

***Pangasius djambal* (a catfish, no common name)**

Ecological Risk Screening Summary

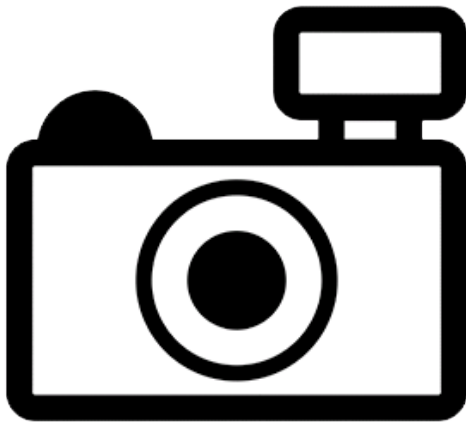
U.S. Fish & Wildlife Service, March 2012

Revised, August 2018

Web Version, 5/1/2020

Organism Type: Fish

Overall Risk Assessment Category: Uncertain



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018):

“Asia: Mekong basin [Rainboth 1996]; also from Malaysia and Indonesia.”

From Gustiano and Pouyaud (2006):

“Distribution: *Pangasius djambal* is presently known from most major drainage of Sumatra, in the Musi, Batang Hari, and Indragiri Rivers.”

Status in the United States

No records of *Pangasius djambal* in the wild or in trade in the United States were found.

Means of Introductions in the United States

No records of *Pangasius djambal* in the wild in the United States were found.

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

According to Eschmeyer et al. (2018), *Pangasius djambal* Bleeker 1846 is the current valid name 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 Siluriformes
Family Pangasiidae
Genus *Pangasius*
Species *Pangasius djambal* Bleeker, 1846

Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 90.0 cm TL male/unsexed; [Sokheng et al. 1999]; max. published weight: 16.0 kg [Sokheng et al. 1999]”

Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic; potamodromous [Riede 2004].”

Climate

From Froese and Pauly (2018):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2018):

“Asia: Mekong basin [Rainboth 1996]; also from Malaysia and Indonesia.”

From Gustiano and Pouyaud (2006):

“Distribution: *Pangasius djambal* is presently known from most major drainage of Sumatra, in the Musi, Batang Hari, and Indragiri Rivers.”

Introduced

No records of introductions of *Pangasius djambal* were found.

Means of Introduction Outside the United States

No records of introductions of *Pangasius djambal* were found.

Short Description

From Froese and Pauly (2018):

“Anal soft rays: 31 - 34. Dorsum dull grey; blunt snout lacking broad white band around muzzle; 24-35 gill rakers in the first arch [Rainboth 1996].”

From Gustiano and Pouyaud (2006):

“Diagnosis: *Pangasius djambal* is distinguished by unique combination of the following characters: 27-39 gill rakers on the first branchial arch, anterior part of snout width 29.3-36.6% HL, head length 21.8-27.1% SL, head width 13.4-19.4% SL.”

Biology

From Froese and Pauly (2018):

“Bears strong resemblance to *P. bocourti* but has different gill-raker counts and coloration. Diet consists mostly of benthic insect larvae and worms, with some free swimming insects, submerged plants and seeds [Rainboth 1996]. Undertakes upstream and downstream migrations in the Mekong mainstream [Sokheng et al. 1999].”

From Gustiano and Pouyaud (2006):

“Ecology: in the present study, the gut content of six specimens of *Pangasius djambal* was examined. The results showed one specimen only contained gastropods; 3 specimens contained gastropods and clams; 1 specimen contained gastropods and seeds. Based on this observation, *P. djambal* is molluscivorous with tendency to opportunism. Specimens in this study were collected from the middle to the upper part of rivers. In all environments, it lives in deeper waters. The environments have a relatively strong current.”

Human Uses

From Froese and Pauly (2018):

“Fisheries: commercial”

From Gustiano (2004):

“Catfishes of the family Pangasiidae are of great economic importance in Southeast Asia region such as *Pangasius djambal* in Indonesia (Legendre et al. 2000), [...]”

Diseases

No information of diseases of *Pangasius djambal* was found. **No records of OIE-reportable diseases (OIE 2020) were found.**

Threat to Humans

From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions

No records of introductions of *Pangasius djambal* were found; therefore, there is no information on impacts of introductions.

4 History of Invasiveness

No records of introductions of *Pangasius djambal* were found; therefore, the history of invasiveness is no known nonnative population.

5 Global Distribution

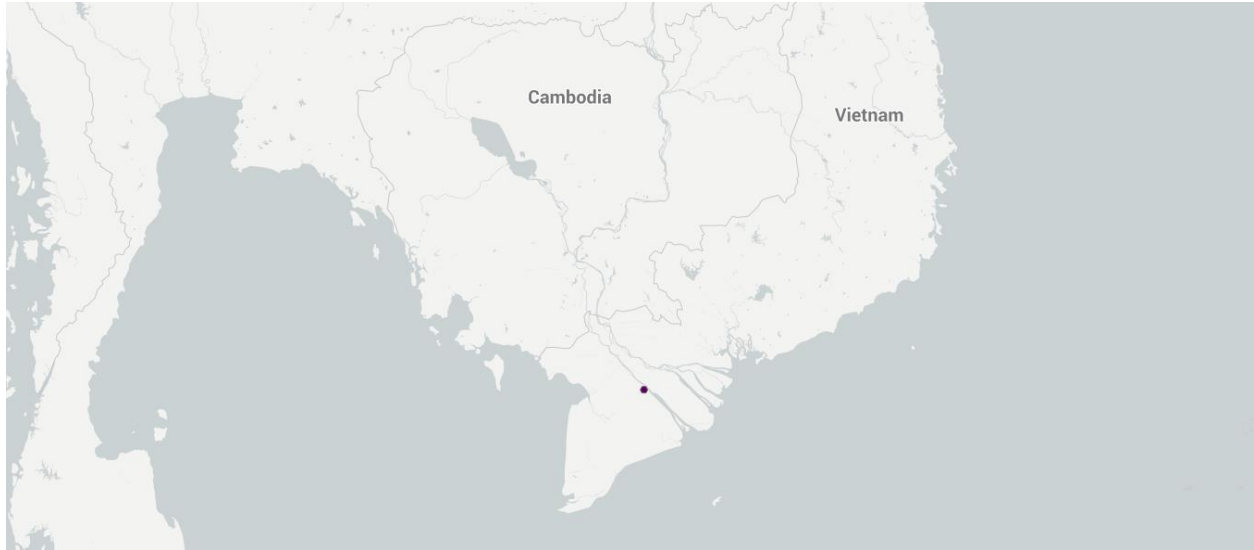


Figure 1. Known global distribution of *Pangasius djambal*. Location is in southern Vietnam. Map from GBIF Secretariat (2018).

6 Distribution Within the United States

No records of *Pangasius djambal* in the wild in the United States were found.

7 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Pangasius djambal* was generally low across the contiguous United States. There was an area of medium match in southern Florida. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low (scores less than 0.005 are considered low). All States had a low individual climate score.

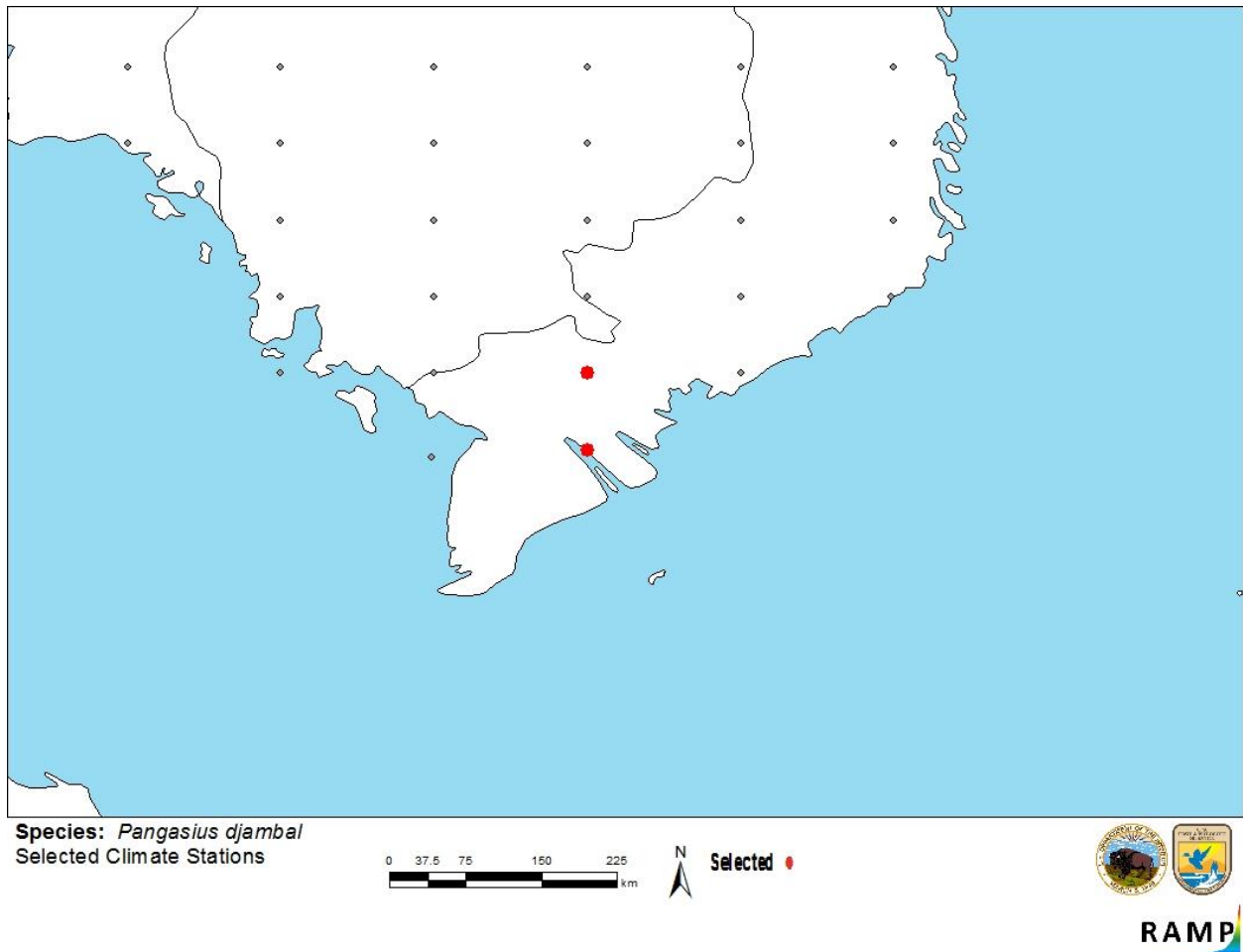


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in southern Asia selected as source locations (red; Vietnam) and non-source locations (gray) for *Pangasius djambal* climate matching. Source locations from GBIF Secretariat (2018). Selected source locations are within 100 km of one or more species occurrences, and do not necessarily represent the locations of occurrences themselves.

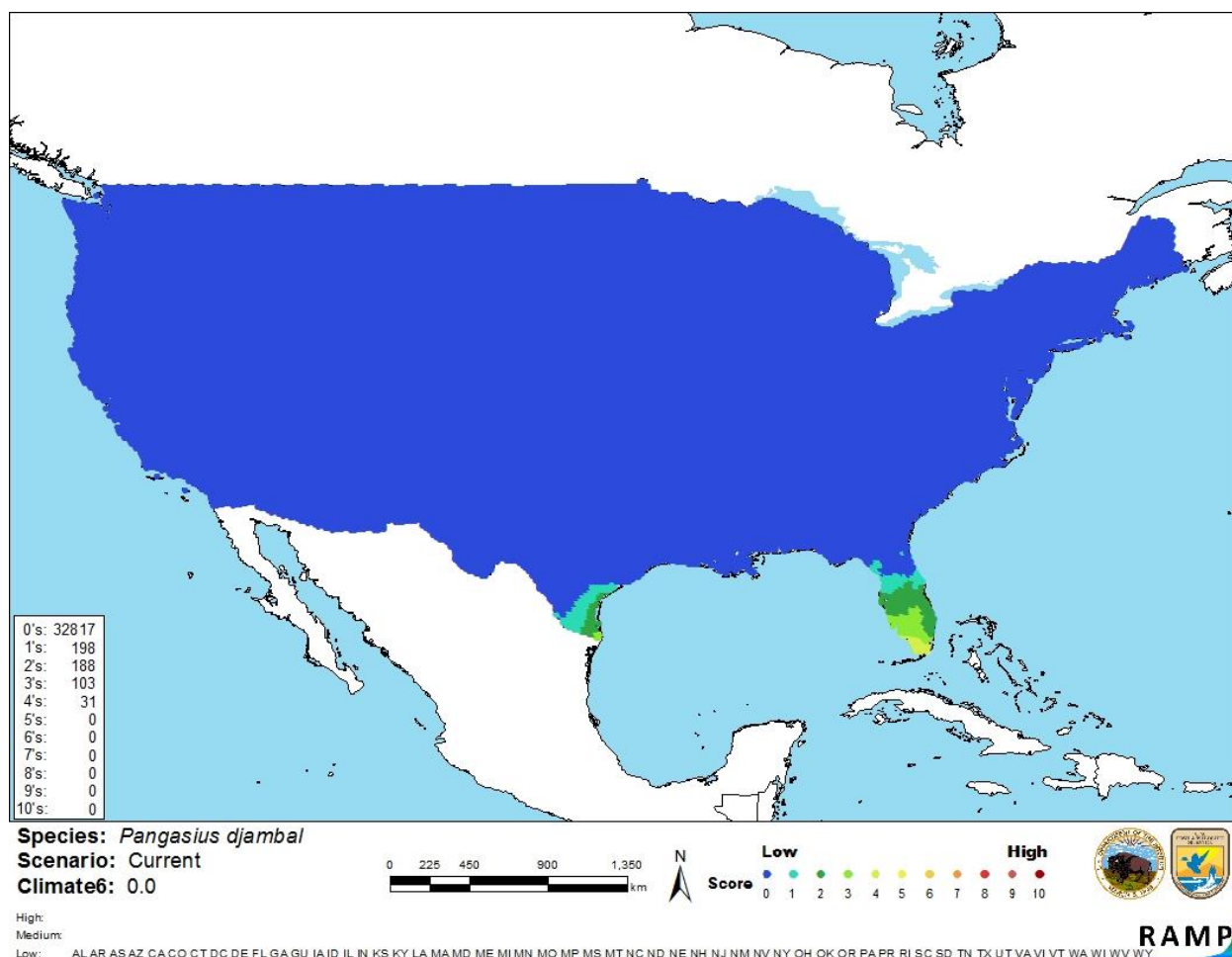


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Pangasius djambal* in the contiguous United States based on source locations reported by GBIF Secretariat (2018). Counts of climate match scores are tabulated on the left. 0/Blue = Lowest match, 10/Red = Highest match.

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

Climate 6: (Count of target points with climate scores 6-10)/ (Count of all target points)	Overall Climate Match Category
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

8 Certainty of Assessment

The certainty of assessment is low. There was some general information about the species available from peer-reviewed sources. There were no records of introductions found and, therefore, there is no information on impacts available to evaluate.

9 Risk Assessment

Summary of Risk to the Contiguous United States

Pangasius djambal is a species of catfish native to the Mekong River basin in southeast Asia as well as smaller river basins in Malaysia and Indonesia. This species is used as a commercial fishery in Indonesia. The history of invasiveness is no known nonnative population. There were no records of introductions to the wild found. The climate match was low. There was a small area of medium match in Florida. The certainty of assessment is low. The overall risk assessment is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 4): No Known Nonnative Population**
- **Overall Climate Match Category (Sec. 7): Low**
- **Certainty of Assessment (Sec. 8): Low**
- **Remarks/Important additional information: No additional information**
- **Overall Risk Assessment Category: Uncertain**

10 Literature Cited

Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 11.

- Eschmeyer WN, Fricke R, van der Laan R, editors. 2018. Catalog of fishes: genera, species, references. California Academy of Science. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp> (August 2018).
- Froese R, Pauly D, editors. 2018. *Pangasius djambal* Bleeker, 1846. FishBase. Available: <https://www.fishbase.de/summary/Pangasius-djambal.html> (August 2018).
- GBIF Secretariat. 2018. GBIF backbone taxonomy: *Pangasius djambal* (Bleeker, 1846). Copenhagen: Global Biodiversity Information Facility. Available: <https://www.gbif.org/species/5202453> (August 2018).
- Gustiano R. 2004. Biometric analysis of the artificial hybridization between *Pangasius djambal* Bleeker, 1846 and *Pangasiandon hypophthalmus* Sauvage, 1878. Indonesian Journal of Agricultural Science 5:70–74.
- Gustiano R, Pouyaud L. 2006. Diversity of Pangasiid catfishes from Sumatra. Buletin Plasma Nutfah 12:83–88.
- [ITIS] Integrated Taxonomic Information System. 2018. *Pangasius djambal* (Bleeker, 1846). Reston, Virginia: Integrated Taxonomic Information System. Available: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=681696#null (August 2018).

[OIE] World Organisation for Animal Health. 2020. OIE-listed diseases, infections and infestations in force in 2020. Available: <http://www.oie.int/animal-health-in-the-world/oie-listed-diseases-2020/> (April 2020).

Sanders S, Castiglione C, Hoff M. 2018. Risk Assessment Mapping Program: RAMP. Version 3.1. U.S. Fish and Wildlife Service.

11 Literature Cited in Quoted Material

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.

Bleeker P. 1846. Siluroideorum bataviensium species nuperrime detectae. *Natuur-en Geneeskundig Archief voor Neêrlandsch Indië* 3:284–293.

Rainboth WJ. 1996. Fishes of the Cambodian Mekong. Rome: FAO. FAO species identification field guide for fishery purposes.

Riede K. 2004. Global register of migratory species - from global to regional scales. Bonn: Federal Agency for Nature Conservation. Final Report, R&D-Projekt 808 05 081.

Sokheng C, Chhea CK, Viravong S, Bouakhamvongsa K, Suntornratana U, Yoorong N, Tung NT, Bao TQ, Poulsen AF, Jørgensen JV. 1999. Fish migrations and spawning habits in the Mekong mainstream: a survey using local knowledge (basin-wide). Vientiane, Lao, P.D.R. Assessment of Mekong fisheries: Fish Migrations and Spawning and the Impact of Water Management Project. AMFP Report 2/99.