

# ***Glanapteryx anguilla* (catfish, no common name)**

## **Ecological Risk Screening Summary**

U.S. Fish & Wildlife Service, December 2016

Revised, January and February 2017

Web Version, 12/28/2017



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: Negro and Orinoco River basins [Brazil and Venezuela].”

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

This species has not been reported in the United States.

From FFWCC (2017):

“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. Very limited exceptions may be made by permit from the Executive Director for research or for public exhibition by facilities that meet biosecurity criteria [...]

Freshwater Aquatic Species [...]

Parasitic catfishes [...]

*Glanapteryx anguilla*”

## Means of Introductions in the United States

This species has not been reported 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 Glanapteryginae  
Genus *Glanapteryx*  
Species *Glanapteryx anguilla* (Myers, 1927)”

“Taxonomic Status: valid”

### Size, Weight, and Age Range

From Froese and Pauly (2017):

“Max length : 6.1 cm TL male/unsexed; [de Pínna and Wosiacki 2003]”

### Environment

From Froese and Pauly (2017):

“Freshwater; benthopelagic.”

### Climate/Range

From Froese and Pauly (2017):

“Tropical, preferred ?”

## Distribution Outside the United States

### Native

From Froese and Pauly (2017):

“South America: Negro and Orinoco River basins.”

### Introduced

This species has not been reported as introduced outside of its native range.

## Means of Introduction Outside the United States

This species has not been reported as introduced outside of its native range.

## Short Description

From de Pinna (1989):

“General appearance of body eel-like; head continuous with trunk [...] Head very small (approximately 7% of TL), noticeably deep for a trichomycterid, its dorsal surface flat [...] Barbels large and stout, with easily visible internal cores. Papillae covering barbels smaller than those on lips. Maxillary, rictal and nasal barbels well developed, all similar in general appearance. Maxillary barbel longest, reaching considerably beyond attachment of pectoral fin. [...] Pectoral fins appearing as two thick small flaps with rounded tips on the midlateral body surface, just posterior to head [...] Each pectoral fin containing three unbranched rays, apparently unsegmented [...] Rays very difficult to see, visible only in strong transmitted light or in cleared and stained preparations [...] Pelvic fins ranging from completely absent to fully formed (here defined as those longer than 1.5% of TL [...]) [...] Fully formed pelvic fin with five rays, three central ones branched; no pelvic splint. Fully formed pelvic fin elongate (more than twice as long as broad), its distal portion slightly wider than its base [...] Caudal fin extremely reduced in size (between 2 and 3% of TL), not evident in general contour of fish, continuous dorsally and ventrally with numerous procurrent rays. Principal caudal- fin rays ranging from two to ten, merging gradually into procurrent rays.”

“Overall coloration tan, darker dorsally [...] General pattern of coloration delicately reticulated under close examination, due to thin anastomosing pigmentless stripes, more notable on head [...]”

## Biology

From Schaefer et al. (2005):

“Little is known about the habitats of the species of *Glanapteryx*, but information available indicates that they have been collected in association with leaf litter underlain with sand.”

“Nico and de Pinna (1996) reported capture of *Glanapteryx anguilla* from small forest streams with sandy substrate covered by leaf litter; however, the exact microhabitat occupied was not observed because the specimens were collected using rotenone.”

## Human Uses

No information available.

## Diseases

No information available.

## Threat to Humans

From Froese and Pauly (2017):

“Harmless”

## 3 Impacts of Introductions

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This species has not been reported as introduced outside of its native range.

From FFWCC (2017):

“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. Very limited exceptions may be made by permit from the Executive Director for research or for public exhibition by facilities that meet biosecurity criteria [...]

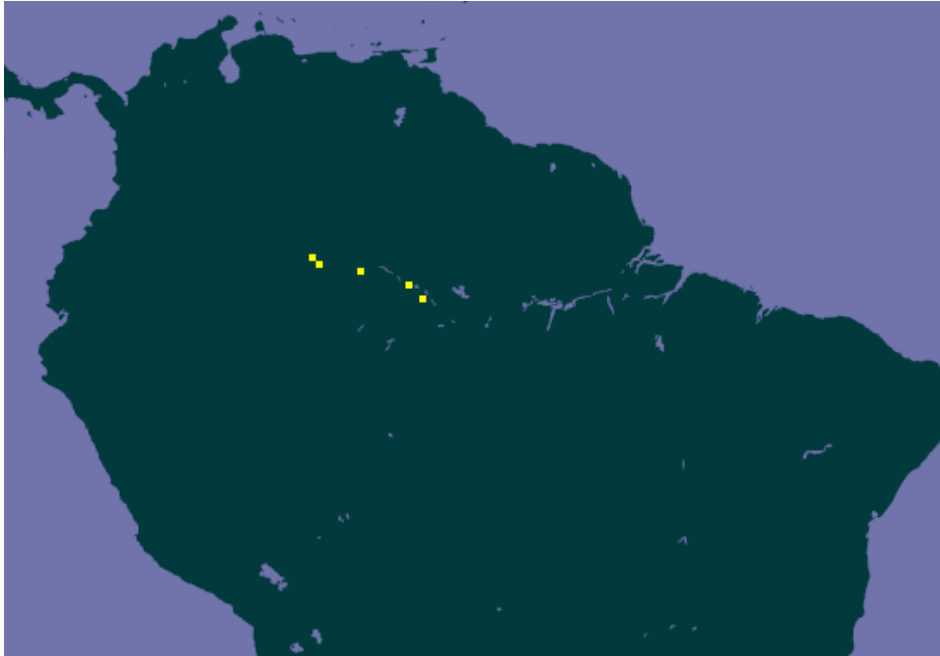
Freshwater Aquatic Species [...]

Parasitic catfishes [...]

*Glanapteryx anguilla*”

## 4 Global Distribution

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**Figure 1.** Known global established locations of *Glanapteryx anguilla* in northern South America. Map from GBIF (2016).

## 5 Distribution Within the United States

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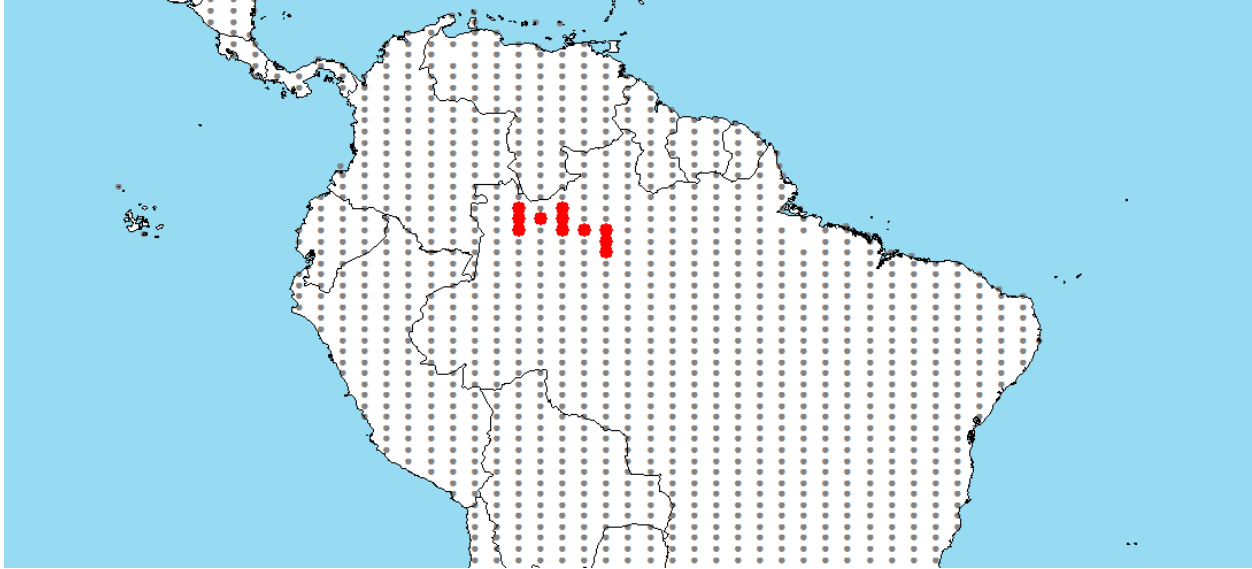
This species has not been reported within the United States.

## 6 Climate Matching

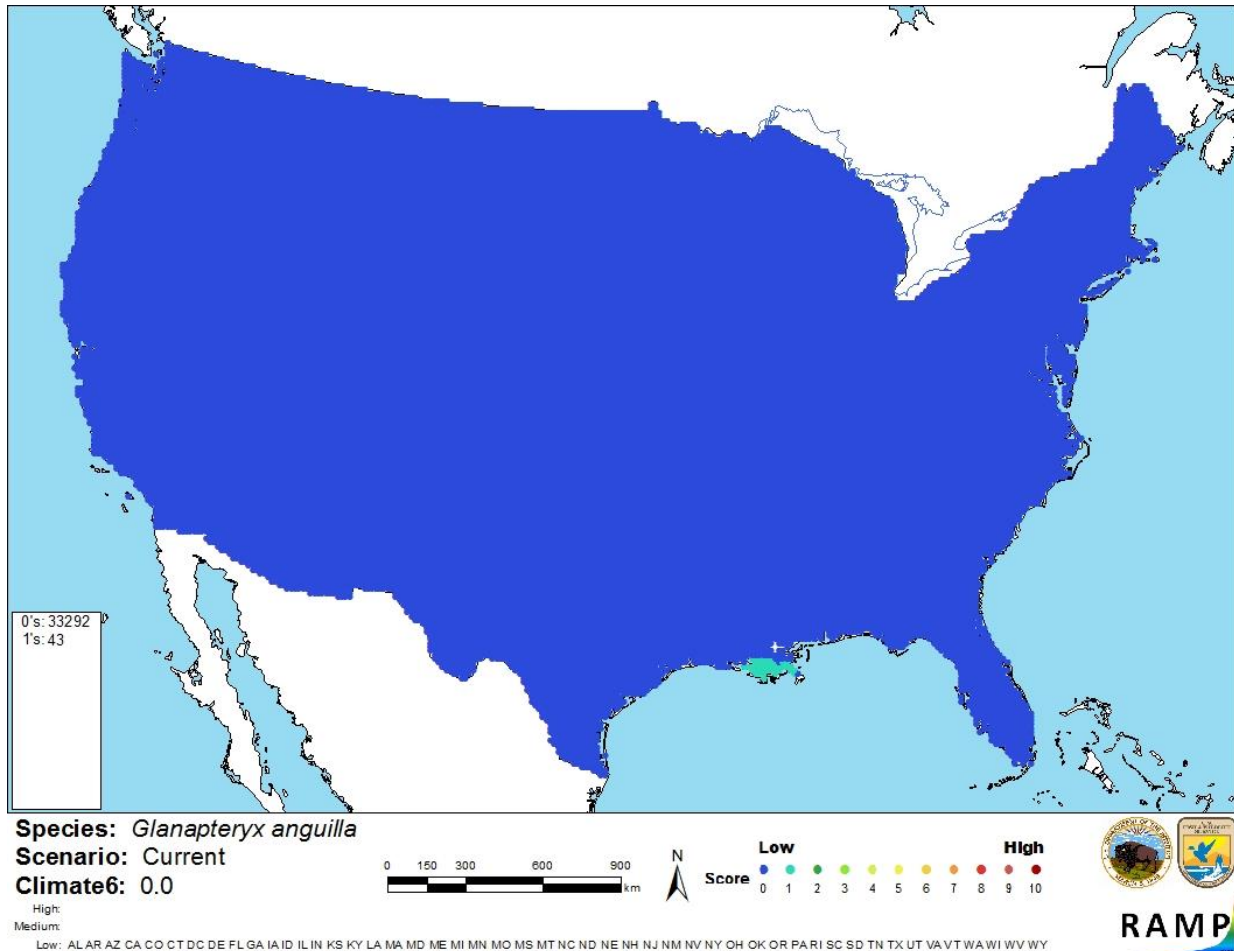
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### Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) was low throughout the contiguous U.S., reflected in a Climate 6 proportion of 0.0. The range of proportions indicating a low climate match is 0.000-0.005.



**Figure 2.** RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *Glanapteryx anguilla* climate matching. Source locations from GBIF (2016).



**Figure 3.** Map of RAMP (Sanders et al. 2014) climate matches for *Glanapteryx anguilla* in the contiguous United States based on source locations reported by GBIF (2016). 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
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
$\geq 0.103$	High

## 7 Certainty of Assessment

There is limited information available on the biology of *Glanapteryx anguilla*. This species has not been reported outside of its native range so impacts of introduction are unknown. With so little information about this species, the certainty of this assessment is low.

## 8 Risk Assessment

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### Summary of Risk to the Contiguous United States

*Glanapteryx anguilla* is a trichomycterid catfish found in the Negro and Orinoco River basins of northern South America. There have been no reports of this fish outside of its native range. It is listed as a prohibited species in the state of Florida. Due to its low Climate 6 proportion for the contiguous U.S. and its absence of introduction history, the overall risk for this species 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.**

de Pinna, M. C. C. 1989. Redescription of *Glanapteryx anguilla*, with notes on the phylogeny of Glanapteryginae (Siluriformes, Trichomycteridae). Proceedings of the Academy of Natural Sciences of Philadelphia 141:361-374.

FFWCC (Florida Fish and Wildlife Conservation Commission). 2017. Prohibited species list. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida. Available: <http://myfwc.com/wildlifehabitats/nonnatives/regulations/prohibited/#nogo>. (January 2017).

Froese, R., and D. Pauly. 2016. *Glanapteryx anguilla* Myers, 1927. FishBase. Available: <http://www.fishbase.org/summary/Glanapteryx-anguilla.html>. (January 2017).

GBIF (Global Biodiversity Information Facility). 2016. GBIF backbone taxonomy: *Glanapteryx anguilla* Myers, 1927. Global Biodiversity Information Facility, Copenhagen. Available: <http://www.gbif.org/species/2342931>. (January 2017).

ITIS (Integrated Taxonomic Information System). 2017. *Glanapteryx anguilla* (Myers, 1927). Integrated Taxonomic Information System, Reston, Virginia. Available: [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=682103#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=682103#null). (January 2017).

Sanders, S., C. Castiglione, and M. H. Hoff. 2014. Risk Assessment Mapping Program: RAMP. U.S. Fish and Wildlife Service.



Schaefer, S. A., F. Provenzano, M. de Pinna, and J. N. Baskin. 2005. New and noteworthy Venezuelan glanapterygine catfishes (Siluriformes, Trichomycteridae), with discussion of their biogeography and psammophily. *American Museum Novitates* 3496:1-27.

## **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 Pinna, 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.