

***Henicorhynchus ornatipinnis* (a carp, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, June 2012
Revised, September 2018
Web Version, 2/15/2019



Photo: California Academy of Sciences. Licensed under Creative Commons. Available: <https://www.gbif.org/occurrence/473270607>. (September 2018).

1 Native Range and Status in the United States

Native Range

From Vidthayanon (2012):

“Endemic to the Mekong basin, from Thailand, Lao PDR, Cambodia and possibly Viet Nam.”

Status in the United States

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

Remarks

The current accepted name for this species, *Henicorhynchus ornatipinnis*, and the synonyms *Cirrhinus ornatipinnis* and *Gymnostomus ornatipinnis* were used when researching in preparation of this report.

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 *Henicorhynchus*
Species *Henicorhynchus ornatipinnis* (Roberts, 1997)”

From Fricke et al. (2018):

“Current status: Valid as *Henicorhynchus ornatipinnis* (Roberts 1997). Cyprinidae: Labeoninae.”

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 9.5 cm SL male/unsexed; [Baird et al. 1999]”

Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2018):

“Tropical”

Distribution Outside the United States

Native

From Vidthayanon (2012):

“Endemic to the Mekong basin, from Thailand, Lao PDR, Cambodia and possibly Viet Nam.”

Introduced

This species has not been reported as introduced or established outside of its native range.

Means of Introduction Outside the United States

This species has not been reported as introduced or established outside of its native range.

Short Description

From Froese and Pauly (2018):

“Dorsal spines (total): 0; Dorsal soft rays (total): 8; Vertebrae: 33 - 35. Perhaps the smallest of the *Cirrhinus*; readily distinguished by its small head, short blunt snout, very deep caudal peduncle, and usually having the pectoral, pelvic, anal, but not the caudal fin red, reddish-orange, or at least rose-tinted; the pelvic and anal fins often tipped with white; barbels absent. In all other species of *Cirrhinus* the pectoral fins are colorless, dusky, or at most pale pink or rose-tinted [Roberts 1997].”

Biology

From Froese and Pauly (2018):

“Seems to be restricted to marginal or temporary habitats, including roadside canals. Has never been seen in flowing water habitats. So far as known, it does not occur sympatrically with other species of the genus.”

Human Uses

From Vidthayanon (2012):

“Locally used as food fish in areas of large water bodies. Produced as dried fish and fermented fish sauce.”

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

This species has not been reported as introduced or established outside of its native range.

4 Global Distribution

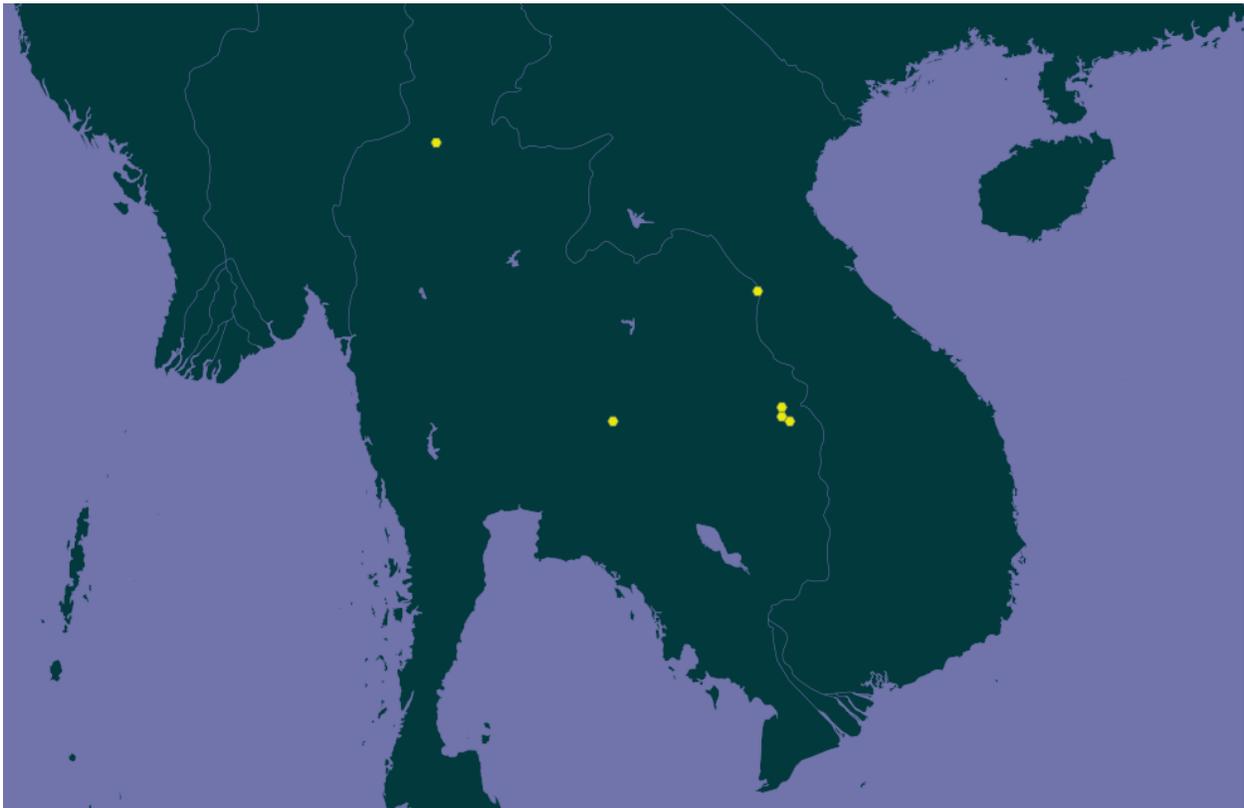


Figure 1. Known global distribution of *Henicorhynchus ornatipinnis*, reported from Thailand. Map from GBIF Secretariat (2017). No georeferenced occurrences were available for parts of the species range in other countries in Southeast Asia.

5 Distribution Within the United States

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

6 Climate Matching

Summary of Climate Matching Analysis

The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous United States was 0.0, which is a low climate match. A Climate 6 score of 0.005 or below indicates a low match. All states in the contiguous United States had a low climate score. There were areas of medium climate match in southern Texas and Florida. The remainder of the contiguous United States had a low match.

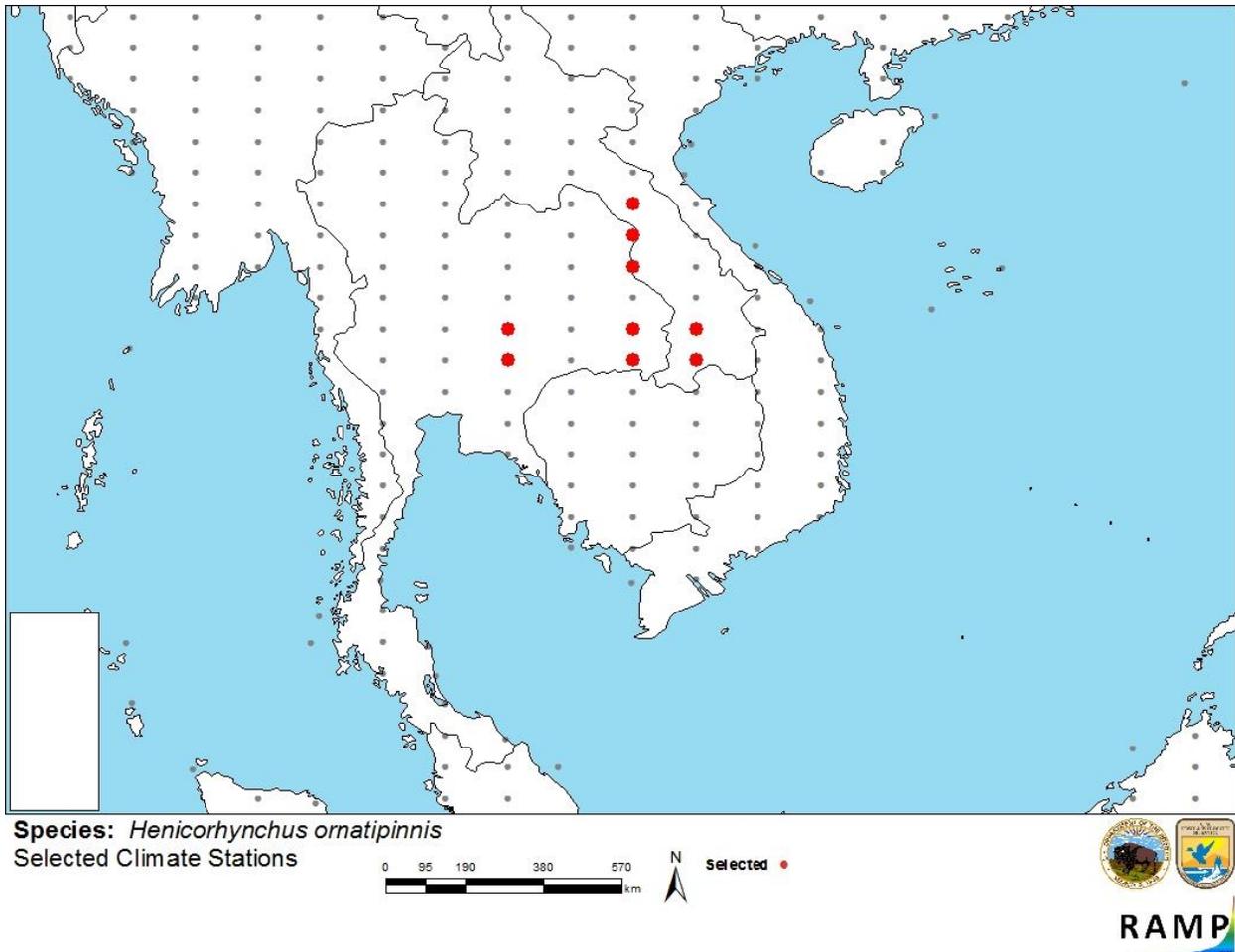


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red; Thailand and Laos) and non-source locations (gray) for *Henicorhynchus ornatipinnis* climate matching. Source locations from GBIF Secretariat (2017).

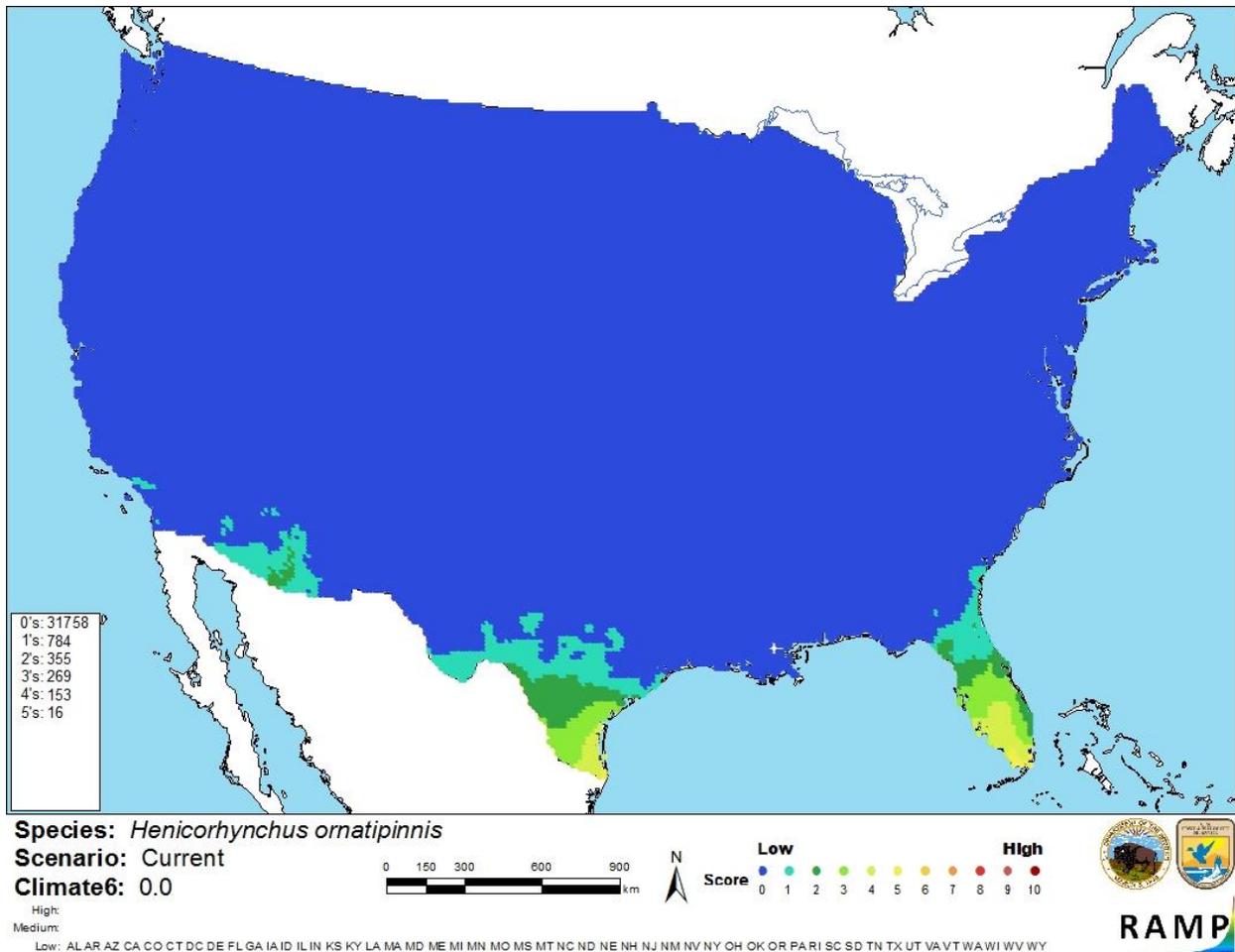


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Henicorhynchus ornatipinnis* in the contiguous United States based on source locations reported by GBIF Secretariat (2018). 0= Lowest match, 10=Highest match.

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

7 Certainty of Assessment

There is little information available about the biology and ecology of *Henicorhynchus ornatipinnis*. This species has never been reported as introduced or established outside of its native range. Because of this, there is inadequate information available from which to assess the risk this species poses to the contiguous United States. Certainty of this assessment is low.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Henicorhynchus ornatipinnis is a freshwater fish species native to the Mekong basin in Southeast Asia. This species is used as a food fish in its native range. There is no indication that *H. ornatipinnis* is in trade in the United States. There are no reports of introduction of this species. Therefore, history of invasiveness is uncertain. *H. ornatipinnis* has a low climate match with the contiguous United States, although there were areas of medium climate match in Texas and Florida. Certainty of this assessment is low due to a lack of information on impacts of introduction. 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**
- **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>. (September 2018).

Froese, R., and D. Pauly, editors. 2018. *Henicorhynchus ornatipinnis* (Roberts, 1997). FishBase. Available: <https://www.fishbase.de/summary/Henicorhynchus-ornatipinnis.html>. (September 2018).

GBIF Secretariat. 2017. GBIF backbone taxonomy: *Henicorhynchus ornatipinnis*, Roberts, 1997. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/2361365>. (September 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Henicorhynchus ornatipinnis* (Roberts, 1997). Integrated Taxonomic Information System, Reston, Virginia. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=689221#null. (September 2018).

Sanders, S., C. Castiglione, and M. H. Hoff. 2014. Risk Assessment Mapping Program: RAMP. U.S. Fish and Wildlife Service.

Vidthayanon, C. 2012. *Gymnostomus ornatipinnis*. The IUCN Red List of Threatened Species 2012: e.T187983A1842083. Available: <http://www.iucnredlist.org/details/187983/0>. (September 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.

Baird, I. G., V. Inthaphaisy, P. Kisouvannalath, B. Phylavanh, and B. Mounsouphom. 1999. The fishes of southern Lao. Lao Community Fisheries and Dolphin Protection Project, Ministry of Agriculture and Forestry, Lao PDR.

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