

Blue-spotted Pleco (*Ancistrus greeni*)

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, web version – 3/30/2018



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1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2014):

“South America: Peru.”

Status in the United States

No records of *Ancistrus greeni* in the United States were found.

Means of Introductions in the United States

No records of *Ancistrus greeni* in the United States were found.

Remarks

Ancistrus greeni replaces and is the senior synonym for *Chaetostomus maculosus* and *Chaetostoma greeni*. Information searches were conducted using all names.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From Eschmeyer (2017):

“*greeni*, *Chaetostoma* Isbrücker [...] **Current status:** Valid as *Ancistrus greeni* (Isbrücker 2001).”

“*maculatus*, *Chaetostomus* Regan [...] **Current status:** Synonym of *Ancistrus greeni* (Isbrücker 2001).”

From Lujan et al. (2015):

“—Based on our direct and photographic examination of type material, we transfer the following three species from *Chaetostoma* to the genus *Ancistrus*: *Chaetostoma greeni* Isbrücker et al., 2001 (replacement name for *Chaetostomus maculatus* Regan, 1904) is recognized as *Ancistrus greeni*, new combination; [...]”

Froese and Pauly (2014) list *Chaetostoma greeni* as the senior, accepted synonym and *Chaetostoma maculatus* as an invalid synonym.

From ITIS (2014):

“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 Loricariidae
Subfamily Hypostominae
Genus *Chaetostoma* Tschudi, 1846
Species *Chaetostoma greeni* Isbrücker in Isbrücker, Seidel, Michels, Schrami and Werner, 2001”

Size, Weight, and Age Range

From Froese and Pauly (2014):

“Max length: 6.5 cm TL male/unsexed; [Fisch-Muller 2003]”

Environment

From Froese and Pauly (2014):

“Freshwater; demersal.”

Climate/Range

From Froese and Pauly (2014):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2014):

“South America: Peru.”

Introduced

No records of *Ancistrus greeni* introductions were found.

Means of Introduction Outside the United States

No records of *Ancistrus greeni* introductions were found.

Short Description

A short description of *Ancistrus greeni* was not found.

Biology

Information on the biology of *Ancistrus greeni* was not found.

Human Uses

From Velasquez and Hidalgo del Aguila (2016):

“The species is fished at a local level for subsistence. In the Equatorial Amazon *Chaetostoma* sp. are indiscriminately captured by locals, mainly from indigenous communities, through the use of a natural toxic chemical dumped into the river for fishing purposes, especially rotenona, which is extracted from plants of the genus *Lonchoarpus* ("barbasco"), the main threat being the lack of regulation for the application doses of these chemicals (Vargas 2012).”

Diseases

Information on diseases of *Ancistrus greeni* was not found.

Threat to Humans

From Froese and Pauly (2014):

“Harmless”

3 Impacts of Introductions

No records of *Ancistrus greeni* introductions were found.

4 Global Distribution



Figure 1. Known global distribution of *Chaetostoma* genus; *C. greeni* is native to Peru. Map from GBIF Secretariat (2014).

Specific distribution information for *C. greeni* was not available. GBIF Secretariat (2014) did not incorporate the name change to *Ancistrus greeni* at the time of assessment.

5 Distribution Within the United States

No records of *Ancistrus greeni* in the United States were found.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match was low for most of the contiguous U.S. There were pockets of medium match in Florida, along the Gulf Coast, in the Southwest, and California. The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean Distance) for the contiguous United States was 0.000, low, and no states had an individually high climate match.

At the time of assessment GBIF Secretariat (2014) did not incorporate the taxonomic change to the valid name of *Ancistrus greeni*, instead still listing the species under *Chaetostoma greeni*. RAMP (Sanders et al. 2014) pulls name information from GBIF; hence the following figures are labeled as *Chaetostoma greeni* and not *Ancistrus greeni*. See Remarks section above for review of taxonomy issues for this species.

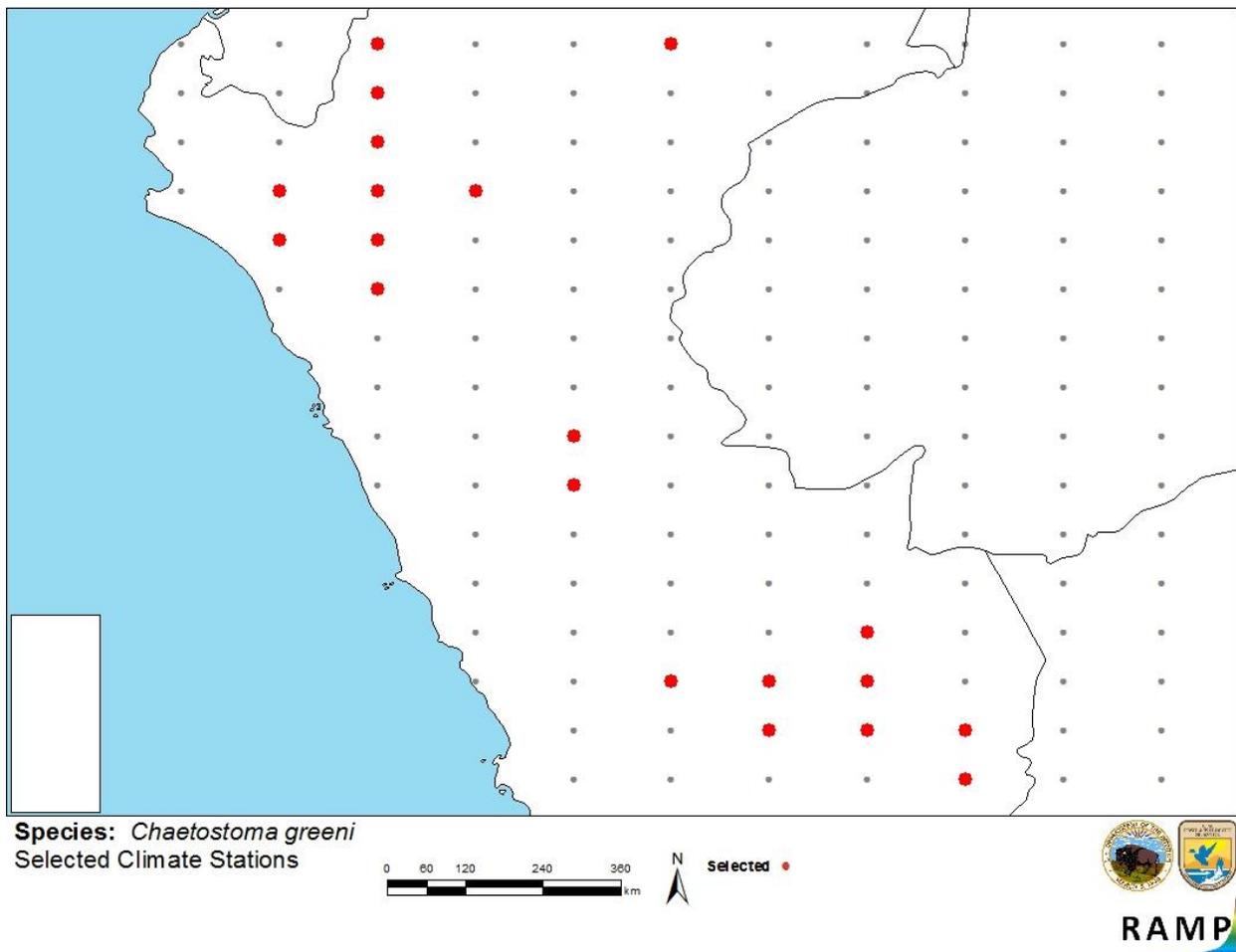


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations in Peru selected as source locations (red) and non-source locations (grey) for *Ancistrus greeni* climate matching. Source locations from Froese and Pauly (2014) and GBIF Secretariat (2014).

The range given for *A. greeni* is given as Peru (Forese and Pauly 2010). Specific locations for *A. greeni* were not available. Source points are those locations for the *Chaetostomus* genus that were in Peru. See Taxonomic Hierarchy and Status, above, for a detailed description of the taxonomic changes for this species.

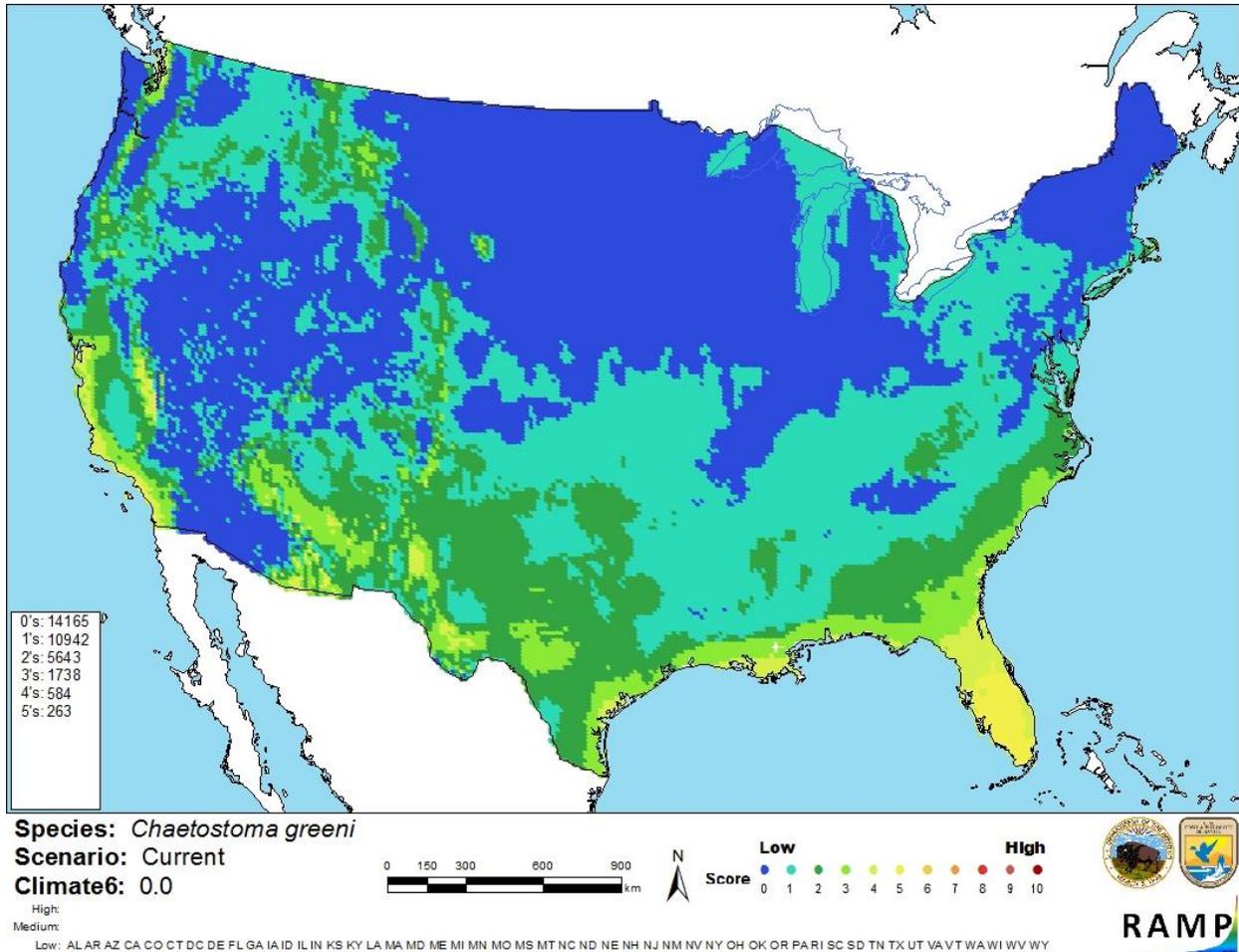


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Ancistrus greeni* in the contiguous United States based on source locations reported by Froese and Pauly (2014) and GBIF Secretariat (2014). 0 = Lowest match, 10 = Highest match.

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

7 Certainty of Assessment

The certainty of assessment is low. Minimal information about *Ancistrus greeni* is available. No records of introduction were found. The only species distribution found was that it is native to Peru without any further detail. The climate match used the locations for the *Ancistrus* genus provided by GBIF Secretariat (2014) that were in Peru as source points.

8 Risk Assessment

Summary of Risk to the Contiguous United States

The history of invasiveness is uncertain. There were no records of introduction found for *Ancistrus greeni*. There is a general lack of information regarding *Ancistrus greeni*. The climate match is low. The certainty of assessment is low. The overall risk assessment category is uncertain.

Assessment Elements

- **History of Invasiveness (Sec. 3):** Uncertain
- **Climate Match (Sec.6):** Low
- **Certainty of Assessment (Sec. 7):** Low
- **Remarks/Important additional information** No additional remarks.
- **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.

Eschmeyer, W. N., editor. 2017. Catalog of fishes online database. California Academy of Sciences, San Francisco, California. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (February 2017).

Froese, R., and D. Pauly, editors. 2014. *Chaetostoma greeni* Isbrücker, 2001. FishBase. Available: <http://www.fishbase.org/summary/Chaetostoma-greeni.html>. (March 2014).

GBIF Secretariat. 2014. GBIF backbone taxonomy: *Chaetostoma greeni* Isbrücker, 2001. Global Biodiversity Information Facility, Copenhagen. Available: <http://www.gbif.org/species/5202389>. (March 2014).

ITIS (Integrated Taxonomic Information System). 2014. *Chaetostoma greeni* Isbrücker in Isbrücker, Seidel, Michels, Schrami and Werner, 2001. Integrated Taxonomic Information System, Reston, Virginia. Available: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=680054. (March 2014).

Lujan, N. K., V. Meza-Vargas, V. Astudillo-Clavijo, R. Barriga-Salazar, and H. López-Fernández. 2015. A multilocus molecular phylogeny for *Chaetostoma* clade genera and species with a review of *Chaetostoma* (Siluriformes: Loricariidae) from the central Andes. *Copeia* 103(3):664–701.

Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk assessment mapping program: RAMP. U.S. Fish and Wildlife Service.

Velasquez, M., and M. Hidalgo del Aguila. 2016. *Ancistrus greeni*. The IUCN Red List of Threatened Species 2016: e.T49829554A53817133. Available: <http://www.iucnredlist.org/details/full/49829554/0>. (February 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.

Fisch-Muller, S. 2003. Loricariidae-Ancistrinae (armored catfishes). Pages 373–400 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.

Vargas. 2012. [Source material did not give full citation for this reference.]