Pangasius kinabatanganensis (a catfish, no common name)
Ecological Risk Screening Summary

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: Known only from the Kinabatangan basin, northeastern Borneo.”

“[In Indonesia:] Known from Kalimantan Timur, Borneo.”

“[In Malaysia:] Known from Sabah [Kottelat and Whitten 1996].”

Status in the United States
No records of this species in the wild or in trade in the United States were found.
Means of Introductions in the United States
No records of this species 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 kinabatanganensis* Roberts & Vidthayanon 1991 is the valid name for this species; it is also the original name.

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 kinabatanganensis* Roberts & Vidthayanon 1991

Size, Weight, and Age Range
From Roberts and Vidthayanon (1991):

“Attains at least 60 cm standard length”

Environment
From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

Climate
From Froese and Pauly (2018):

“Tropical”
**Distribution Outside the United States**

Native
From Froese and Pauly (2018):

“Asia: Known only from the Kinabatangan basin, northeastern Borneo.”

“[In Indonesia:] Known from Kalimantan Timur, Borneo.”

“[In Malaysia:] Known from Sabah [Kottelat and Whitten 1996].”

Introduced
No records of introduction were found for this species.

**Means of Introduction Outside the United States**
No records of introduction were found for this species.

**Short Description**
From Roberts and Vidthayanon (1991):

“*Pangasius kinabatanganensis* differs from all other other [sic] species of *Pangasius* except *P. lithostoma* in having the combination of palatal dentition consisting of a single large median (entirely vomerine?) toothplate and a humeral spine extending posteriorly one-half or less the distance to end of adpressed pectoral fin spine. It differs from *P. lithostoma* in having only 27-30 anal fin rays (instead of 40-41). Gill rakers on first gill arch 7-9+15-17=22-25. Vertebrae 49-50.”

“Although it has fewer rays, the anal fin of *P. kinabatanganensis* is much larger than that of *P. lithostoma*; the anterior anal fin rays are one and a half times as long as in *P. lithostoma*, the posterior rays fully twice as long. The adipose and pelvic fins are also much larger in *P. kinabatanganensis*. In the 590 mm paratype the palatal tooth plate is enormous, but even so it does not project so strongly downwards from the roof of the mouth as does the toothplate in *P. lithostoma*. In the smaller holotype and other paratypes of *P. kinabatanganensis* the toothplate is much smaller and relatively flat rather than strongly convex.”

**Biology**
From Gustiano and Pouyaud (2005):

“[… the guts content of five specimens were examined and hard seeds as well as small crustaceans were found in the gut.”

**Human Uses**
No information on human uses of *Pangasius kinabatanganensis* was found.
Diseases
No records of OIE-reportable diseases (OIE 2020) were found for *Pangasius kinabatanganensis*.

Pariselle et al. (2001) list *P. kinabatanganensis* as a host of *Thaparocleidus bahar* and *T. sabanensis*.

Threat to Humans
From Froese and Pauly (2018):

“Harmless”

3 Impacts of Introductions
No records of introduction were found for this species; therefore, there is no information on impacts of introduction.

4 History of Invasiveness
No records of introduction were found for this species; therefore, the history of invasiveness is no known nonnative population.

5 Global Distribution

![Figure 1. Known global distribution of *Pangasius kinabatanganensis*. Locations are in Malaysia on the island of Borneo. Map from GBIF Secretariat (2018).](image)

6 Distribution Within the United States
No records of this species in the wild in the United States were found.
7 Climate Matching

Summary of Climate Matching Analysis
The climate match for *Pangasius kinabatanganensis* was low for the entire contiguous United States. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for contiguous United States was 0.000, low (scores below 0.005 are considered low). All States had low individual climate scores.

![Map showing weather stations selected as source locations (red; Malaysia on Borneo) and non-source locations (gray) for *Pangasius kinabatanganensis* 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.](image-url)

**Figure 2.** RAMP (Sanders et al. 2018) source map showing weather stations selected as source locations (red; Malaysia on Borneo) and non-source locations (gray) for *Pangasius kinabatanganensis* 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 kinabatanganensis* 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:

<table>
<thead>
<tr>
<th>Climate 6: (Count of target points with climate scores 6-10)/ (Count of all target points)</th>
<th>Overall Climate Match Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000 ≤ X ≤ 0.005</td>
<td>Low</td>
</tr>
<tr>
<td>0.005 &lt; X ≤ 0.103</td>
<td>Medium</td>
</tr>
<tr>
<td>≥ 0.103</td>
<td>High</td>
</tr>
</tbody>
</table>

### 8 Certainty of Assessment
The certainty of assessment for *Pangasius kinabatanganensis* is low. There was some biological and ecological information available for this species. No records of introductions were found. Therefore, there is no information on impacts of introductions to evaluate.
9 Risk Assessment

Summary of Risk to the Contiguous United States

*Pangasius kinabatanganensis* is a species of catfish native to the Kinabatangan River basin in northeastern Borneo. No information on human uses of *P. kinabatanganensis* was found. The history of invasiveness is no known nonnative population. No records of introduction were found so there is no information on impacts of introductions. No records of this species in trade were found. The climate match is low. The entire contiguous United States had a low climate match. The certainty of assessment is low. The overall risk assessment category 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.


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.*