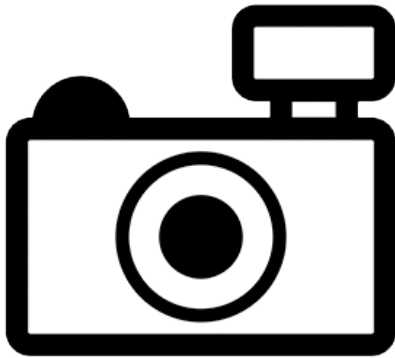


Auchenipterus nigripinnis
(a driftwood catfish; no English common name)
Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, July 2017
Revised, September 2017
Web Version, 10/30/2017



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2017):

“South America: La Plata River basin.”

Status in the United States

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

Means of Introduction into the United States

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

Remarks

From ScotCat (2016):

“Synonyms: *Euanemus nigripinnis*, *Auchenipterus paysanduanus*”

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2017):

“Kingdom Animalia
Subkingdom Bilateria
Infrakingdom Deuterostomia
Phylum Chordata
Subphylum Vertebrata
Infraphylum Gnathostomata
Superclass Actinopterygii
Class Teleostei
Superorder Ostariophysi
Order Siluriformes
Family Auchenipteridae
Subfamily Auchenipterinae
Genus *Auchenipterus*
Species *Auchenipterus nigripinnis* (Boulenger 1895)”

“Current Standing: valid”

Size, Weight, and Age Range

From Froese and Pauly (2017):

“Max length : 20.2 cm SL male/unsexed [Ferraris 2003]”

Environment

From Froese and Pauly (2017):

“Freshwater; benthopelagic.”

Climate/Range

From Froese and Pauly (2017):

“Subtropical, preferred ?”

Distribution Outside the United States

Native

From Froese and Pauly (2017):

“South America: La Plata River basin.”

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 Ferraris and Vari (1999):

“*Auchenipterus nigripinnis* can be distinguished from all other species of the genus, except *A. brachyurus*, by the following combination of characters: anal-fin origin posterior to the middle of the body; and caudal fin without terminal band, but with chevron-shaped dark mark near base of each lobe. From *Auchenipterus brachyurus*, *A. nigripinnis* can be distinguished by having more gill rakers (36-46, rarely 36 or 37; vs. 32-37 in *A. brachyurus*) and more branched anal-fin rays (typically 36-39, vs. 34 or 35).”

“Body silvery white, grey dorsally. Abdomen and underside of head white. Complete midlateral, posteriorly tapering, dark stripe present in some specimens, but often stripe extends from humeral region posteriorly only to region above pelvic-fin base.”

Biology

From Abrial et al. (2014):

“[Reproductive strategy:] IF”

“(IF) sedentary or short-distance migratory fish with internal fertilization and without parental care. They show sexual dimorphism and/or mating rituals associated with reproductive behavior.”

Human Uses

From ScotCat (2016):

“[...] this species is not seen very often in the [aquarium] hobby and only arrived via Aquarium Glaser in Germany in 2009 [...]”

Diseases

From Chemes and Takemoto (2011):

“Checklist of ichthyoparasites in the middle Paraná system (Argentina) [...]”

Infraphylum Trematoda (Rudolphi, 1808; Cavalier-Smith, 1998)

Class Trematoda (Rudolphi, 1808)

Subclass Digenea (Carus, 1863)

Family Allocreadiidae (Stossich, 1903)

***Crepidostomum macrorchis* (Szidat, 1954)**

Hosts: [...] *A. nigripinnis* (Boulenger, 1895) [...]

Family Halipegidae (Poche, 1926)

***Genarchella genarchella* (Travassos, 1928)**

Hosts: [...] *Auchenipterus nigripinnis* [...]

***Genarchella parva* (Travassos et al., 1928)**

Hosts: *Auchenipterus nigripinnis* [...]"

From Ostrowski de Núñez et al. (2017):

"*Thometrema overstreeti* (Brooks, Mayes & Thorson, 1979)

Host: [...] *Auchenipterus nigripinnis* [...]"

Eiras et al. (2016) report that *A. nigripinnis* is a host of *Eustrongylides ignotus* Jägerskiöld, 1909 (larva) and *Eustrongylides* sp. (larva).

No OIE-reportable diseases have been documented for this species.

Threat to Humans

From Froese and Pauly (2017):

"Harmless"

3 Impacts of Introductions

No introductions of this species have been reported.

4 Global Distribution

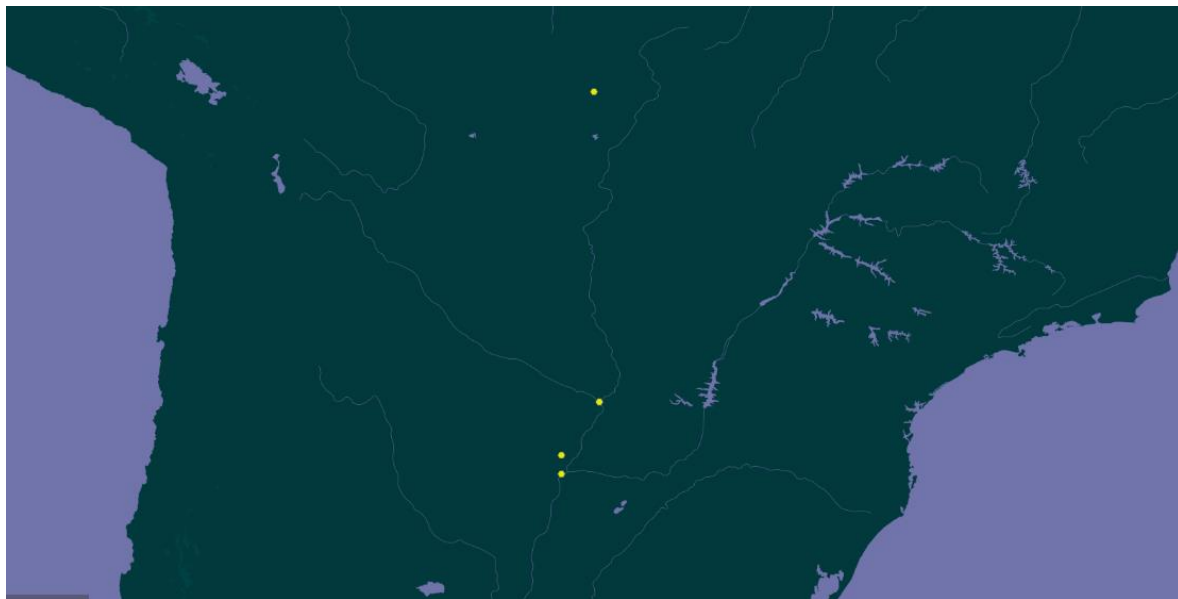


Figure 1. Known global distribution of *A. nigripinnis* in South America. Map from GBIF (2017).

5 Distribution Within the United States

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

6 Climate Matching

Summary of Climate Matching Analysis

The climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous U.S. was 0.032, indicating a medium climate match. Scores that indicate medium match range between 0.005 and 0.103. The locations with the highest climate matches for *A. nigripinnis* in the contiguous United States were found in peninsular Florida and the Gulf Coast of Texas. Medium matches were seen along the Southeast coastlines from North Carolina to Texas, and up into central Texas. Much of the contiguous U.S. showed low climate match.

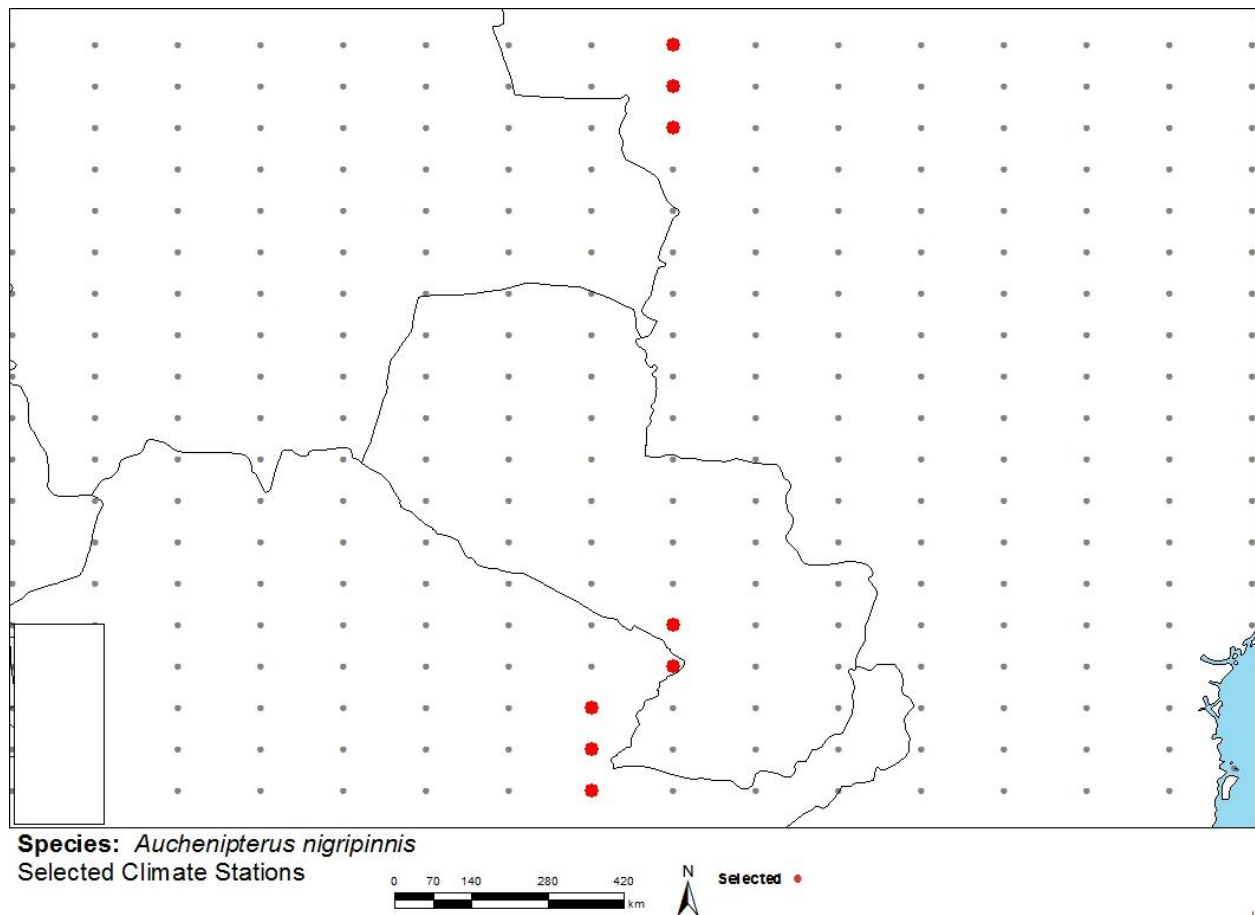


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *A. nigripinnis* climate matching. Source locations from GBIF (2017).

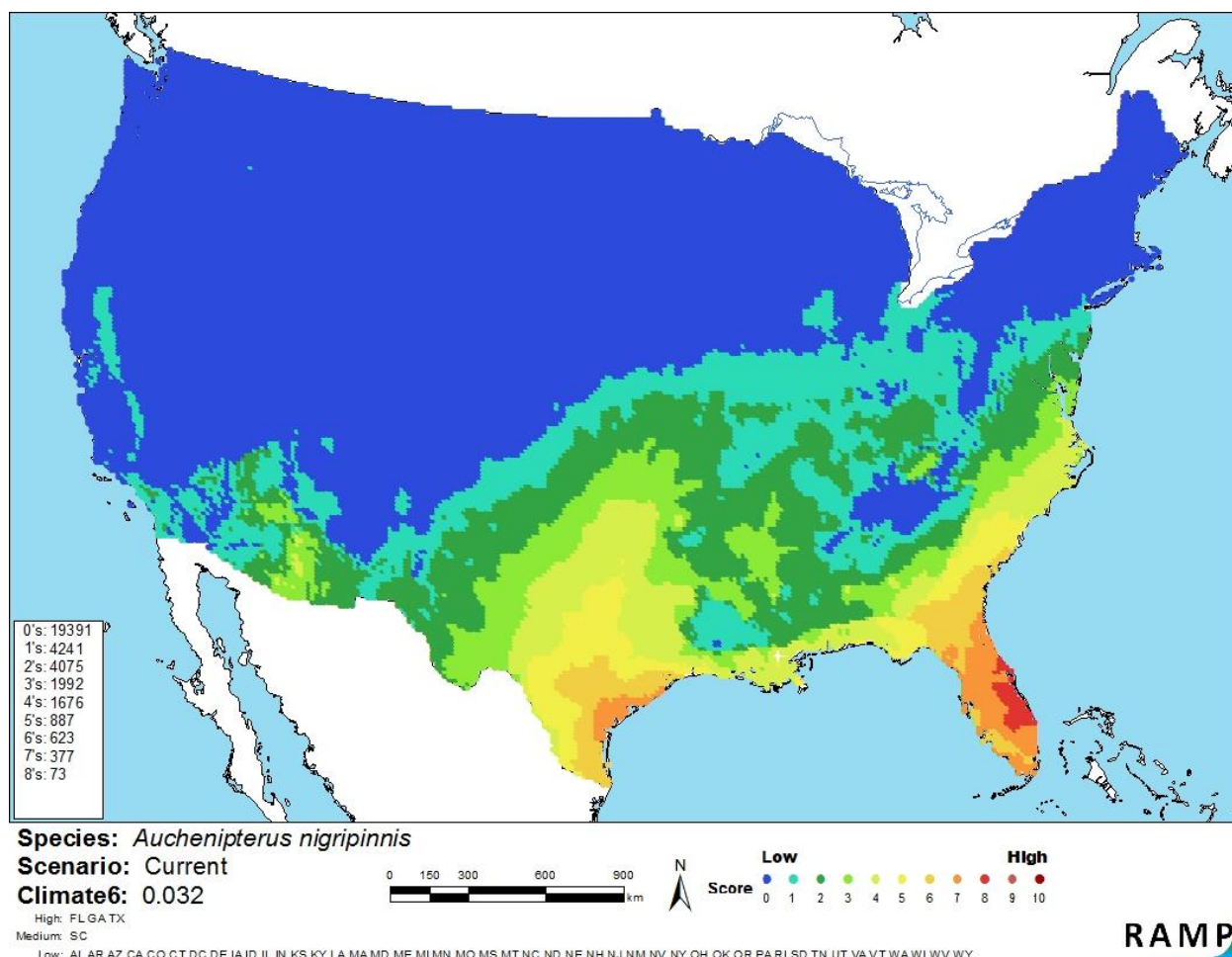


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *A. nigripinnis* in the contiguous United States based on source locations reported by GBIF (2017). 0=Lowest match, 10=Highest match.

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
$0.000 \leq X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

7 Certainty of Assessment

The biology and ecology of *A. nigripinnis* are poorly known. *A. nigripinnis* has never been introduced outside of its native range and is rarely utilized for human trade. The certainty of this assessment is low because the lack of information available.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Auchenipterus nigripinnis showed a medium climate match with the contiguous United States, with highest matches occurring in Florida and Texas. This species is native to South America and has no documented introductions or establishments outside of its native range. It is present but rare in the aquarium trade. Without observing introduction or establishment elsewhere in the world, there is limited potential to discern possible impacts of establishment in the contiguous United States. The overall risk of this species is uncertain.

Assessment Elements

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

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

ScotCat. 2016. *Auchenipterus nigripinnis*. Factsheet 219. Available: http://www.scotcat.com/factsheets/auchenipterus_nigripinnis.htm. (September 2017).

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.

Ferraris, C. J. Jr. 2003. Auchenipteridae (driftwood catfishes). Pages 470-482 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.