

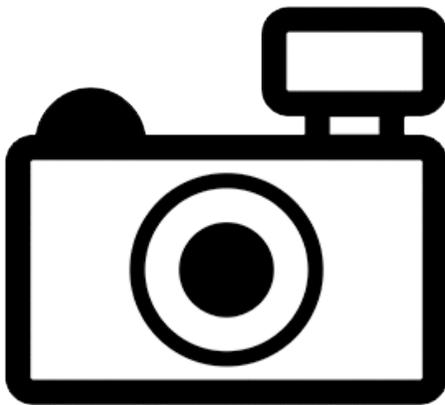
## ***Hoplias patana* (a fish, no common name)**

### **Ecological Risk Screening Summary**

U.S. Fish and Wildlife Service, August 2011

Revised, September 2018

Web Version, 1/28/2019



No Photo Available

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

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### **Native Range**

From Froese and Pauly (2018):

“South America: French Guiana.”

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

This species has not been reported as introduced or established in the United States. There is no indication that this species is in trade in the United States.

The Florida Fish and Wildlife Conservation Commission has listed *Hoplias patana* as a prohibited species. 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” (FFWCC 2018).

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

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

## Remarks

Fricke et al. (2018) report that the species was first described as *Macrodon patana*, and was thought at one point to be a synonym for *H. malabaricus*, but is currently viewed as valid as *H. patana*. The synonym *M. patana* was used alongside the accepted scientific name to search for information for this ERSS.

## 2 Biology and Ecology

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### Taxonomic Hierarchy and Taxonomic Standing

From ITIS (2018):

“Kingdom Animalia  
Subkingdom Bilateria  
Infrakingdom Deuterostomia  
Phylum Chordata  
Subphylum Vertebrata  
Infraphylum Gnathostomata  
Superclass Actinopterygii  
Class Teleostei  
Superorder Ostariophysi  
Order Characiformes  
Family Erythrinidae  
Genus *Hoplias* Gill, 1903  
Species *Hoplias patana* (Valenciennes in Cuvier and Valenciennes, 1847)”

“Current Standing: valid”

From Fricke et al. (2018):

“**Current status:** Valid as *Hoplias patana* (Valenciennes 1847). Erythrinidae.”

### Size, Weight, and Age Range

From Froese and Pauly (2018):

“Max length : 39.4 cm SL male/unsexed; [Oyakawa 2003]”

### Environment

From Froese and Pauly (2018):

“Freshwater; benthopelagic.”

## **Climate/Range**

From Froese and Pauly (2018):

“Tropical”

## **Distribution Outside the United States**

Native

From Froese and Pauly (2018):

“South America: French Guiana.”

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**

No information available.

## **Biology**

No information available.

## **Human Uses**

No information available.

## **Diseases**

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

## **Threat to Humans**

From Froese and Pauly (2018):

“Harmless”

## **3 Impacts of Introductions**

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No information available. No introductions of this species have been reported.

The Florida Fish and Wildlife Conservation Commission (2018) has listed *H. patana* as a prohibited species.

## 4 Global Distribution

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**Figure 1.** Known global distribution of *H. patana*, reported from the coast of French Guiana. Map from GBIF Secretariat (2017).

## 5 Distribution within the United States

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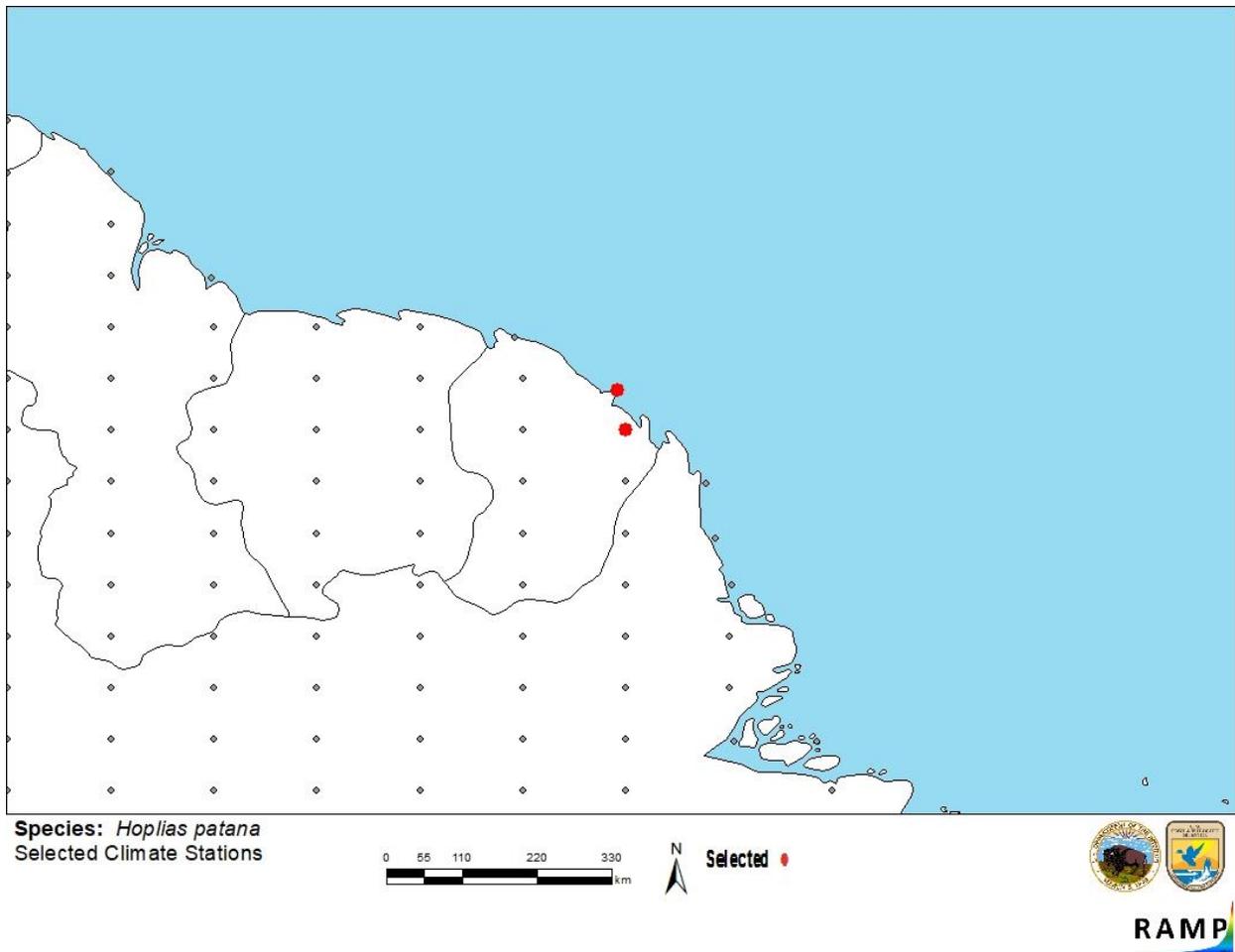
This species has not been reported as introduced or established in the United States.

## 6 Climate Matching

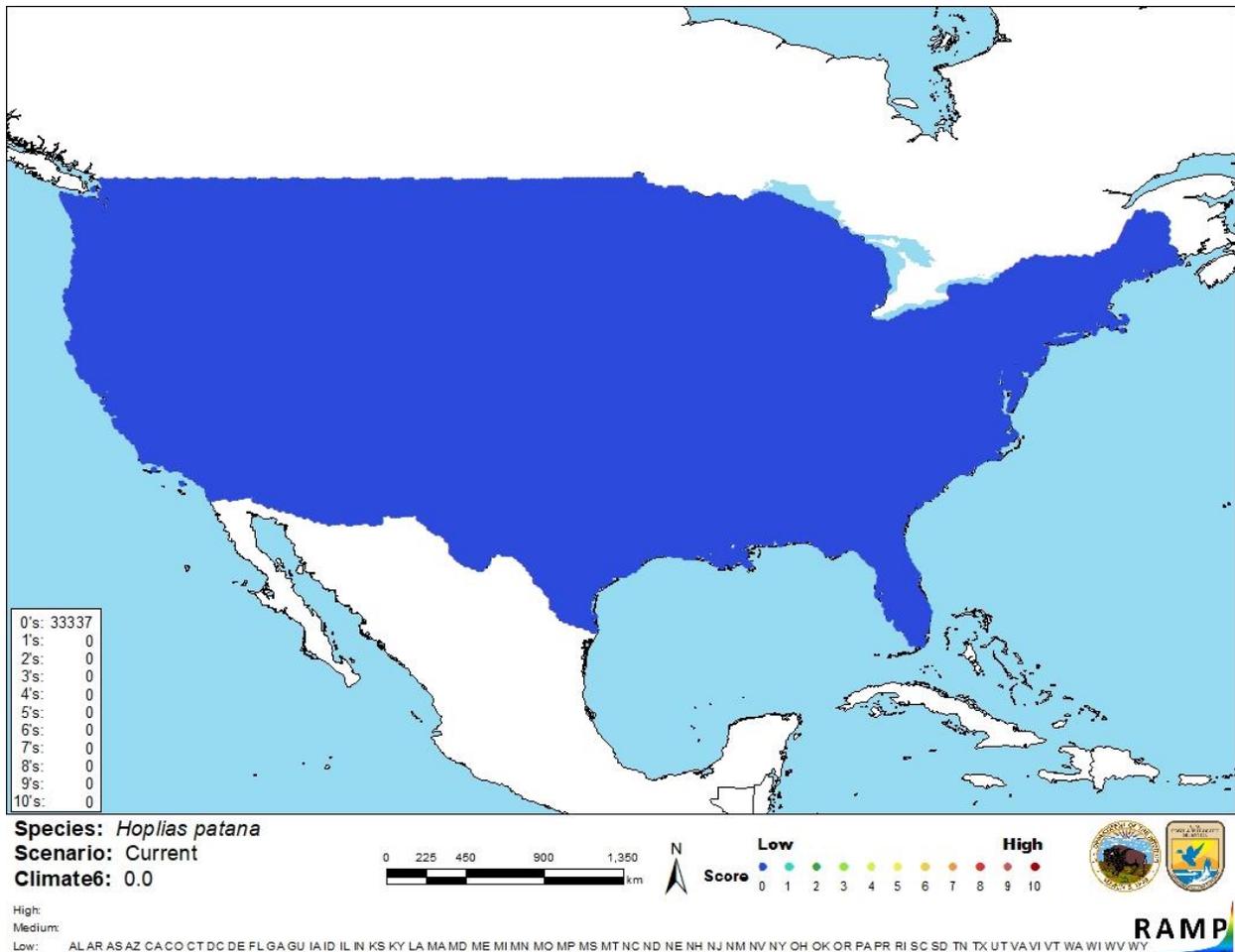
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### Summary of Climate Matching Analysis

The climate match (Sanders et al. 2018; 16 climate variables; Euclidean Distance) was low throughout the entire contiguous United States, reflected in a Climate 6 score of 0.000. Scores of 0.005 and below are classified as low match. All states had a low individual climate score.



**Figure 2.** RAMP (Sanders et al. 2018) source map showing weather stations in northeastern South America selected as source locations (red; French Guiana) and non-source locations (gray) for *Hoplias patana* climate matching. Source locations from GBIF Secretariat (2017).



**Figure 3.** Map of RAMP (Sanders et al. 2018) climate matches for *Hoplias patana* in the contiguous United States based on source locations reported by GBIF Secretariat (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
$0.000 \leq X < 0.005$	Low
$0.005 < X < 0.103$	Medium
$\geq 0.103$	High

## 7 Certainty of Assessment

Very limited information is available on the biology, ecology, and distribution of *H. patana*. Only one georeferenced location was available for climate matching. No introductions of this species have been documented, so any impacts of introduction remain unknown. Certainty of this assessment is low; further information would be needed to increase the certainty.

## 8 Risk Assessment

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### Summary of Risk to the Contiguous United States

*Hoplias patana* is a species of characiform fish native to French Guiana. Very little information is available on the species. No introductions of *H. patana* have been reported. Therefore, history of invasiveness is uncertain. It is listed as a prohibited species by the State of Florida. Climate match is low throughout the contiguous United States. Because of the lack of introduction history and limited information on distribution, certainty of the assessment is low. The overall risk posed by *H. patana* is classified as “Uncertain.”

### Assessment Elements

- **History of Invasiveness: Uncertain**
- **Climate Match: Low**
- **Certainty of Assessment: 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.**

FFWCC (Florida Fish and Wildlife Conservation Commission). 2018. Prohibited species list. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida. Available: <http://myfwc.com/wildlifehabitats/nonnatives/regulations/prohibited/>. (September 2018).

Fricke, R., W. N. Eschmeyer, and R. van der Laan, editors. 2018. Catalog of fishes: genera, species, references. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatget.asp?spid=3813>. (September 2018).

Froese, R., and D. Pauly, editors. 2018. *Hoplias patana* (Valenciennes, 1847). FishBase. Available: <https://www.fishbase.de/summary/Hoplias-patana.html>. (September 2018).

GBIF Secretariat. 2017. GBIF backbone taxonomy: *Hoplias patana* (Valenciennes, 1847). Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/2352252>. (September 2018).

ITIS (Integrated Taxonomic Information System). 2018. *Hoplias patana* (Valenciennes in Cuvier and Valenciennes, 1847). Integrated Taxonomic Information System, Reston, Virginia. Available: [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=641098#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=641098#null). (September 2018).

Sanders, S., C. Castiglione, and M. Hoff. 2018. Risk Assessment Mapping Program: RAMP, version 3.1. 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.**

Oyakawa, O. T. 2003. Erythrinidae (trahiras). Pages 238-240 *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.