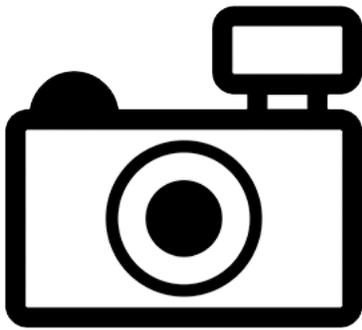


# ***Microcambeva ribeirae* (a catfish, no common name)**

## **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: Rio Ribeira do Iguape basin in southeastern Brazil.”

### **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 ribeirae*”

### **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 ribeirae</i> Costa, Lima and Bizerril, 2004”

“Current Standing: valid”

### Size, Weight, and Age Range

From Froese and Pauly (2016):

“Max length : 4.8 cm SL male/unsexed; [Costa et al. 2004]”

### Environment

From Froese and Pauly (2016):

“Freshwater; demersal.”

### Climate/Range

From Froese and Pauly (2016):

“Subtropical, preferred ?”

## **Distribution Outside the United States**

### **Native**

From Froese and Pauly (2016):

“South America: Rio Ribeira do Iguape basin in southeastern 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 Froese and Pauly (2016):

“Dorsal soft rays (total): 9; Anal soft rays: 8; Vertebrae: 34. Differs from *M. barbata* in having short nasal barbels reaching just behind posterior nostril; eye positioned on posterior half of head; first pectoral-fin ray shorter than posterior ones, its tip not forming a distinct filament; anal fin origin posterior of vertical through base of last dorsal-fin ray; posteriormost pore of each supraorbital canal united in the midline, composing a single median pore; frontal elongated anteriorly; fontanel not extending anteriorly beyond posteriormost supraorbital pore; anterior portion of sphenotic with a prominent lateral process; anterior palatine ossification absent; posterior process of palatine elongate, about 60% of palatine bony portion without posterior process; and supraorbital bone elongate, about three times as long as lacrimal [Costa et al. 2004].”

From Costa et al. (2004):

“Coloration in life: Body almost translucent, with dark brown spots as described above [along midline of flank, and two similar rows of spots on dorsolateral portion of body and dorsal midline, respectively]. Golden iridescence around dark spots of lateral and dorsolateral rows of flank.”

## **Biology**

From Froese and Pauly (2016):

“Collected in clear, shallow streams (about 60 cm deep), with a gray sandy bottom, in which some specimens were found entirely buried, except for snout and barbels (Bizerril, pers. obs.).”

## **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 ribeirae*”

## 4 Global Distribution

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**Figure 1.** Map of the municipality of Pedro de Toledo in São Paulo state, Brazil, where the holotype of *Microcambeva ribeirae* was collected (Costa et al. 2004). Map by Raphael Lorenzeto de Abreu. Licensed under CC BY 2.5. Available: <https://commons.wikimedia.org/w/index.php?curid=1119196>. (February 2017).

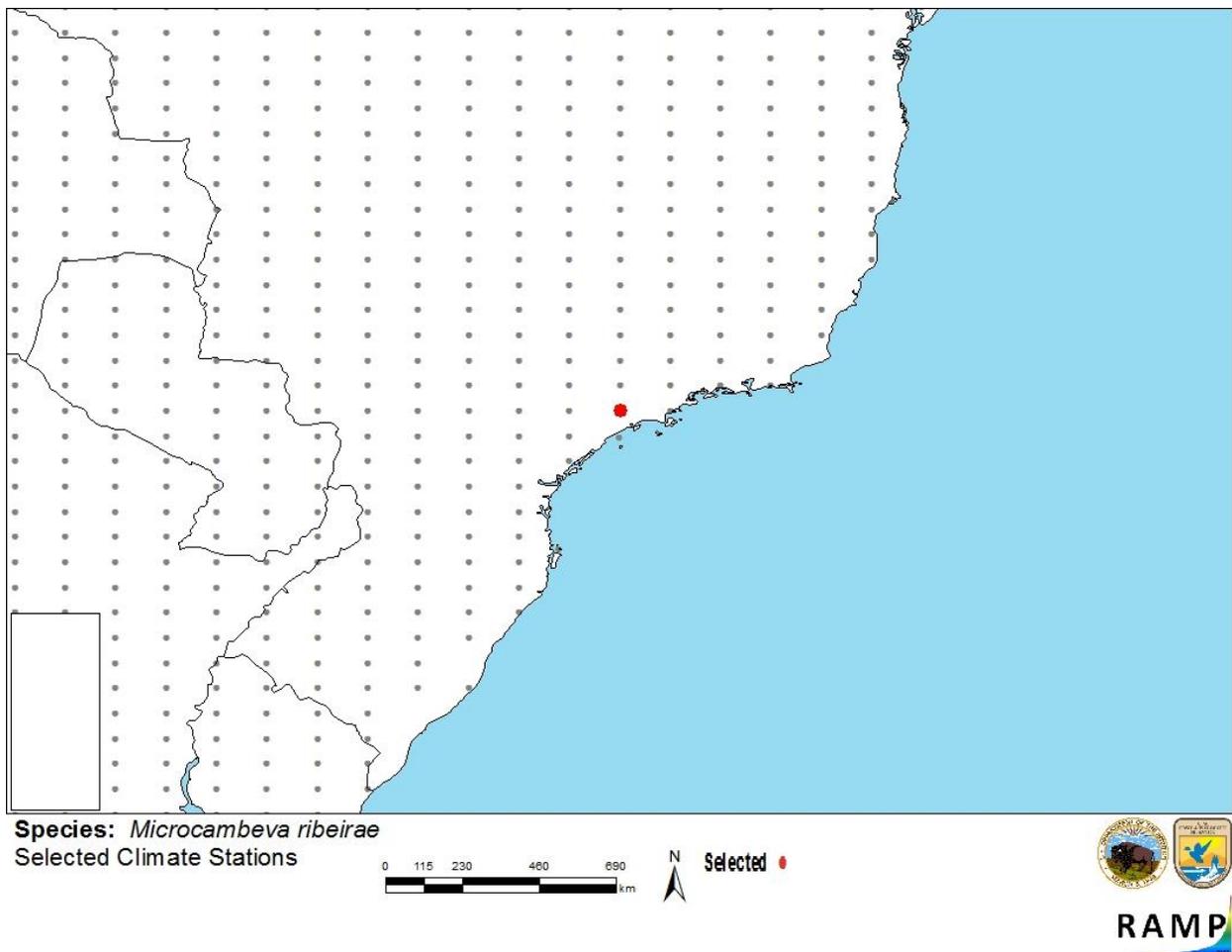
## 5 Distribution Within the United States

This species has not been reported in the United States.

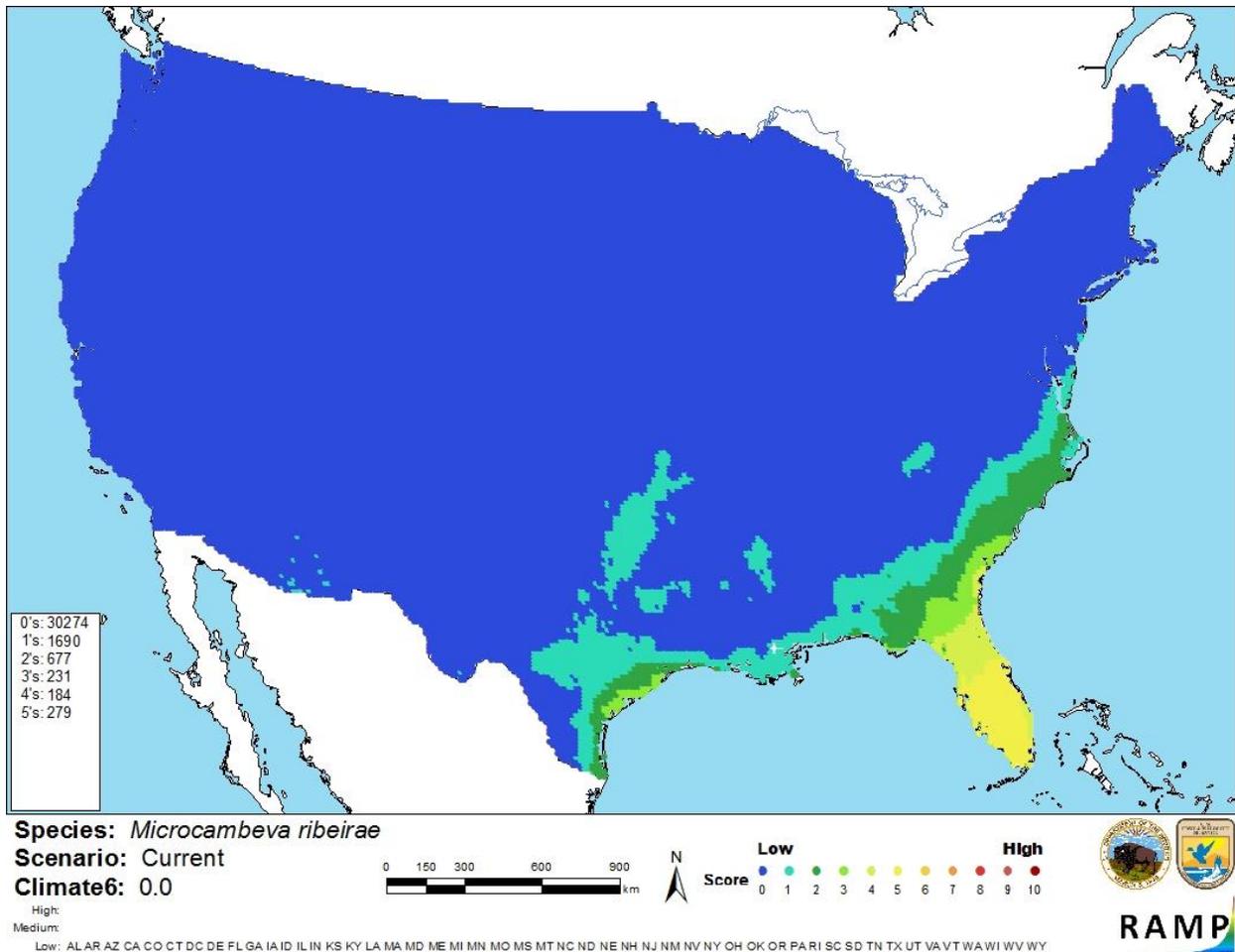
## 6 Climate Matching

### Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) was medium in peninsular Florida and low throughout the remainder of the contiguous U.S. The Climate 6 proportion indicated a low climate match for the contiguous U.S. overall. The range of proportions indicating a low climate match range from 0.000 to 0.005; the Climate 6 proportion for *Microcambeva ribeirae* 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 ribeirae* climate matching. Source location from Costa et al. (2004).



**Figure 3.** Map of RAMP (Sanders et al. 2014) climate matches for *Microcambeva ribeirae* in the contiguous United States based on source locations reported by Costa et al. (2004). 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 (Sum of Climate Scores 6-10) / (Sum of total Climate Scores)	Climate Match Category
$0.000 \leq X < 0.005$	Low
$0.005 < X < 0.103$	Medium
$\geq 0.103$	High

## 7 Certainty of Assessment

There is very limited information available on the biology of *Microcambeva ribeirae*. Potential impacts of an introduction are unknown because the species has not yet been observed in a novel environment. 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 ribeirae* is a trichomycterid catfish native to southeastern Brazil. Very little is known about its biology, and it has not been reported as introduced outside its native range, so impacts of introduction are unknown. Along with other members of the family Trichomycteridae, *M. ribeirae* is listed as a prohibited species in the state of Florida. Climate match to the contiguous U.S. is low. Overall risk posed by *M. ribeirae* 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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- Costa, W. J. E. M., S. M. Q. Lima, and C. R. S. F. Bizerril. 2004. *Microcambeva ribeirae* sp. n. (Teleostei: Siluriformes: Trichomycteridae): a new sarcoglanidine catfish from the Rio Ribeira do Iguape basin, southeastern Brazil. *Zootaxa* 563:1-10.
- 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 ribeirae* Costa, Lima & Bizerril, 2004. FishBase. Available: <http://www.fishbase.org/summary/Microcambeva-ribeirae.html>. (January 2017).
- ITIS (Integrated Taxonomic Information System). 2017. *Microcambeva ribeirae* Costa, Lima and Bizerril, 2004. Integrated Taxonomic Information System, Reston, Virginia. Available: [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=682138#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=682138#null). (January 2017).
- Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk Assessment Mapping Program: RAMP. U.S. Fish and Wildlife Service.