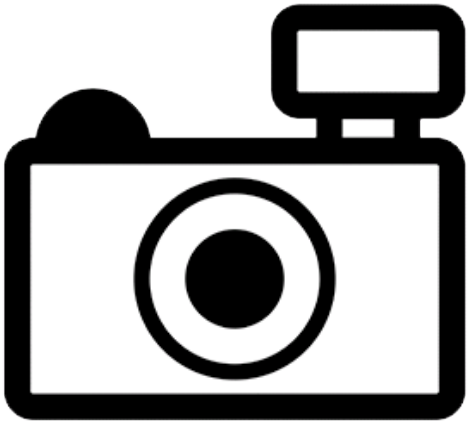
Myleus altipinnis (a fish, no common name)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, December 2012
Revised, December 2018
Web Version, 1/7/2020



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2018a):

"South America: São Francisco River basin in Brazil."

Status in the United States

No records of *Myleus altipinnis* in the wild or in trade in the United States were found.

Means of Introductions in the United States

No records of *Myleus altipinnis* in the wild in the United States were found.

Remarks

No additional remarks.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

According to Fricke et al. (2018), *Myleus altipinnis* (Valenciennes 1850) is the current valid name of this species. *Myleus altipinnis* was originally described as *Tometes altipinnis* (Valenciennes 1850).

From Froese and Pauly (2018b):

"Biota > Animalia (Kingdom) > Chordata (Phylum) > Vertebrata (Subphylum) > Gnathostomata (Superclass) > […] Actinopterygii (Class) > Characiformes (Order) > Serrasalmidae (Family) > *Myleus* (Genus) > *Myleus altipinnis* (Species)"

Size, Weight, and Age Range

From Norman (1928):

"In the British Museum a single specimen, a skin 460 mm. in total length, from the Rio Cipo."

Environment

From Froese and Pauly (2018a):

"Freshwater; benthopelagic."

Climate/Range

From Froese and Pauly (2018a):

"Tropical"

Distribution Outside the United States

Native

From Froese and Pauly (2018a):

"South America: São Francisco River basin in Brazil."

Introduced

No records of introductions of *Myleus altipinnis* were found.

Means of Introduction Outside the United States

No records of introductions of *Myleus altipinnis* were found.

Short Description

No short description of *Myleus altipinnis* was found.

Biology
No information on the biology of *Myleus altipinnis* was found.

Human Uses
No information on human uses of *Myleus altipinnis* was found.

Diseases
No information on diseases of *Myleus altipinnis* was found. **No records of OIE-reportable diseases (OIE 2020) were found for *M. altipinnis.***

Threat to Humans
From Froese and Pauly (2018a):

"Harmless"

3 Impacts of Introductions
No records of introductions of *Myleus altipinnis* were found; therefore, there is no information on impacts of introductions.

4 Global Distribution


Figure 1. Known global distribution of *Myleus altipinnis.* Location is in Brazil. Map from GBIF Secretariat (2018).

5 Distribution Within the United States
No records of *Myleus altipinnis* in the wild in the United States were found.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Myleus altipinnis* was low for the majority of the contiguous United States with small patches of medium match in southern California, Florida, and Texas. The Climate 6 score (Sanders et al. 2018; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low. (Scores between 0.000 and 0.005, inclusive, are classified as low.) All States having an individually low climate score.

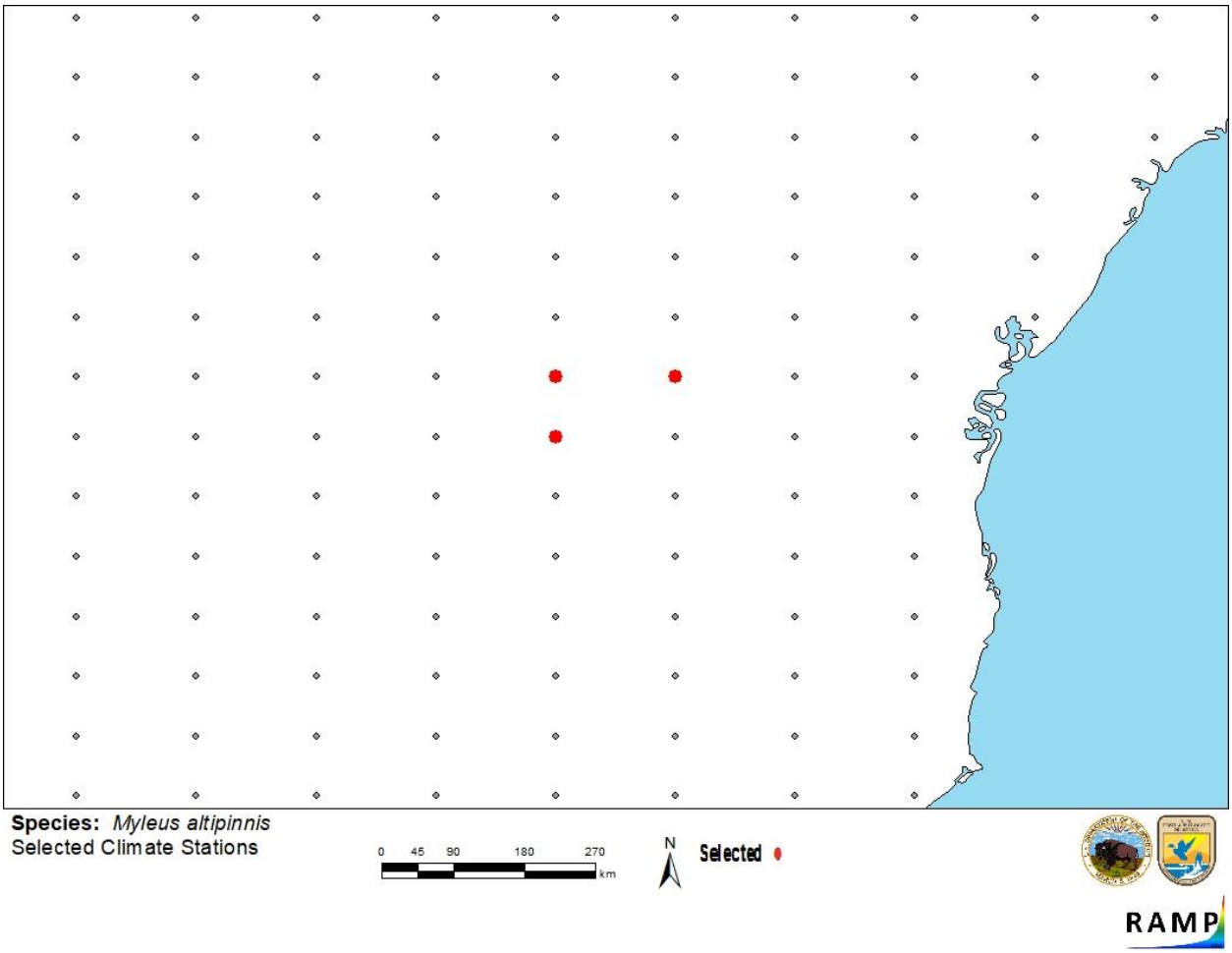


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in eastern Brazil selected as source locations (red) and non-source locations (gray) for *Myleus altipinnis* climate matching. Source locations from GBIF Secretariat (2018). Selected source locations are within 100 km of one or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

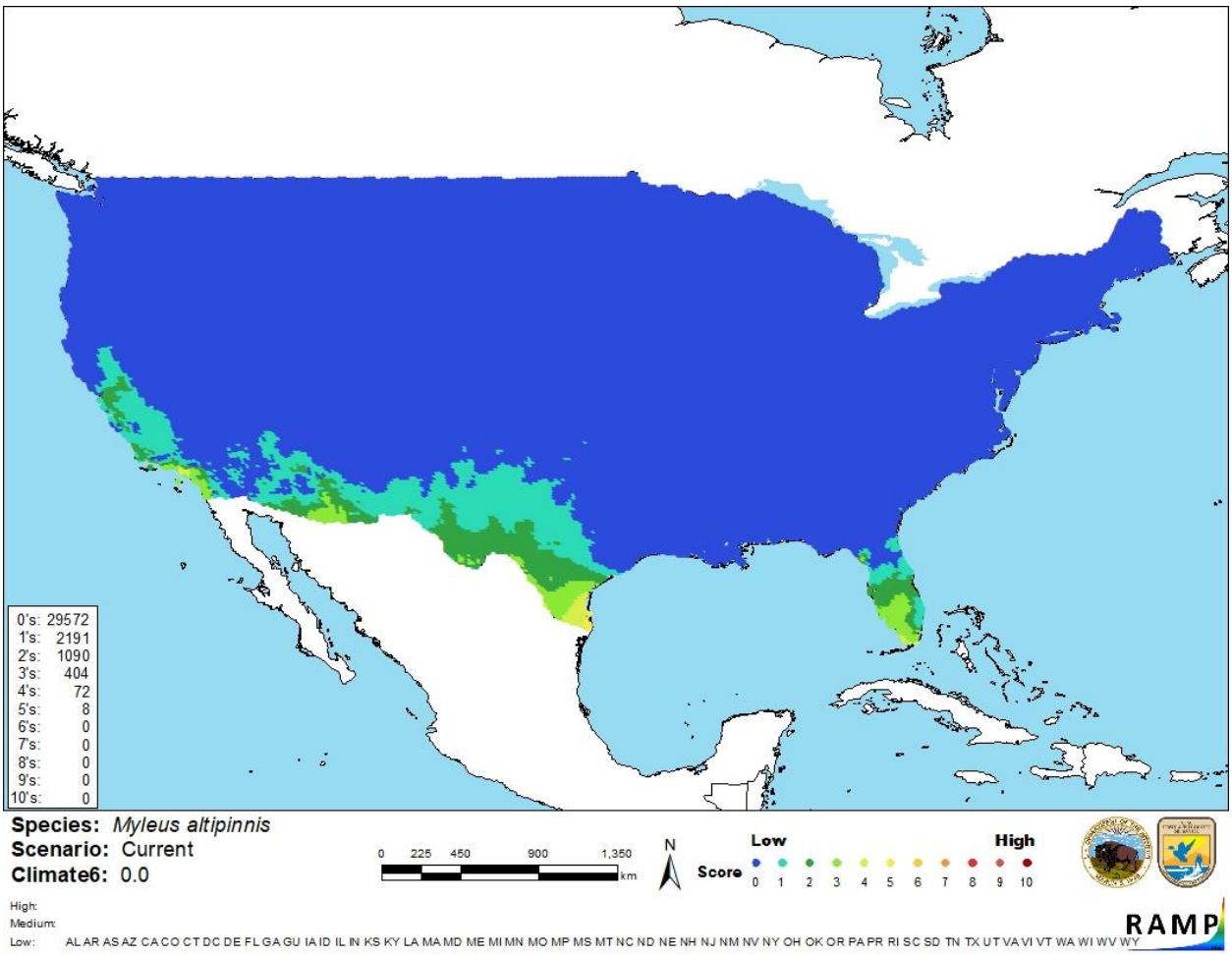


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Myleus altipinnis* in the contiguous United States based on source locations reported from GBIF Secretariat (2018). 0 = Lowest match, 10 = Highest match.

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≤X≤0.005	Low
0.005<X<0.103	Medium
≥0.103	High

7 Certainty of Assessment

The certainty of assessment for *Myleus altipinnis* is low. There is minimal information available for this species. No information on introductions *Myleus altipinnis* was found.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Myleus altipinnis is a South American fish native to Brazil. The history of invasiveness is uncertain. It has not been reported as introduced or established anywhere in the world. The climate match for the contiguous United States was low, with all states having an individually low climate match. The certainty of assessment is low due to lack of information. 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:** No additional information.
- **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. (December 2018).

Froese, R., and D. Pauly, editors. 2018a. *Myleus altipinnis* Valenciennes, 1850. FishBase. Available: https://www.fishbase.de/summary/Myleus-altipinnis.html. (December 2018).

Froese, R., and D. Pauly. 2018b. *Myleus altipinnis*. *In* World Register of Marine Species. Available: http://www.marinespecies.org/aphia.php?p=taxdetails&id=1021799. (December 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Myleus altipinnis* (Valenciennes, 1850). Global Biodiversity Information Facility, Copenhagen. Available: https://www.gbif.org/species/2354458. (December 2018).

Norman, J. R. 1928. The South American characid fishes of the subfamily Serrasalmoninae, with a revision of the genus *Serrasalmus* Lacepéde. Proceedings of the Zoological Society 52:52–55.

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/. (January 2020).

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.

Cuvier, G., and A. Valenciennes. 1850. Histoire naturelle des poissons. Tome vingt-deuxième. Suite du livre vingt-deuxième. Suite de la famille des Salmonoïdes. Table générale de l'Histoire Naturelle des Poissons 22:634–650.