Remarks

A previous version of the ERSS for this fish was published in 2012.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From Fricke et al. (2018):

“**Current status:** Valid as *Cyprinus exophthalmus* Mai 1978.”

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 exophthalmos* Mai, 1978”

Size, Weight, and Age Range

No information on the size, weight, or age range of *Cyprinus exophthalmus* was found.

Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic”

From Huckstorf (2012):

“The type locality is in karst limestone mountains.”

Climate/Range

From Froese and Pauly (2018):

“Tropical”

Distribution Outside the United States

Native

From Huckstorf (2012):

“The species is presently known only from the Phong Nha-Ke Bang mountain region in the Minh Hoa district, Quang Binh Province, Central Viet Nam (Mai 1978; Ngyuen and Ngo 2001).”

Introduced

No records of introduction were found for *Cyprinus exophthalmus*.

Means of Introduction Outside the United States

No records of introduction were found for *Cyprinus exophthalmus*.

Short Description

A description of *Cyprinus exophthalmus* was not found.

Biology

Information on the biology of *Cyprinus exophthalmus* was not found.

Human Uses

Information on human uses of *Cyprinus exophthalmus* was not found.

Diseases

Information on diseases of *Cyprinus exophthalmus* was not found.

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

No records of introduction were found for *Cyprinus exophthalmus*. Therefore, there is no information on impacts of introduction.

4 Global Distribution

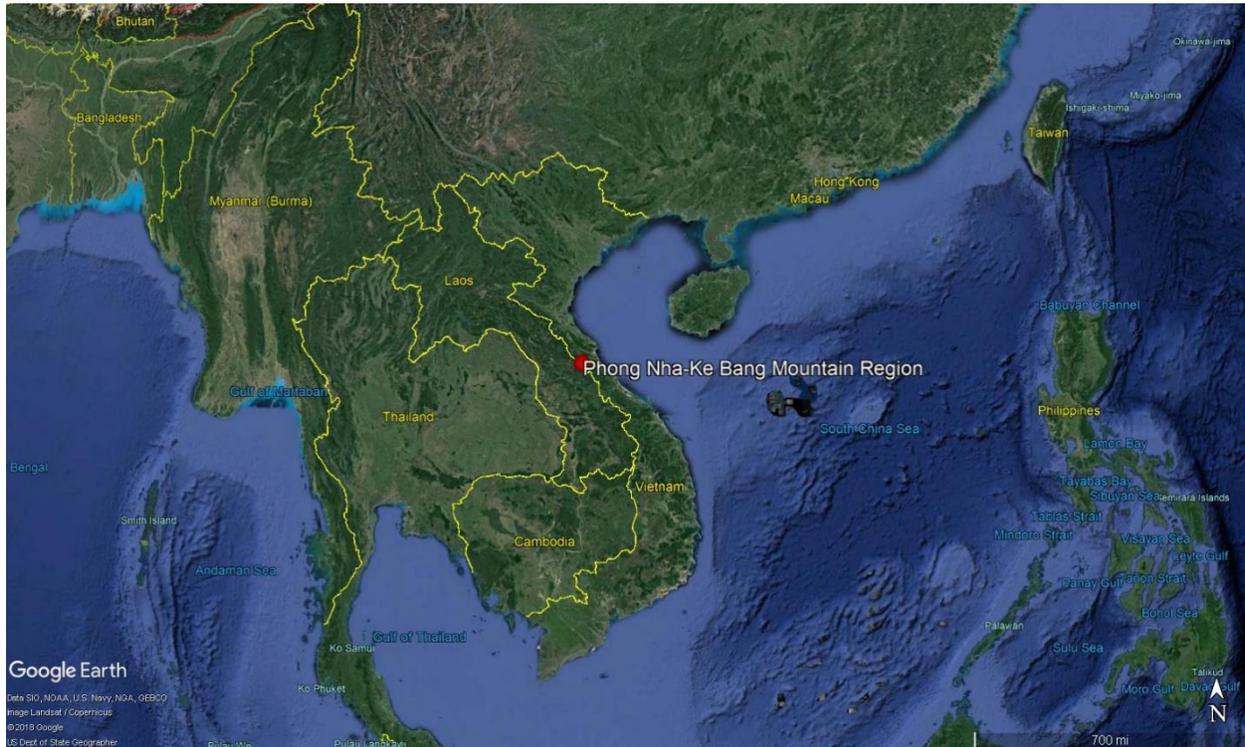


Figure 1. Known global distribution of *Cyprinus exophthalmus*. Location is in central Vietnam. Location from Huckstorf (2012).

5 Distribution Within the United States

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

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Cyprinus exophthalmus* was low across the contiguous United States. There were no areas of high or medium match. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low. All States had low individual climate scores.

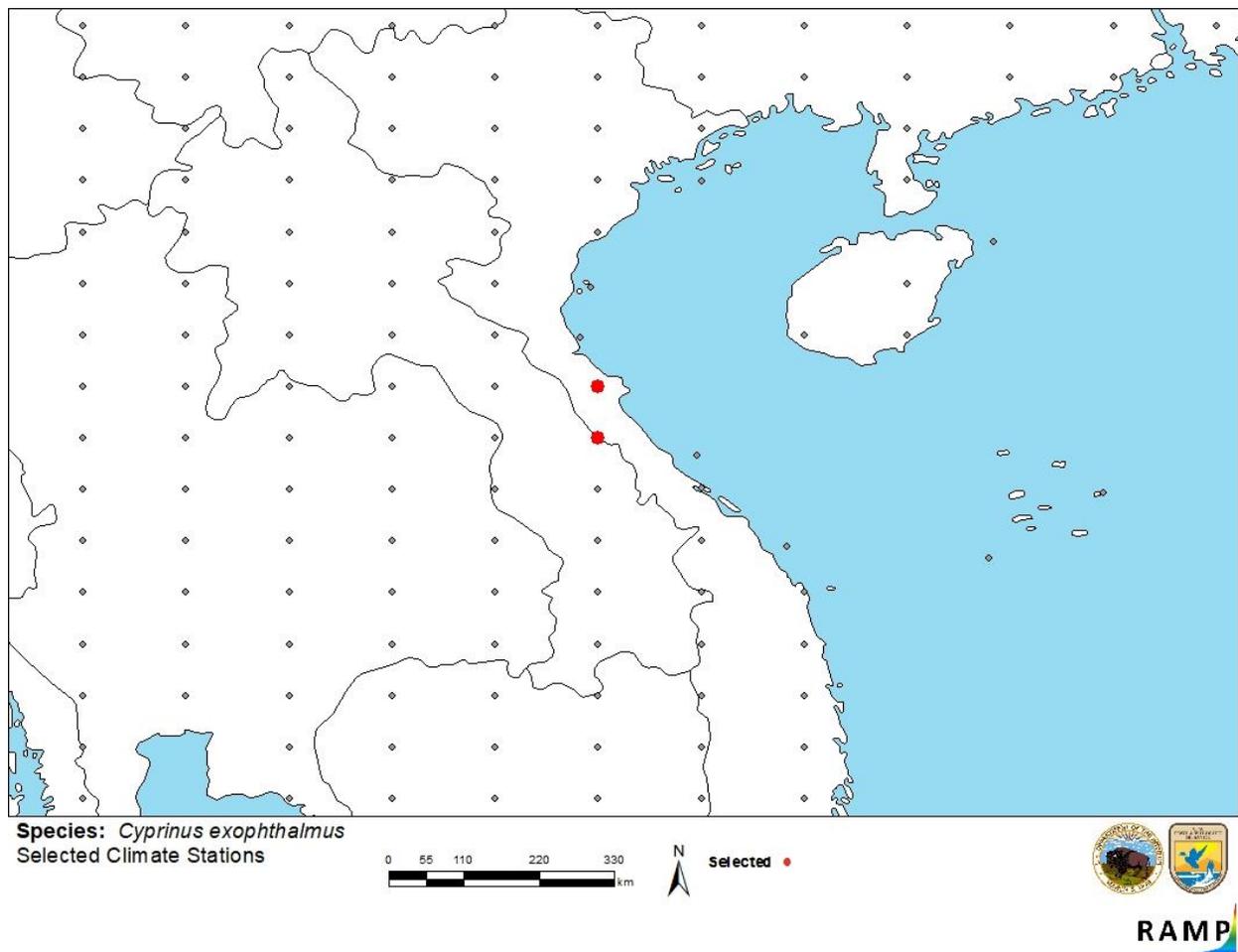


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in Southeast Asia selected as source locations (red; Vietnam) and non-source locations (gray) for *Cyprinus exophthalmus* climate matching. Source locations from Huckstorf (2012).

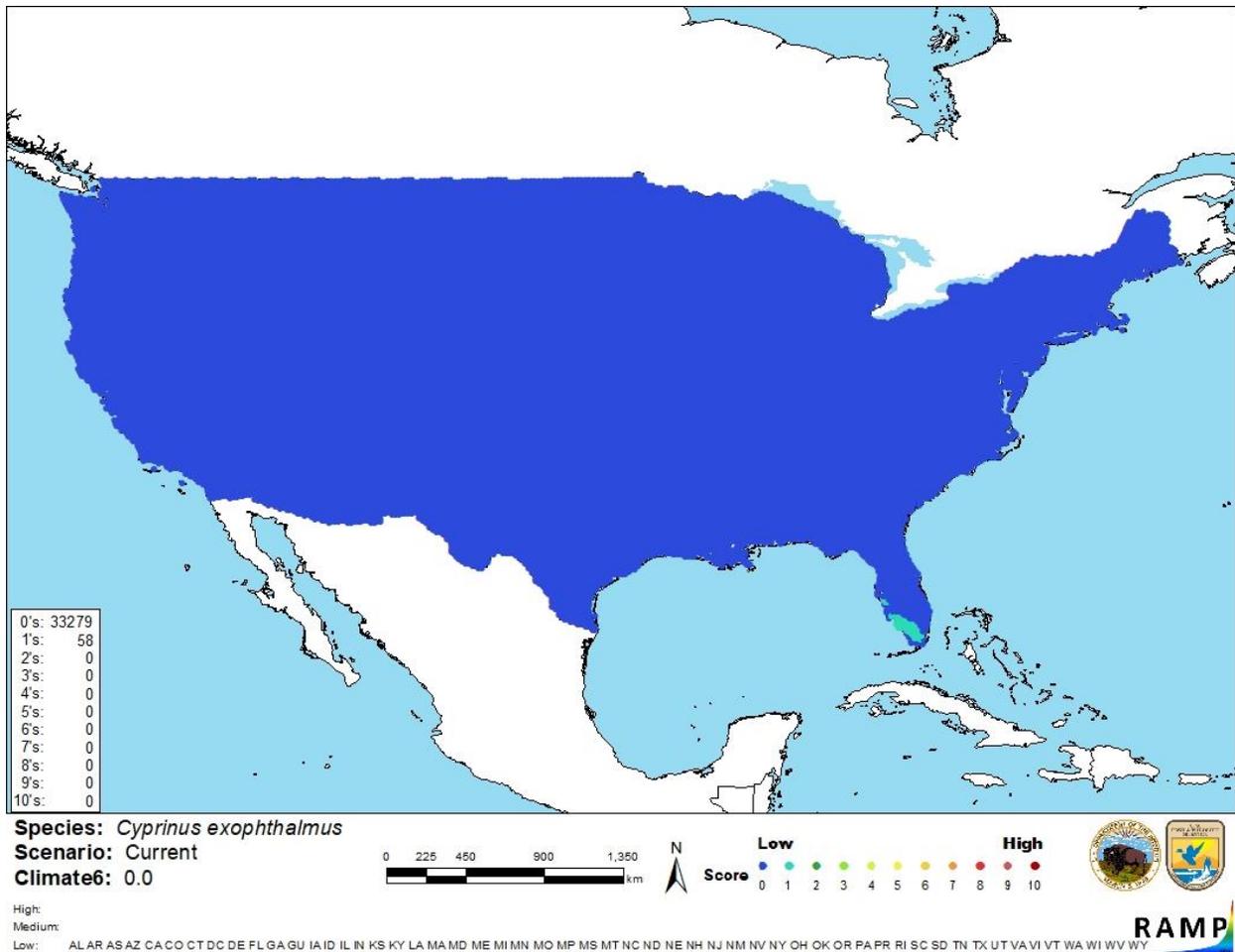


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Cyprinus exophthalmus* in the contiguous United States based on source locations reported by Huckstorf (2012). 0 = Lowest match, 10 = Highest match.

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
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

7 Certainty of Assessment

Peer-reviewed literature or other sources of information on the biology, ecology, and distribution of *Cyprinus exophthalmus* as well as information on its potential invasiveness is limited. The climate match is based on an estimated distribution and not actual observations. The certainty of assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Cyprinus exophthalmus is a species of carp native to fresh waters of the mountain regions in central Vietnam. Not much is known about this fish. The history of invasiveness is uncertain. No records of introduction were found. The climate match was low. There were no areas of high or medium match in the contiguous United States. The certainty of 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**
- **Remarks/Important additional information:** A previous version of this ERSS was published in 2012.
- **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).

Froese, R. and D. Pauly, editors. 2018. *Cyprinus exophthalmus* Mai, 1978. FishBase. Available: <https://www.fishbase.de/summary/Cyprinus-exophthalmus.html>. (November 2018).

Huckstorf, V. 2012. *Cyprinus exophthalmus*. The IUCN Red List of Threatened Species 2012: e.T181347A1724507. Available: <https://www.iucnredlist.org/species/181347/1724507>. (November 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Cyprinus exophthalmus* Mai, 1978. Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=688954#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.

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.

Mai, D. Y. 1978. Dinh loai ca nuoc ngot. Gas tinh Phia bac Vietnam [Identification of the freshwater fishes of northern Vietnam]. Tran Hung Dao (Scientific and Technology Publisher), Hanoi, Vietnam.

Nguyen, V. H., and S. V. Ngo. 2001. Ca nuoc ngot Viet Nam. Tap I. Ho ca chep Cyprinidae). [Freshwater fishes of Viet Nam, volume I. Family Cyprinidae]. Nhà Xuất Ban Nông Nghiệp [Agriculture Publishing House], Hanoi, Vietnam.