

## ***Tometes trilobatus* (a fish, no common name)**

### **Ecological Risk Screening Summary**

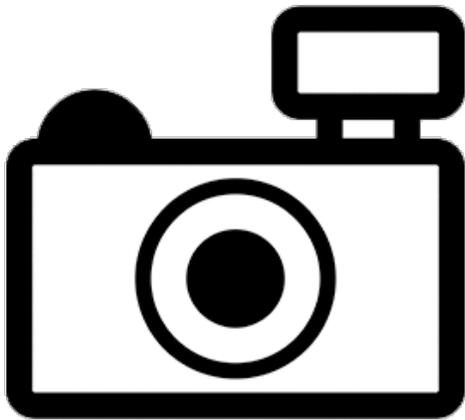
U.S. Fish & Wildlife Service, August 2012

Revised, September 2018

Web Version, 10/5/2021

Organism Type: Fish

Overall Risk Assessment Category: Uncertain



No Photo Available

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

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### **Native Range**

From Froese and Pauly (2018):

“South America: northeastern Guiana Shield rivers [Brazil, French Guiana].”

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

No records of *Tometes trilobatus* in the wild or in trade in the United States were found.

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

No records of *Tometes trilobatus* in the wild 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 Fricke et al. (2018), *Tometes trilobatus* Cuvier and Valenciennes 1850 is the current valid name of this species and was also the original name.

From ITIS (2018):

Kingdom Animalia  
Subkingdom Bilateria  
Infrakingdom Deuterostomia  
Phylum Chordata  
Subphylum Vertebrata  
Infraphylum Gnathostomata  
Superclass Actinopterygii  
Class Teleostei  
Superorder Ostariophysii  
Order Characiformes  
Family Characidae  
Genus *Tometes*  
Species *Tometes trilobatus* Valenciennes in Cuvier and Valenciennes,  
1850

### Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 43.0 cm SL male/unsexed; [Jégu 2003]”

### Environment

From Froese and Pauly (2018):

“Freshwater; pelagic.”

### Climate

From Froese and Pauly (2018):

“Tropical”

### Distribution Outside the United States

Native

From Froese and Pauly (2018):

“South America: northeastern Guiana Shield rivers [Brazil, French Guiana].”

## Introduced

No records of *Tometes trilobatus* being introduced outside its native range were found.

## Means of Introduction Outside the United States

No records of introductions of *Tometes trilobatus* were found.

## Short Description

No information on a short description of *Tometes trilobatus* was found.

## Biology

From Froese and Pauly (2018):

“A rheophilic species, collected in high courses, especially in zones of rapids. Associated with Podostemaceae, the rupestral plants characteristic of the rapids of the studied area, observed in abundance in the stomachs [Jégu et al. 2002].”

From Sa-Oliveira et al. (2014):

“Plant material was ingested by herbivorous species, such as [...] *Tometes trilobatus*, [...].

## Human Uses

No information on human uses of *Tometes trilobatus* were found.

## Diseases

No records of diseases of *Tometes trilobatus* were found. **No records of OIE-reportable diseases (OIE 2021) were found for *T. trilobatus*.**

## Threat to Humans

From Froese and Pauly (2018):

“Harmless”

## 3 Impacts of Introductions

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No records of introductions of *Tometes trilobatus* were found, therefore there is no information on impacts of introductions.

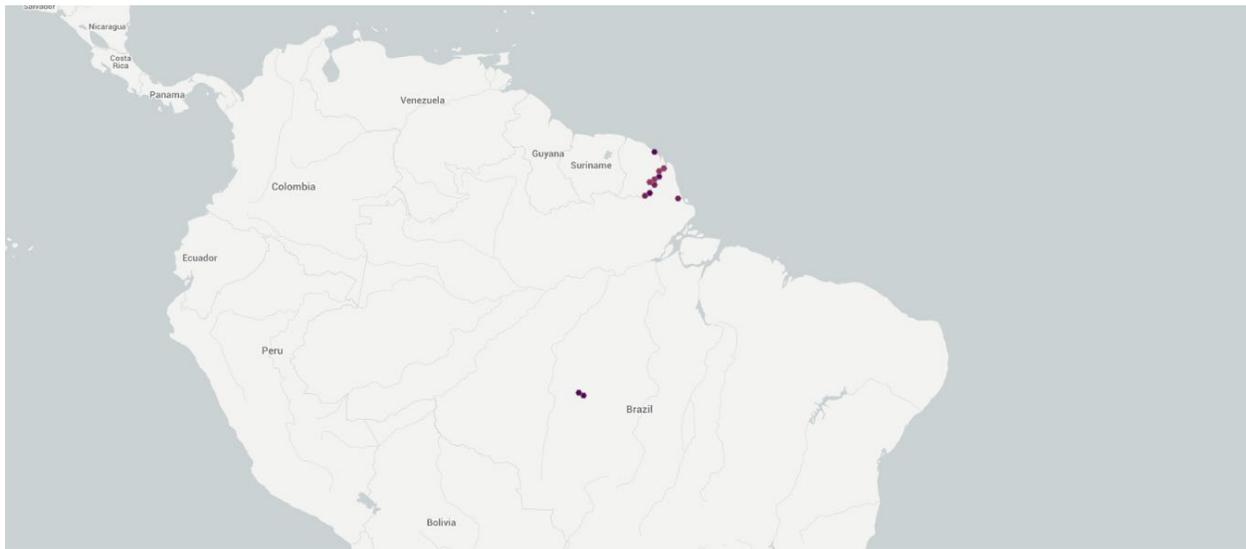
## 4 History of Invasiveness

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No records of introductions of *Tometes trilobatus* were found, therefore the history of invasiveness is classified as No Known Nonnative Population.

## 5 Global Distribution

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## 6 Distribution Within the United States

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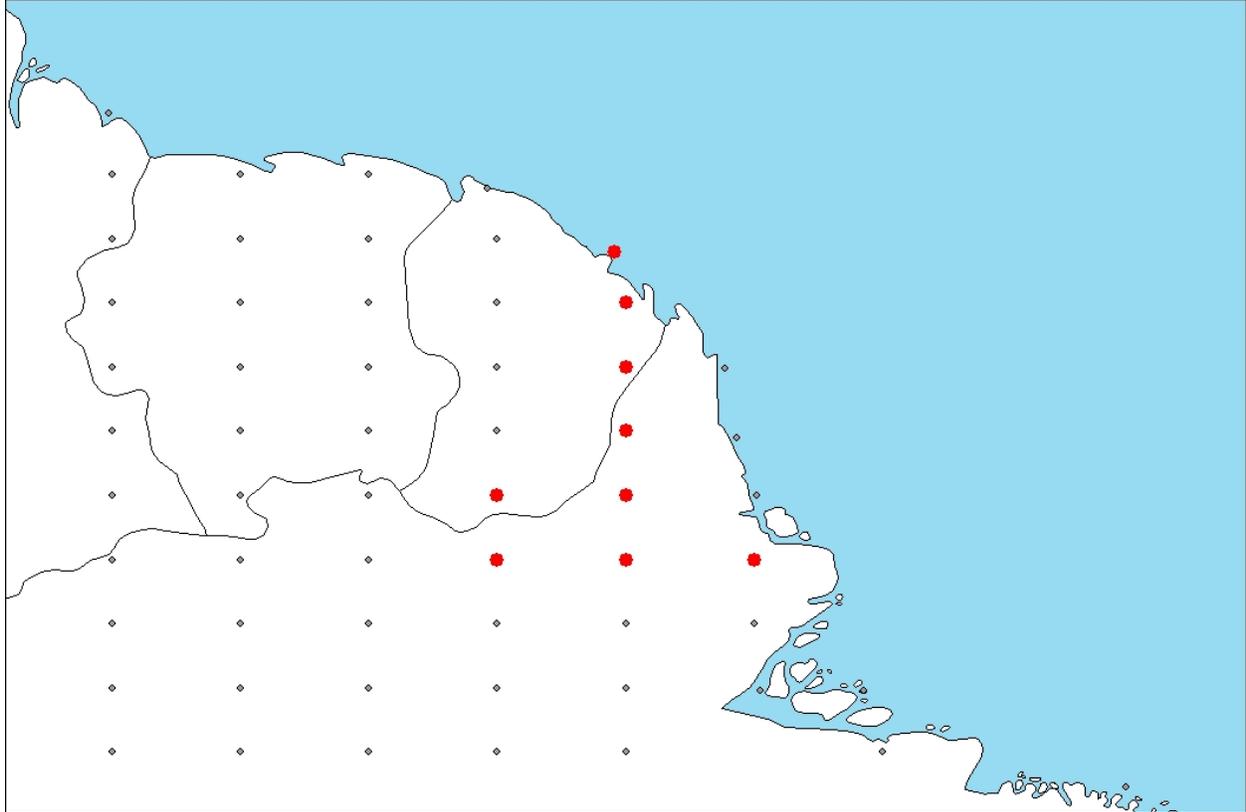
No records of *Tometes trilobatus* in the wild in the United States were found.

## 7 Climate Matching

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### Summary of Climate Matching Analysis

The climate match for *Tometes trilobatus* was low across the entire contiguous United States. There were no areas of high or medium climate match. The overall 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 had low individual climate matches.



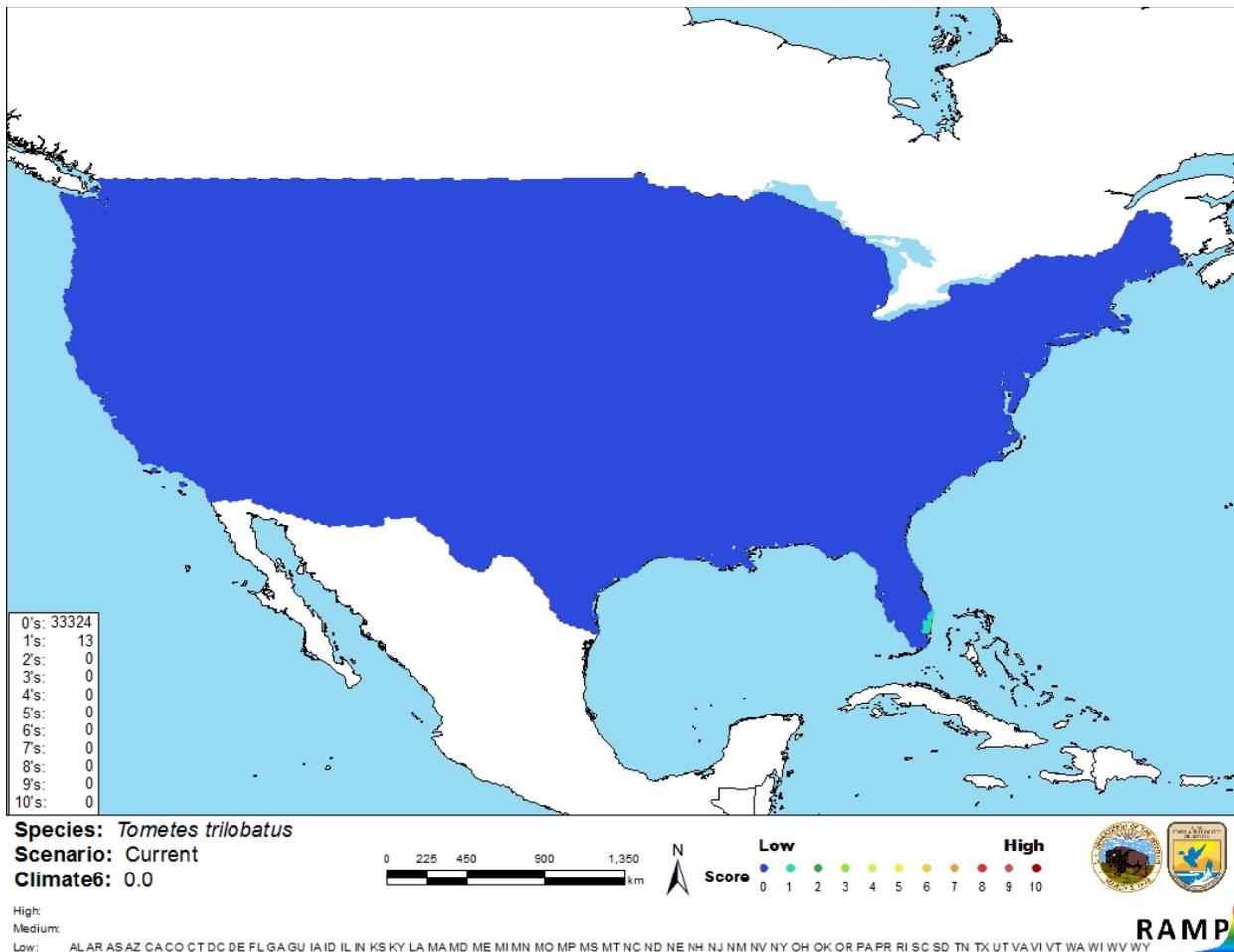
Species: *Tometes trilobatus*  
Selected Climate Stations



Selected ●



RAMP



**Figure 3.** Map of RAMP (Sanders et al. 2018) climate matches for *Tometes trilobatus* in the contiguous United States based on source locations reported from 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
$\geq 0.103$	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

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### Summary of Risk to the Contiguous United States

*Tometes trilobatus* is a characin fish native to South America. The history of invasiveness is classified as No Known Nonnative Population. There were no records of introductions to the wild found and therefore no information on impacts of introduction. The overall climate match was Low for the entire contiguous United States. There were no areas of high or medium match. The certainty of assessment is Low due to a general lack of information. The overall risk assessment is Uncertain.

### Assessment Elements

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

## 10 Literature Cited

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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 11.**

Fricke R, Eschmeyer WN, 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> (September 2018).

Froese R, Pauly D, editors. 2018. *Tometes trilobatus* Valenciennes, 1850. FishBase. Available: <https://www.fishbase.de/summary/Tometes-trilobatus.html> (September 2018).

GBIF Secretariat. 2018. GBIF backbone taxonomy: *Tometes trilobatus* Valenciennes, 1850. Copenhagen: Global Biodiversity Information Facility. Available: <https://www.gbif.org/species/2354761> (September 2018).

[ITIS] Integrated Taxonomic Information System. 2018. *Tometes trilobatus* Valenciennes in Cuvier and Valenciennes, 1850. Reston, Virginia: Integrated Taxonomic Information System. Available: [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=641784#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=641784#null) (September 2018).

[OIE] World Organisation for Animal Health. 2021. Animal diseases. Available: <https://www.oie.int/en/what-we-do/animal-health-and-welfare/animal-diseases/> (September 2021).

Sa-Oliveira JC, Angelini R, Isaac-Nahum VJ. 2014. Diet and niche breadth and overlap in fish communities within the area affected by an Amazonian reservoir (Amapá, Brazil). *Anais da Academia Brasileira de Ciências* 86:383–406.

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

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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.**

Cuvier G, Valenciennes A. 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.

Jégu M. 2003. Serrasalminae (pacus and piranhas). Pages 182–196 in Reis RE, Kullander SO, Ferraris CJ Jr, editors. Checklist of the freshwater fishes of South and Central America. Porto Alegre, Brazil: EDIPUCRS.

Jégu M, dos Santos GM, Keith P, Le Bail P-Y. 2002. Description complémentaire et réhabilitation de *Tometes trilobatus* (Cuvier and Valenciennes, 1850), espèce-type de *Tometes* Valenciennes (Characidae: Serrasalminae). *Cybium* 26:99–122.