

# *Tilapia dageti*

## Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, June 2015

Photo not available.

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

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#### Native Range

From Froese and Pauly (2015):

“Africa: Upper Senegal, upper and middle Niger system, upper Comoe, Volta, Mono, Bénoué and Lake Chad [Teugels and Thys van den Audenaerde 2003].”

#### Status in the United States

This species has not been reported in the U.S.

#### Means of Introductions in the United States

This species has not been reported in the U.S.

### 2 Biology and Ecology

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#### Taxonomic Hierarchy and Taxonomic Standing

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 *Tilapia*  
Species *Tilapia dageti* Thys van den Audenaerde, 1971”

“Taxonomic Status: valid”

## **Size, Weight, and Age Range**

From Froese and Pauly (2015):

“Max length : 40.0 cm TL male/unsexed; [Teugels and Thys van den Audenaerde 1991]; max. published weight: 1.0 kg [Ita 1984]”

## **Environment**

From Froese and Pauly (2015):

“Freshwater; demersal; potamodromous [Riede 2004].”

## **Climate/Range**

From Froese and Pauly (2015):

“Tropical; 24°C - 28°C [Baensch and Riehl 1995]; 15°N - 4°N”

## **Distribution Outside the United States**

Native

From Awaiss and Lalèyè (2015):

“Burkina Faso; Cameroon; Chad; Côte d'Ivoire; Ghana; Guinea; Kenya; Mali; Niger; Nigeria; Togo”

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 Froese and Pauly (2015):

“Dorsal spines (total): 14 - 16; Dorsal soft rays (total): 12-16; Anal spines: 3; Anal soft rays: 8 - 10. Diagnosis: lower pharyngeal bone about as long as broad with anterior lamella shorter than toothed area; median pharyngeal teeth not broadened; dorsal fin with 14-16 spines and 12-16 soft rays (mean 15, 13-15); 8-10 lower gill-rakers; bifurcated dark vertical bars on the upper half of flanks; dorsal and anal without orange-red upper margin; dorsal and caudal fins not or feebly blotched [Teugels and Thys van den Audenaerde 2003].”

## **Biology**

No information available.

## Human uses

From Froese and Pauly (2015):

“This species is harvested for human consumption.”

## Diseases

No OIE-notifiable diseases have been reported for this species.

## Threat to humans

From Froese and Pauly (2015):

“Harmless”

## 3 Impacts of Introductions

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No introductions of this species have been reported.

## 4 Global Distribution

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**Figure 1.** Global distribution of *T. dageti*. Map from GBIF (2015).

## 5 Distribution within the United States

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This species has not been reported in the U.S.

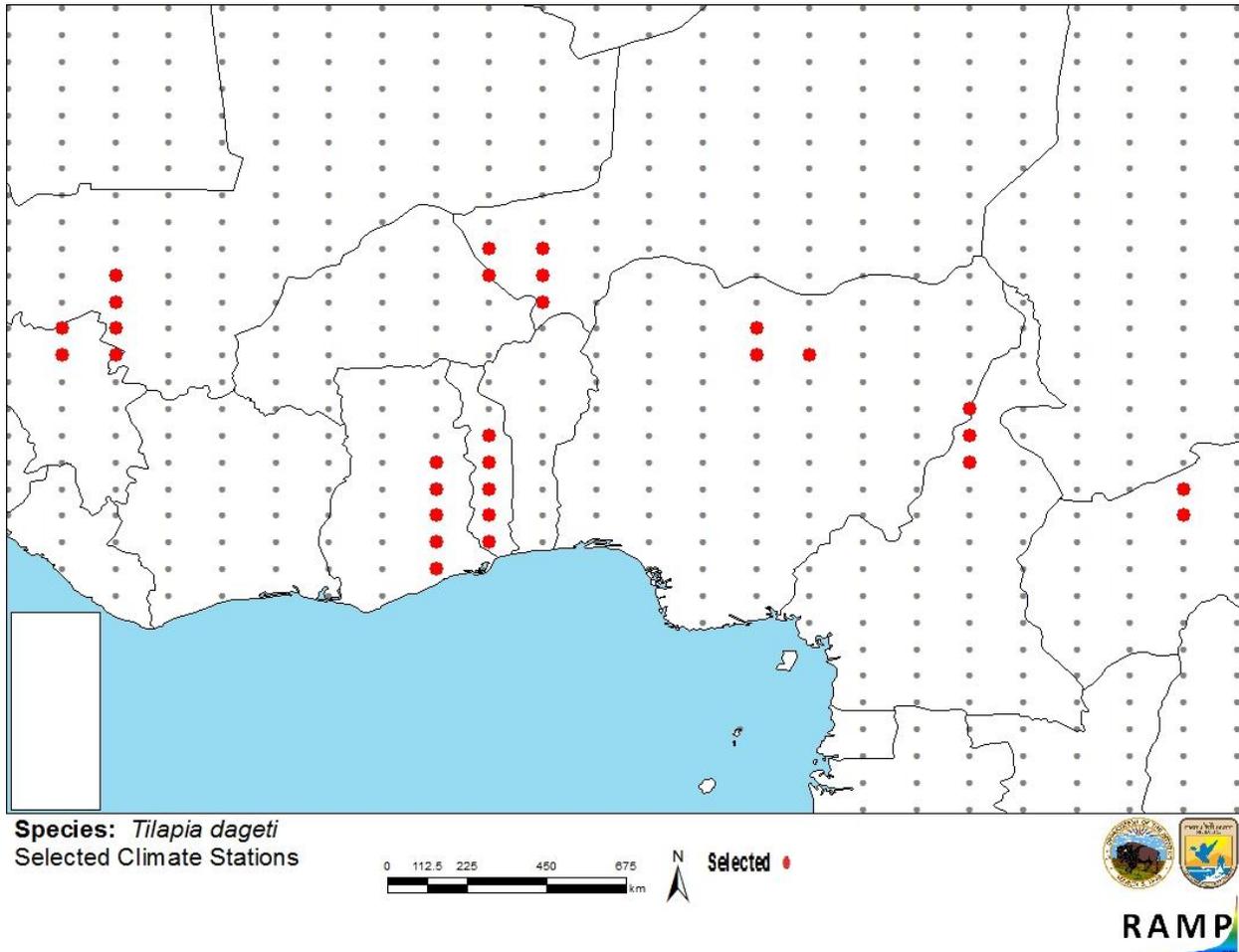
## 6 Climate Matching

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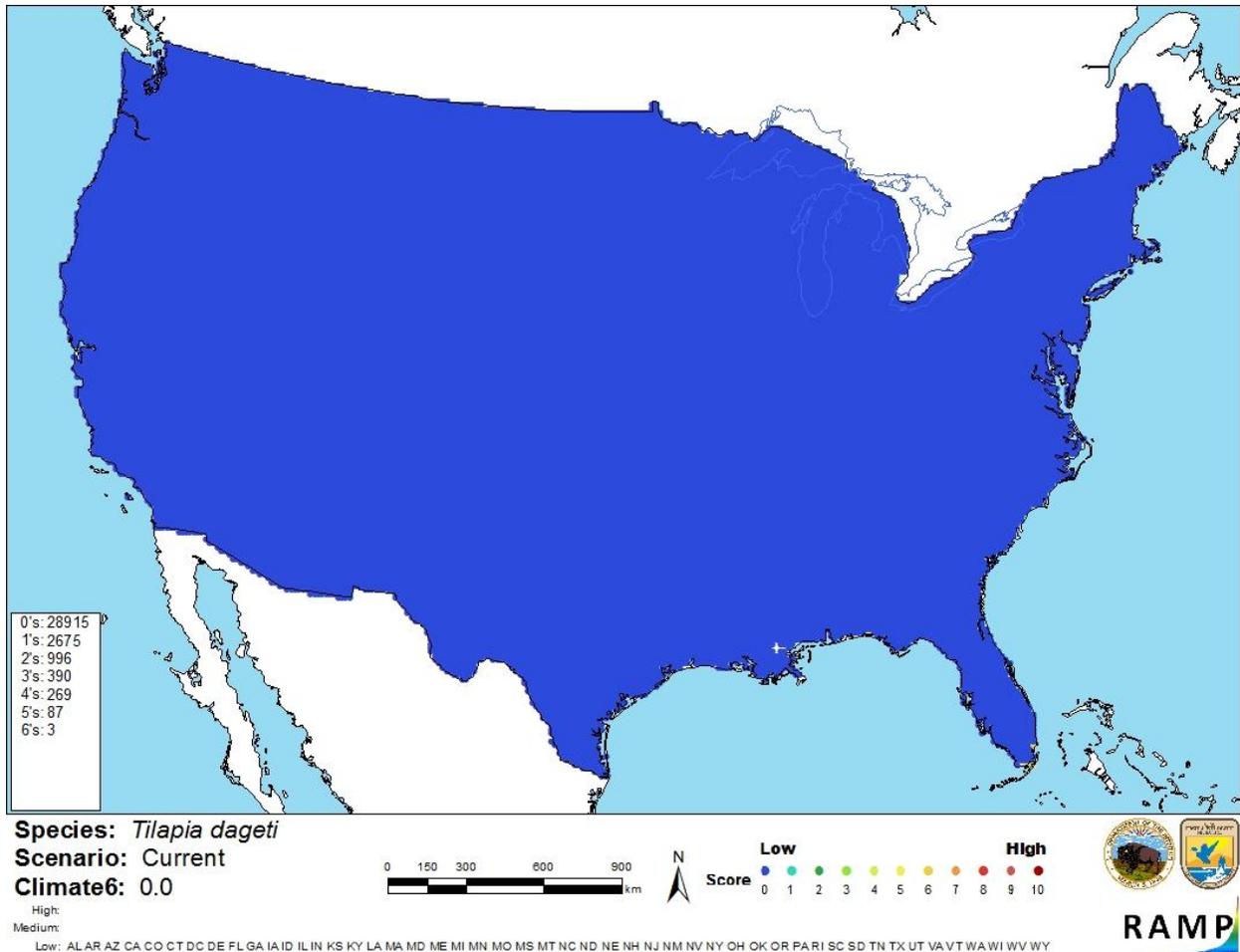
### Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) was medium at a few points in far southern Florida. Climate 6 proportion indicated that the contiguous U.S.

has a low climate match. The range for a low climate match is 0.000 to 0.005; the climate match of *T. dageti* is 0.0.



**Figure 2.** RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *T. dageti* climate matching. Source locations from GBIF (2015).



**Figure 3.** Map of RAMP (Sanders et al. 2014) climate matches for *T. dageti* in the continental United States based on source locations reported by GBIF (2015). 0= Lowest match, 10=Highest match. Counts of climate match scores are tabulated on the left.

## 7 Certainty of Assessment

Little information is available on the biology of *T. dageti* and it has not become established outside its native range. The certainty of this assessment is high because the lack of information about this species precludes any assessment other than “uncertain” risk.

## 8 Risk Assessment

### Summary of Risk to the Continental United States

*Tilapia dageti* is a demersal, potamodromous cichlid native to western and central sub-Saharan Africa. It has not been reported outside its native range. Because *T. dageti* has no history of invasion, it is currently impossible to know what impacts *T. dageti* might have if introduced to the U.S. Climate match to the contiguous U.S. is low. Overall risk is uncertain.

## **Assessment Elements**

- **History of Invasiveness (Sec. 3):** Uncertain
- **Climate Match (Sec.6):** Low
- **Certainty of Assessment (Sec. 7):** High
- **Overall Risk Assessment Category: Uncertain**

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## 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.**

Awaïss, A., and P. Lalèyè. 2010. *Tilapia dageti*. The IUCN Red List of Threatened Species, version 2015.2. Available: <http://www.iucnredlist.org/details/182634/0>. (June 2015).

Froese, R., and D. Pauly, editors. 2015. *Tilapia dageti* Thys van den Audenaerde, 1971. FishBase. Available: <http://www.fishbase.org/summary/2486>. (June 2015).

Global Biodiversity Information Facility (GBIF). 2015. GBIF backbone taxonomy: *Tilapia dageti* Thys van den Audenaerde, 1971. Global Biodiversity Information Facility, Copenhagen. Available: <http://www.gbif.org/species/2370631>. (June 2015).

Integrated Taxonomic Information System (ITIS). 2015. *Tilapia dageti* Thys van den Audenaerde, 1971. Integrated Taxonomic Information System, Reston, Virginia. Available: [http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=648964](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=648964). (June 2015).

Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk Assessment Mapping Program: RAMP. US 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.**

Baensch, H. A., and R. Riehl. 1995. Aquarien atlas, volume 4. Mergus Verlag GmbH, Verlag für Natur-und Heimtierkunde, Melle, Germany.

Ita, E. O. 1984. Kainji (Nigeria). Pages 43-103 in J. M. Kapetsky and T. Petr, editors. Status of African reservoir fisheries. CIFA Technical Paper 10.

Riede, K. 2004. Global register of migratory species - from global to regional scales. Final Report of the R&D-Projekt 808 05 081. Federal Agency for Nature Conservation, Bonn, Germany.

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Teugels, G. G., and D. F. E. Thys van den Audenaerde. 2003. Cichlidae. Pages 521-600 in D. Paugy, C. Lévêque, and G. G. Teugels, editors. The fresh and brackish water fishes of West Africa, volume 2. Coll. faune et flore tropicales 40. Institut de recherche de développement, Paris, France, Muséum national d'histoire naturelle, Paris, France and Musée royal de l'Afrique Central, Tervuren, Belgium.

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