

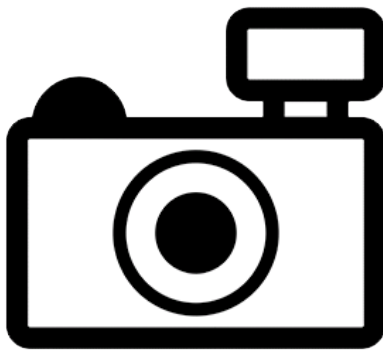
## ***Microcambeva barbata* (a catfish, no common name)**

### **Ecological Risk Screening Summary**

U.S. Fish & Wildlife Service, January 2017

Revised, February 2017

Web Version, 2/27/2018



No Photo Available

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

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### **Native Range**

From Froese and Pauly (2016):

“South America: coastal drainages in Rio de Janeiro and Espírito Santo, Brazil.”

From Reis et al. (2003):

“Type locality: Brazil: Estado do Rio de Janeiro: rio São João, near Gaviões, Município de Silva Jardim.”

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

This species has not been reported as introduced in the United States.

From FFWCC (2016):

“Prohibited nonnative species are considered to be dangerous to the ecology and/or the health and welfare of the people of Florida. These species are not allowed to be personally possessed or used for commercial activities. [...]

Freshwater Aquatic Species [...]

Parasitic catfishes [...]  
*Microcambeva barbata*”

## Means of Introductions in the United States

This species has not been reported as introduced in the United States.

## 2 Biology and Ecology

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### Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2017):

|              |                                                          |
|--------------|----------------------------------------------------------|
| “Kingdom     | Animalia                                                 |
| Subkingdom   | Bilateria                                                |
| Infrakingdom | Deuterostomia                                            |
| Phylum       | Chordata                                                 |
| Subphylum    | Vertebrata                                               |
| Infraphylum  | Gnathostomata                                            |
| Superclass   | Osteichthyes                                             |
| Class        | Actinopterygii                                           |
| Subclass     | Neopterygii                                              |
| Infraclass   | Teleostei                                                |
| Superorder   | Ostariophysi                                             |
| Order        | Siluriformes                                             |
| Family       | Trichomycteridae                                         |
| Subfamily    | Sarcoglanidinae                                          |
| Genus        | <i>Microcambeva</i>                                      |
| Species      | <i>Microcambeva barbata</i> Costa and Bockmann,<br>1994” |

“Current Standing: valid”

### Size, Weight, and Age Range

From Froese and Pauly (2016):

“Max length : 2.6 cm SL male/unsexed; [de Pinna and Wosiacki 2003]”

### Environment

From Froese and Pauly (2016):

“Freshwater; benthopelagic.”

From Evers and Seidel (2005):

“The Rio São João at Gavioés is, in its upper course, only five meters wide and possibly 40 cm deep at the deepest sections. There is no shore vegetation, and the substrate consists of sand or incrustated rocks.”

## **Climate/Range**

From Froese and Pauly (2016):

“Tropical, preferred ?”

## **Distribution Outside the United States**

Native

From Froese and Pauly (2016):

“South America: coastal drainages in Rio de Janeiro and Espírito Santo, Brazil.”

Introduced

No introductions of this species have been reported.

## **Means of Introduction Outside the United States**

No introductions of this species have been reported.

## **Short Description**

From Mattos and Lima (2010):

“*Microcambeva* is distinguished from all other Sarcoglanidinae by having a rectangular lower hypural plate [...]”

“Nasal barbel extending beyond posterior margin of eye; posterior process of palatine short, about 45 % of palatine bony portion without posterior process; supraorbital bone approximately same size as lachrymal.”

## **Biology**

No information available.

## **Human Uses**

No information available.

## **Diseases**

No information available.

## Threat to Humans

From Froese and Pauly (2016):

“Harmless”

## 3 Impacts of Introductions

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No introductions of this species have been reported.

From FFWCC (2016):

“Prohibited nonnative species are considered to be dangerous to the ecology and/or the health and welfare of the people of Florida. These species are not allowed to be personally possessed or used for commercial activities. [...]

Freshwater Aquatic Species [...]

Parasitic catfishes [...]

*Microcambeva barbata*”

## 4 Global Distribution

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**Figure 1.** The São João River, type locality of *Microcambeva barbata* (see Native Range). Map by NordNordWest, licensed under CC BY-SA 3.0. Available: <https://commons.wikimedia.org/w/index.php?curid=12161221>. (February 2017).

## 5 Distribution Within the United States

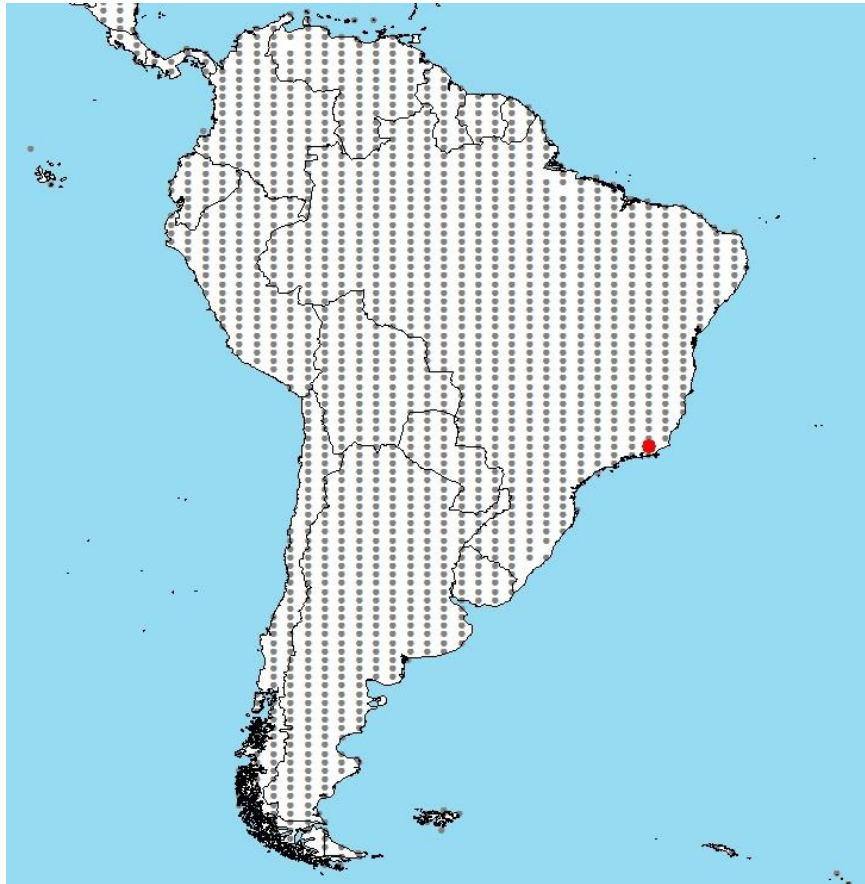
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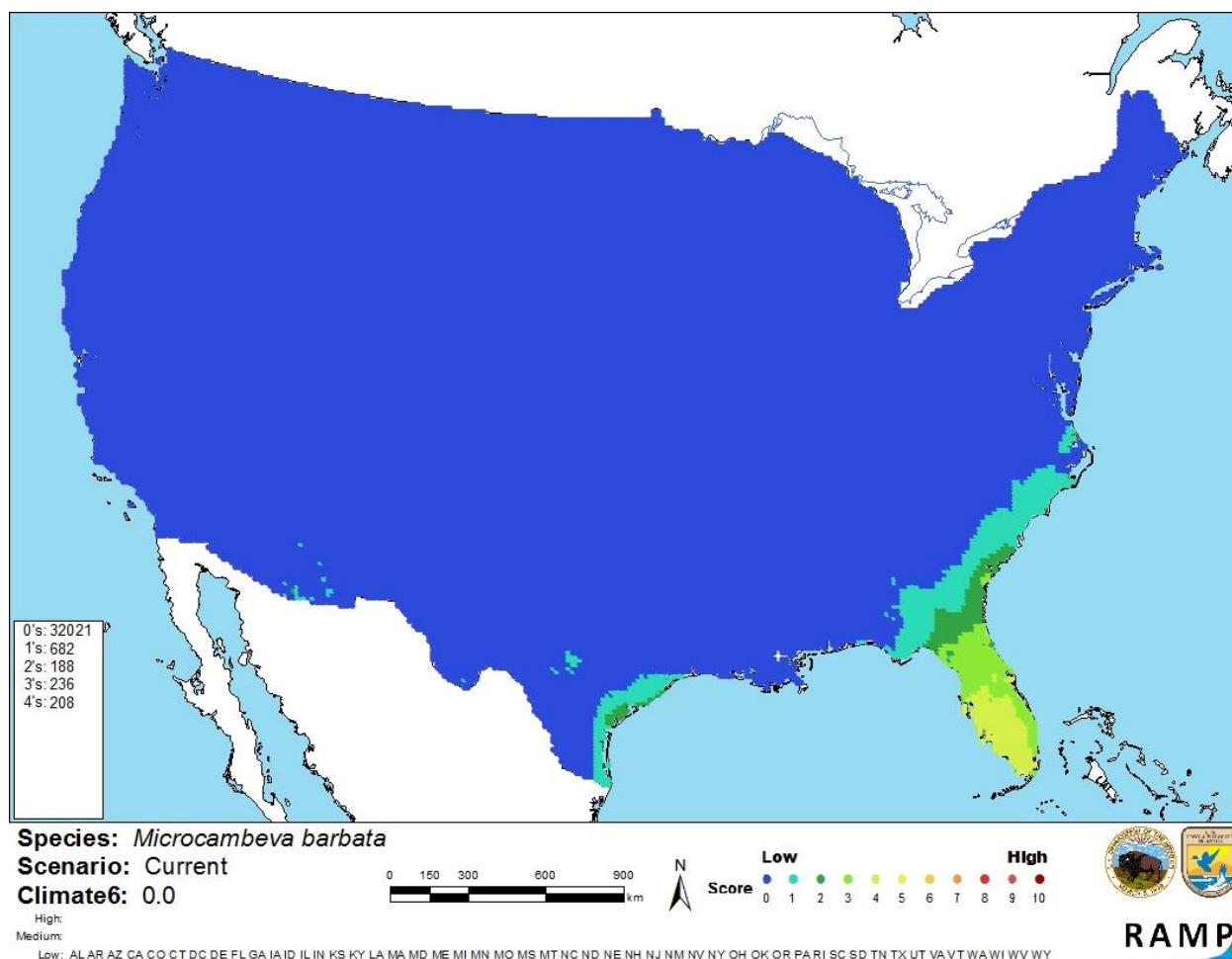
## 6 Climate Matching

### Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014) was medium in southern Florida and low elsewhere in the contiguous U.S. Climate 6 proportion indicated a low climate match for the contiguous U.S. overall. The range of proportions that represent low climate matches is 0.000-0.005; the Climate 6 proportion for *M. barbata* is 0.0.



**Figure 2.** RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *Microcambeva barbata* climate matching. Source location from Reis et al. (2003).



**Figure 3.** Map of RAMP (Sanders et al. 2014) climate matches for *Microcambeva barbata* in the contiguous United States based on source location reported by Reis 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<br>(Sum of Climate Scores 6-10) / (Sum of total Climate Scores) | Climate Match<br>Category |
|------------------------------------------------------------------------------------------|---------------------------|
| $0.000 \leq X \leq 0.005$                                                                | Low                       |
| $0.005 < X < 0.103$                                                                      | Medium                    |
| $\geq 0.103$                                                                             | High                      |

## 7 Certainty of Assessment

There is very limited information available on the biology and distribution of *Microcambeva barbata*. The potential impacts of an introduction are unknown. Due to this lack of information, the certainty of this assessment is low.

## 8 Risk Assessment

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### Summary of Risk to the Contiguous United States

*Microcambeva barbata* is a trichomycterid catfish native to Brazil. Very little is known about its biology or distribution, and it has not been reported as introduced outside its native range, so impacts of introduction are unknown. Like other members of the family Trichomycteridae, *M. barbata* is listed as a prohibited species by the state of Florida. Climate match to the contiguous U.S. was low. Overall risk posed by *M. barbata* is uncertain.

### Assessment Elements

- **History of Invasiveness (Sec. 3): Uncertain**
- **Climate Match (Sec. 6): Low**
- **Certainty of Assessment (Sec. 7): Low**
- **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.**

- Evers, H.-G., and I. Seidel. 2005. Catfish atlas volume 1: South American catfishes of the families Loricariidae, Cetopsidae, Nematogenyiidae and Trichomycteridae. Mergus Verlag GmbH, Melle, Germany.
- FFWCC (Florida Fish and Wildlife Conservation Commission). 2016. Prohibited species list. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida. Available: <http://myfwc.com/wildlifehabitats/nonnatives/regulations/prohibited/#nogo>. (December 2016).
- Froese, R., and D. Pauly, editors. 2016. *Microcambeva barbata* Costa & Bockmann, 1994. FishBase. Available: <http://www.fishbase.org/summary/Microcambeva-barbata.html>. (January 2017).
- ITIS (Integrated Taxonomic Information System). 2017. *Microcambeva barbata* Costa and Bockmann, 1994. Integrated Taxonomic Information System, Reston, Virginia. Available: [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=682137#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=682137#null). (January 2017).
- Mattos, J. L. O., and S. M. Q. Lima. 2010. *Microcambeva draco*, a new species from northeastern Brazil (Siluriformes: Trichomycteridae). Ichthyological Exploration of Freshwaters 21(3):233-238.
- Reis, R. E., S. O. Kullander, and C. J. Ferraris, Jr. 2003. Checklist of the freshwater fishes of South and Central America. EDIPUCRS, Porto Alegre, Brazil.

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.**

de Pínna, M. C. C., and W. Wosiacki. 2003. Trichomycteridae (pencil or parasitic catfishes).  
Pages 270-290 *in* R. E. Reis, S. O. Kullander, and C. J. Ferraris, Jr., editors. Checklist of the  
freshwater fishes of South and Central America. EDIPUCRS, Porto Alegre, Brazil.