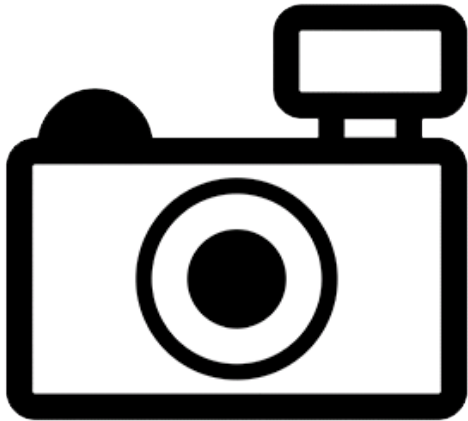


## ***Alcolapia latilabris* (a fish, no common name)**

### **Ecological Risk Screening Summary**

U.S. Fish & Wildlife Service, March 2015  
Revised, September 2017, October 2017  
Web Version, 8/21/2018



No Photo Available

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

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### **Native Range**

From Hanssens and Snoeks (2006):

“Endemic to the lake Natron basin [Tanzania and Kenya] where it inhabits some southern and southeastern springs and affluents of the southern Lagoon. In addition, it was collected from one of two springs and the adjacent relatively wide stream between the Moinik River and the southwestern lagoon (Seegers and Tichy 1999).”

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

No records of *Alcolapia latilabris* in the wild or in trade in the United States were found.

The Florida Fish and Wildlife Conservation Commission has listed the tilapia *A. latilabris* as a prohibited species. Prohibited nonnative species (FFWCC 2018), “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.”

## Means of Introductions in the United States

No records of *Alcolapia latilabris* in the United States were found.

## Remarks

Information searches were performed under *Alcolapia latilabris* and the synonym *Oreochromis latilabris*.

From Hanssens and Snoeks (2006):

“Red List Category & Criteria: Vulnerable D2 ver 3.1”

## 2 Biology and Ecology

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### Taxonomic Hierarchy and Taxonomic Standing

According to Eschmeyer et al. (2017), *Alcolapia latilabris* (Seegers & Tichy, 1999) is the current valid name for this species. It was originally described as *Oreochromis (Alcolapia) latilabris*.

From ITIS (2015):

“Kingdom Animalia  
Subkingdom Bilateria  
Infrakingdom Deuterostomia  
Phylum Chordata  
Subphylum Vertebrata  
Infraphylum Gnathostomata  
Superclass Osteichthyes  
Class Actinopterygii  
Subclass Neopterygii  
Infraclass Teleostei  
Superorder Acanthopterygii  
Order Perciformes  
Suborder Labroidei  
Family Cichlidae  
Genus *Oreochromis*  
Species *Oreochromis latilabris* Seegers and Tichy, 1999”

### Size, Weight, and Age Range

From Froese and Pauly (2015):

“Max length: 6.2 cm SL male/unsexed; [Seegers and Tichy 1999]”

## **Environment**

From Froese and Pauly (2015):

“Freshwater; benthopelagic.”

## **Climate/Range**

From Froese and Pauly (2015):

“Tropical”

## **Distribution Outside the United States**

Native

From Hanssens and Snoeks (2006):

“Endemic to the lake Natron basin [Tanzania and Kenya] where it inhabits some southern and southeastern springs and affluents of the southern Lagoon. In addition, it was collected from one of two springs and the adjacent relatively wide stream between the Moinik River and the southwestern lagoon (Seegers and Tichy 1999).”

Introduced

No records of *Alcolapia latilabris* introductions were found.

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

No records of *Alcolapia latilabris* introductions were found.

## **Short Description**

From Froese and Pauly (2015):

“Dorsal spines (total): 13 - 14; Dorsal soft rays (total): 10-13; Anal spines: 3; Anal soft rays: 9 - 11. Unique head morphology. Wide lips and a remarkably long snout.”

## **Biology**

From Hanssens and Snoeks (2006):

“An omnivorous species but is mainly herbivorous living on the bluegreen algae covering the substrate (Seegers and Tichy 1999). It is a maternal mouthbrooder (Seegers and Tichy 1999).”

“IT has been collected in springs and the effluent streams which flow to Lake Natron (Seegers and Tichy 1999).”

## **Human Uses**

Anecdotal evidence of use in the aquarium trade was found.

The Florida Fish and Wildlife Conservation Commission has listed the tilapia *Alcolapia latilabris* as a prohibited species. Prohibited nonnative species (FFWCC 2018), “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.”

## Diseases

No information available.

## Threat to Humans

From Froese and Pauly (2015):

“Harmless”

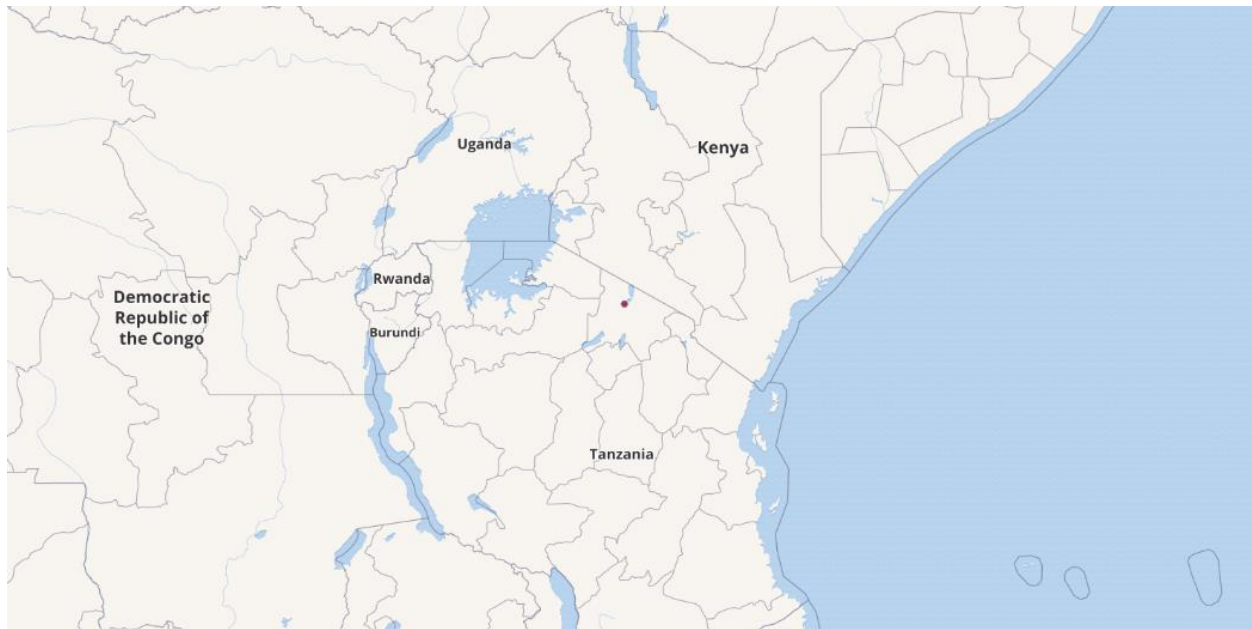
## 3 Impacts of Introductions

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No records of *Alcolapia latilabris* introductions were found.

## 4 Global Distribution

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**Figure 1.** Known global distribution of *Alcolapia latilabris*. Location is in northern Tanzania. Map from GBIF Secretariat (2017).

## 5 Distribution Within the United States

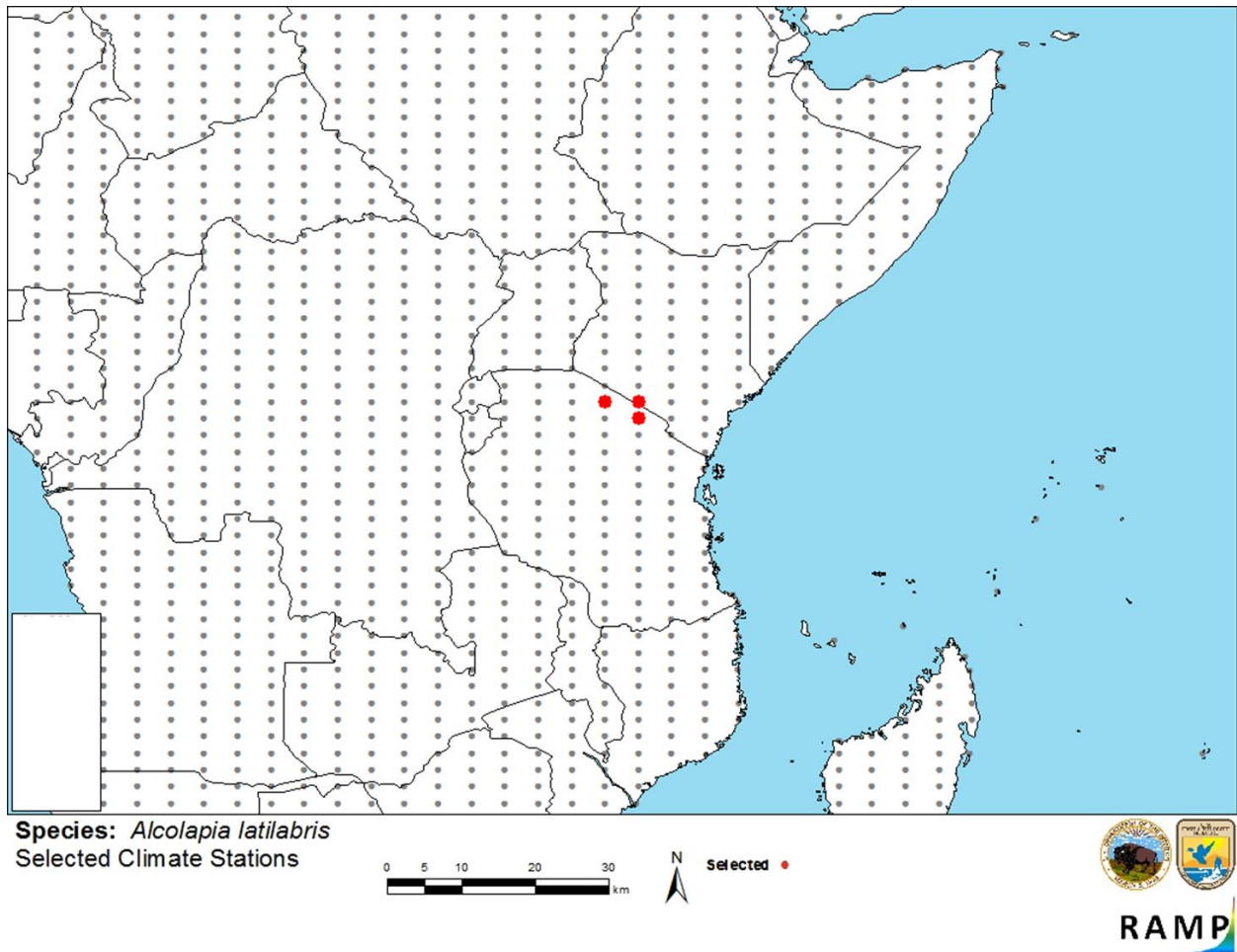
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No records of *Alcolapia latilabris* in the United States were found.

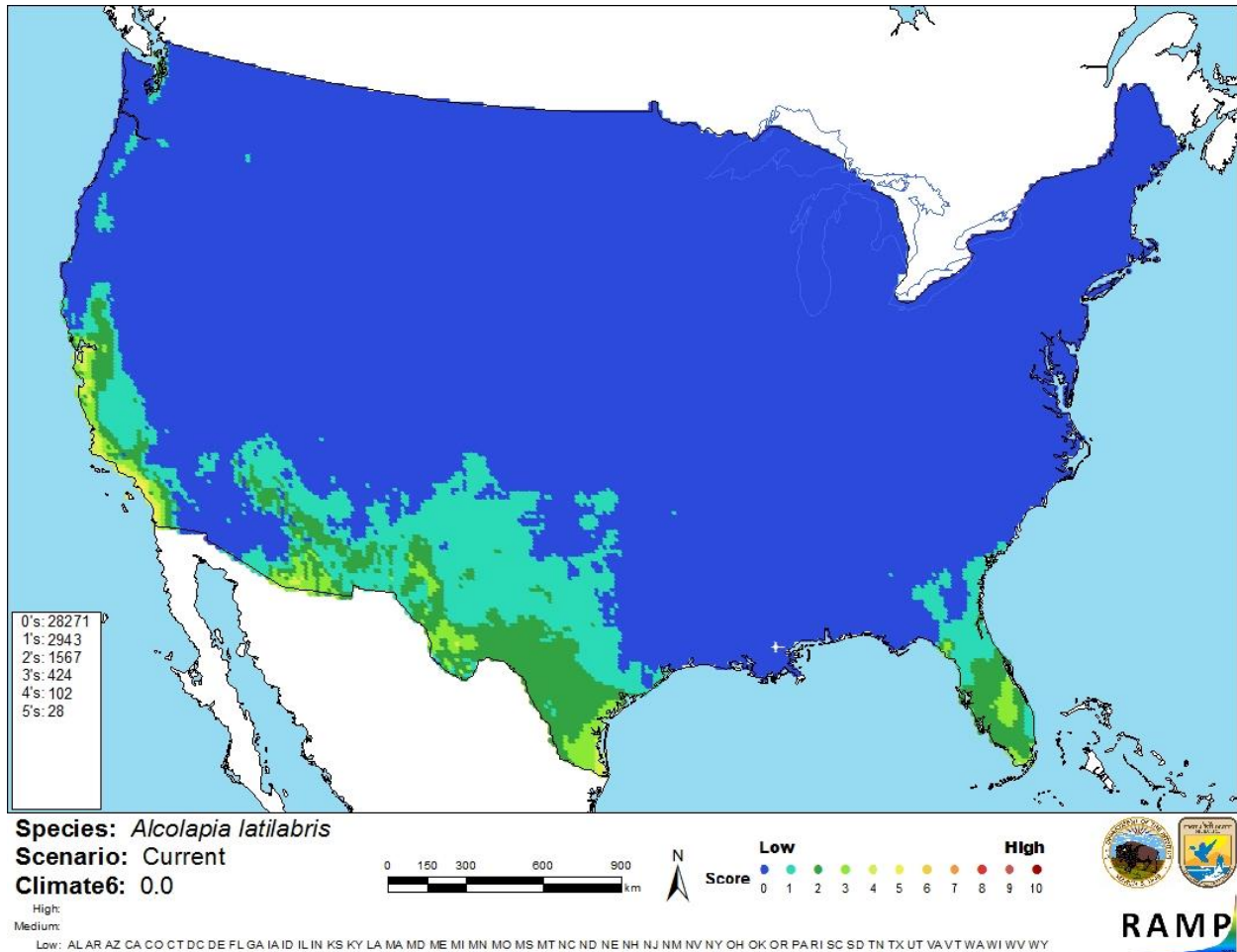
## 6 Climate Matching

### Summary of Climate Matching Analysis

The climate match for *Alcolapia latilabris* was medium for coastal California and the southern tip of Texas; it was low everywhere else. 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 medium or high climate match.



**Figure 2.** RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red; Tanzania) and non-source locations (grey) for *Alcolapia latilabris* climate matching. Source locations from GBIF Secretariat (2017).



**Figure 3.** Map from RAMP (Sanders et al. 2014) of a current climate match for *Alcolapia latilabris* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 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

The certainty of assessment is low. There was minimal quality information available for *Alcolapia latilabris*. No records of introduction were found. This species is endemic to hypersaline Lake Natron.

## 8 Risk Assessment

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### Summary of Risk to the Contiguous United States

*Alcolapia latilabris* is a tilapia species native to the Lake Natron basin on the border of Tanzania and Kenya. The history of invasiveness is uncertain. There were no records of introductions found. The climate match was low. The lake this species is endemic to is hypersaline so it is uncertain how that physiology would affect its ability to successfully establish a population in the United States. The certainty of assessment is low. There was very little information available about the species. 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** This species is endemic to hypersaline Lake Natron.
- **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.**

Eschmeyer, W. N., R. Fricke, and R. van der Laan, editors. 2017. Catalog of fishes: genera, species, references. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (September 2017).

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/>. (August 2018).

Froese, R., and D. Pauly, editors. 2015. *Alcolapia latilabris* (Seegers & Tichy, 1999). FishBase. Available: <http://www.fishbase.org/summary/54452>. (March 2015).

GBIF Secretariat. 2017. GBIF backbone taxonomy: *Alcolapia latilabris* (Seegers & Tichy, 1999). Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/2369997>. (September 2017).

Hanssens, M., and J. Snoeks. 2006. *Oreochromis latilabris*. The IUCN Red List of Threatened Species 2006: e.T60319A12348298. Available: <http://www.iucnredlist.org/details/60319/0>. (March 2015).

ITIS (Integrated Taxonomic Information System). 2015. *Oreochromis latilabris* Seegers and Tichy, 1999. Integrated Taxonomic Information System, Reston, Virginia. Available: [http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=648845](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=648845). (March 2015).

Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk assessment mapping program: RAMP. 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.**

Seegers, L., and H. Tichy. 1999. The *Oreochromis alcalicus* flock (Teleostei: Cichlidae) from Lake Natron and Magadi, Tanzania and Kenya, with descriptions of two new species. *Ichthyological Exploration of Freshwaters* 10(2):97–146.