

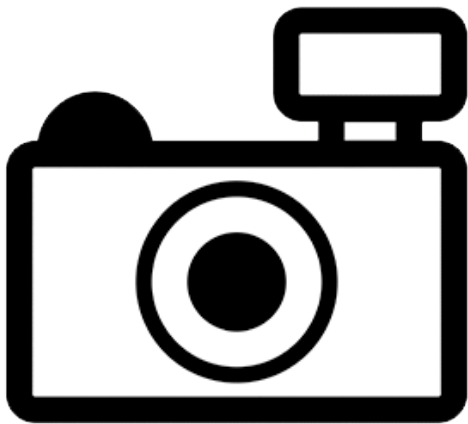
## ***Barbodes polylepis* (a fish, no common name)**

### **Ecological Risk Screening Summary**

U.S. Fish & Wildlife Service, April 2015

Revised, October 2017

Web Version, 8/28/2018



No Photo Available

## **1 Native Range and Status in the United States**

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### **Native Range**

*Barbodes polylepis* is present in Wuijiang sub-basin of the Yangtze River basin (Fu et al. 2003).

*Barbodes polylepis* is endemic to the Wuijiang basin (He 2010).

### **Status in the United States**

No records of *Barbodes polylepis* in the wild or in trade United States were found.

### **Means of Introductions in the United States**

No records of *Barbodes polylepis* in the United States were found.

### **Remarks**

No additional remarks.

## 2 Biology and Ecology

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### Taxonomic Hierarchy and Taxonomic Standing

According to Eschmeyer et al. (2017), *Barbodes polylepis* Chen & Li 1988 is the valid name for this species; it is also the original name.

From ITIS (2015):

“Kingdom Animalia  
Subkingdom Bilateria  
Infrakingdom Deuterostomia  
Phylum Chordata  
Subphylum Vertebrata  
Infraphylum Gnathostomata  
Superclass Osteichthyes  
Class Actinopterygii  
Subclass Neopterygii  
Infraclass Teleostei  
Superorder Ostariophysi  
Order Cypriniformes  
Superfamily Cyprinoidea  
Family Cyprinidae  
Genus *Barbodes*  
Species *Barbodes polylepis* Chen and Li 1988”

### Size, Weight, and Age Range

From Chen et al. (1988):

“[...] standard length 92mm [...] standard length 83mm [...]”

### Environment

From Froese and Pauly (2015):

“Freshwater; pelagic”

### Climate/Range

From Froese and Pauly (2015):

“Subtropical”

### Distribution Outside the United States

Native

*Barbodes polylepis* is present in Wuijiang sub-basin of the Yangtze River basin (Fu et al. 2003).

*Barbodes polylepis* is endemic to the Wuijiang basin (He 2010).

#### Introduced

No records of *Barbodes polylepis* introductions were found.

#### Means of Introduction Outside the United States

No records of *Barbodes polylepis* introductions were found.

#### Short Description

From Chen et al. (1988):

“Description: D. 4,8;A. 3,5;p. 1,15; V. 1, 8. L. 1. 45~46; predorsal 15~16; Circumpeduncular 18. Gill—rakeres 12~13.ph. teeth1.3.5–5. 3.1.”

#### Biology

Information on the biology of *Barbodes polylepis* was not found.

#### Human Uses

Information on human uses of *Barbodes polylepis* was not found.

#### Diseases

Information on pathogens of *Barbodes polylepis* was not found.

#### Threat to Humans

From Froese and Pauly (2015):

“Harmless”

### 3 Impacts of Introductions

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No records of *Barbodes polylepis* introductions were found.

## 4 Global Distribution

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**Figure 1.** A map of the Yangtze River basin in China showing the location of the Wujiang sub-basin. According to Fu et al. (2003), *Barbodes polylepis* is only present in the Wujiang sub-basin of the Yangtze River basin. Map by Keenan Pepper, released under Creative Commons BY-SA. Available: [https://commons.wikimedia.org/wiki/File:Yangtze\\_River\\_drainage\\_basin\\_map.svg](https://commons.wikimedia.org/wiki/File:Yangtze_River_drainage_basin_map.svg).

## 5 Distribution Within the United States

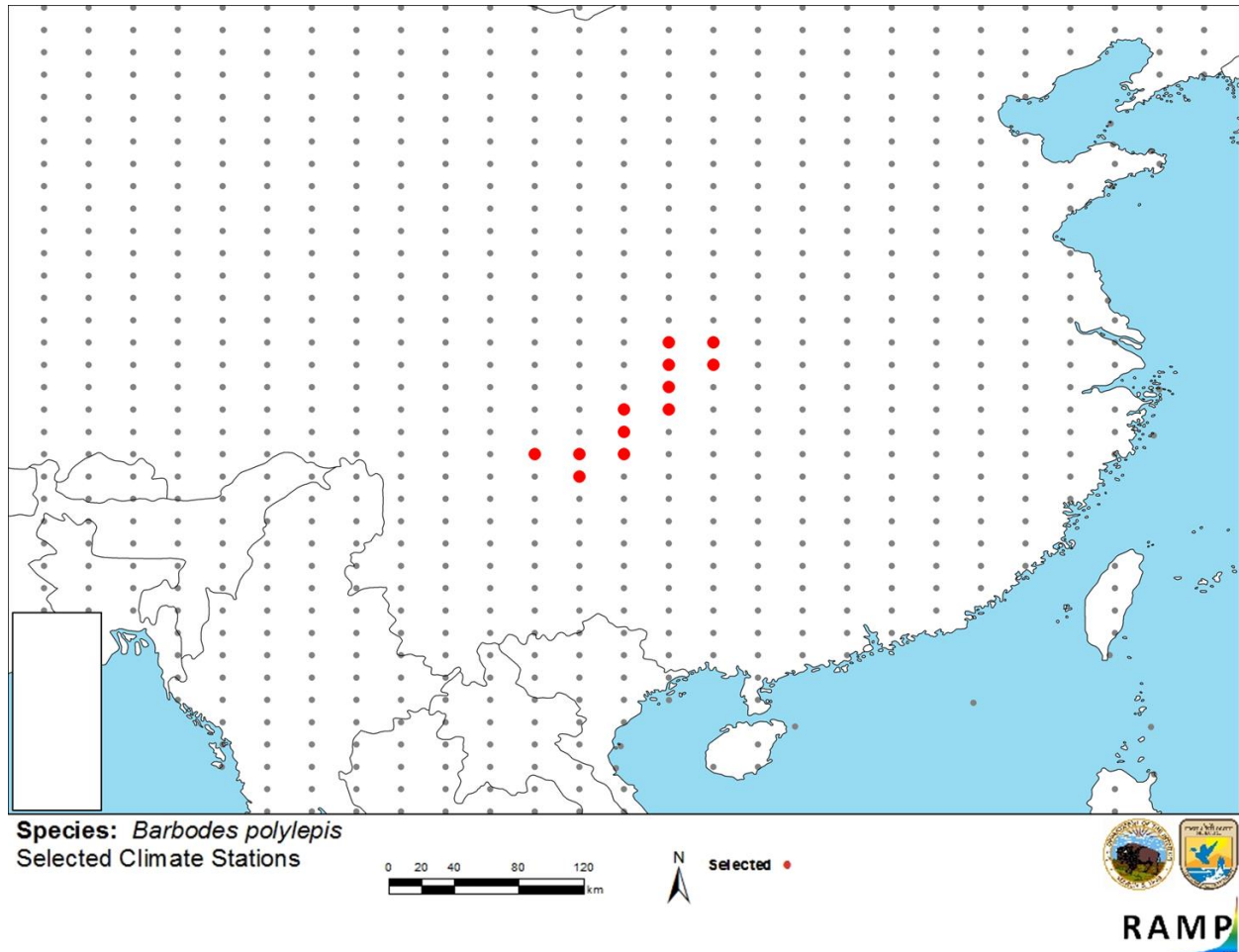
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No records of *Barbodes polylepis* in the United States were found.

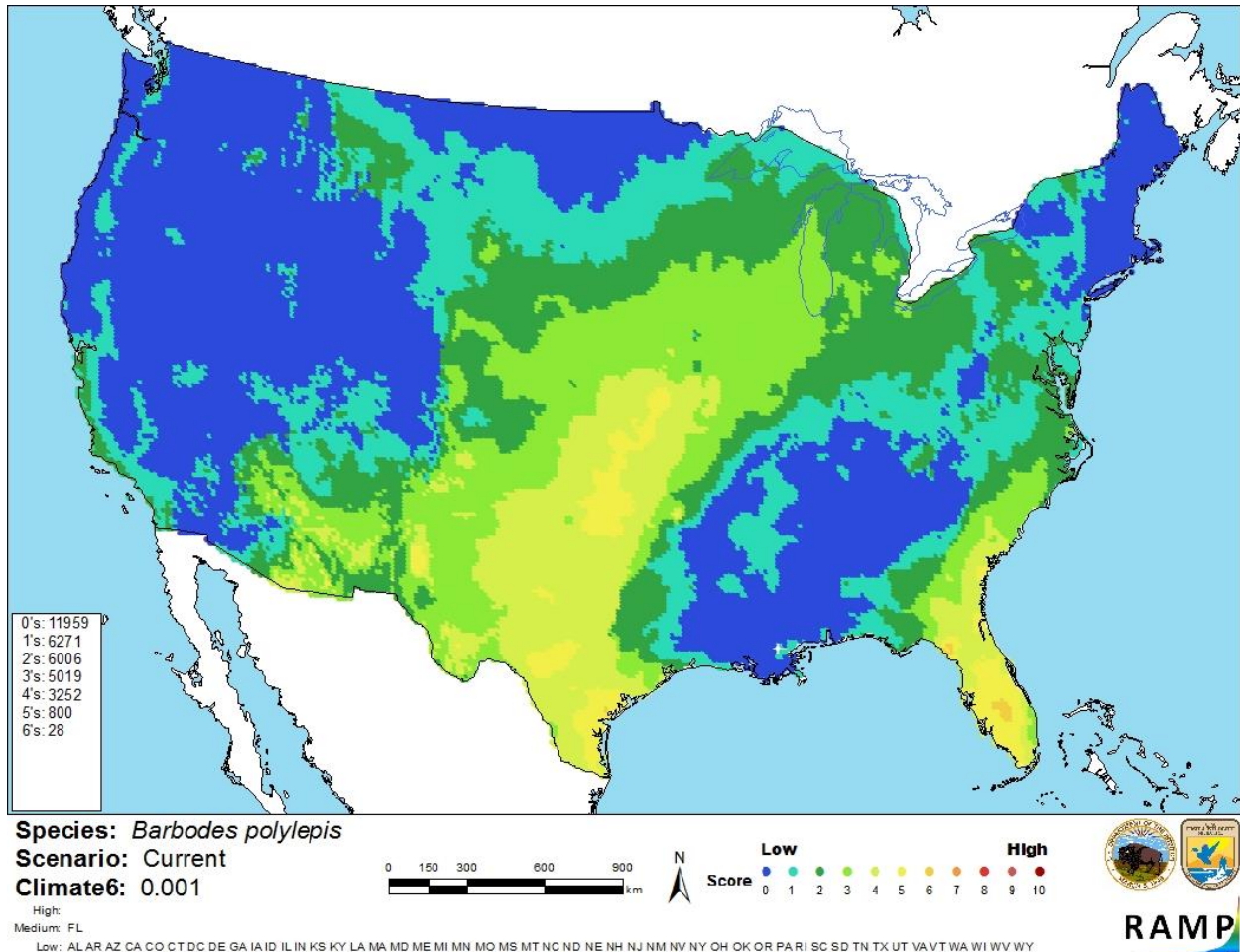
## 6 Climate Matching

### Summary of Climate Matching Analysis

The climate match for *Barbodes polylepis* was medium in Florida and parts of the southeastern Atlantic coast. The match was also medium in parts of Texas and a strip moving north of Texas. The climate match was low everywhere else. The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous United States was 0.001, low and no states had an individually high climate match.



**Figure 2.** RAMP (Sanders et al. 2014) source map showing weather stations in Asia selected as source locations (red; China) and non-source locations (gray) for *Barbodes polylepis* climate matching. Source locations from He (2010) and Fu et al. (2003).



**Figure 3.** Map of RAMP (Sanders et al. 2014) climate matches for *Barbodes polylepis* in the contiguous United States based on source locations reported by He (2010) and Fu et al. (2003). 0 = Lowest match, 10 = Highest match. Counts of climate match scores are tabulated on the left.

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
$\geq 0.103$	High

## 7 Certainty of Assessment

The certainty of this assessment is low. There is little information available for *Barbodes polylepis*. No point location distribution data was available and no records of introduction were found. The source locations were pulled from text descriptions that stated the species was present in a single river basin. The entire basin was used as source locations, not locations of known populations.

## 8 Risk Assessment

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### Summary of Risk to the Contiguous United States

*Barbodes polylepis* is a species of cyprinid native to the Wujiang River sub-basin in China. There is not much information available about this species. The history of invasiveness for *B. polylepis* is uncertain. No records of introductions were found. The climate match is low, 0.001. Florida had a medium individual match. The certainty of assessment is low. Information about *B. polylepis* was sparse and the source locations used for the climate match were generalized. 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:** Information about *B. polylepis* was sparse and the source locations used for the climate match were generalized.
- **Overall Risk Assessment Category: Uncertain**

## 9 References

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**Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 10.**

Chen, J.-X., J.-F. Zhao, J.-Z. Zheng, and D.-J. Li. 1988. Description of three new barbines [fishes] from Guizhou, China. *Acta Academiae Medicinae Zunyi* 11(1):1–4. (In Chinese. English abstract available: [http://en.cnki.com.cn/Article\\_en/CJFDTOTAL-ZYYB198801000.htm](http://en.cnki.com.cn/Article_en/CJFDTOTAL-ZYYB198801000.htm).)

Eschmeyer, W. N., R. Fricke, and R. van der Laan, editors. 2017. *Catalog of fishes: genera, species, references*. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (October 2017).

Froese, R., and D. Pauly, editors. 2015. *Barbodes polylepis* Chen & Li, 1988. FishBase. Available: <http://www.fishbase.org/summary/Barbodes-polylepis.html>. (April 2015).

Fu, C., J. Wu, J. Chen, Q. Wu, and G. Lei. 2003. Freshwater fish biodiversity in the Yangtze River basin of China: patterns, threats and conservation. *Biodiversity and Conservation* 12:1649–1685.

He, Y. 2010. Structure of endemic fish assemblages in the upper Yangtze River basin and population differentiation of an endangered endemic fish (*Gabiocypris rarus*). Doctoral dissertation. L'Université Toulouse, France and l'Institut d'Hydrobiologie, Wuhan, China.

ITIS (Integrated Taxonomic Information System). 2015. *Barbodes polylepis* Chen and Li in Chen, Zhao, Zheng and Li, 1988. Integrated Taxonomic Information System, Reston, Virginia. Available: [http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=688439](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=688439). (April 2015).

Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk assessment mapping program: RAMP. U.S. Fish and Wildlife Service.

## **10 References Quoted But Not Accessed**

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**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.**

No references in this section.