

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

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

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 Awaïss 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

No introductions of this species have been reported.

4 Global Distribution



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

5 Distribution within the United States

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

6 Climate Matching

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.

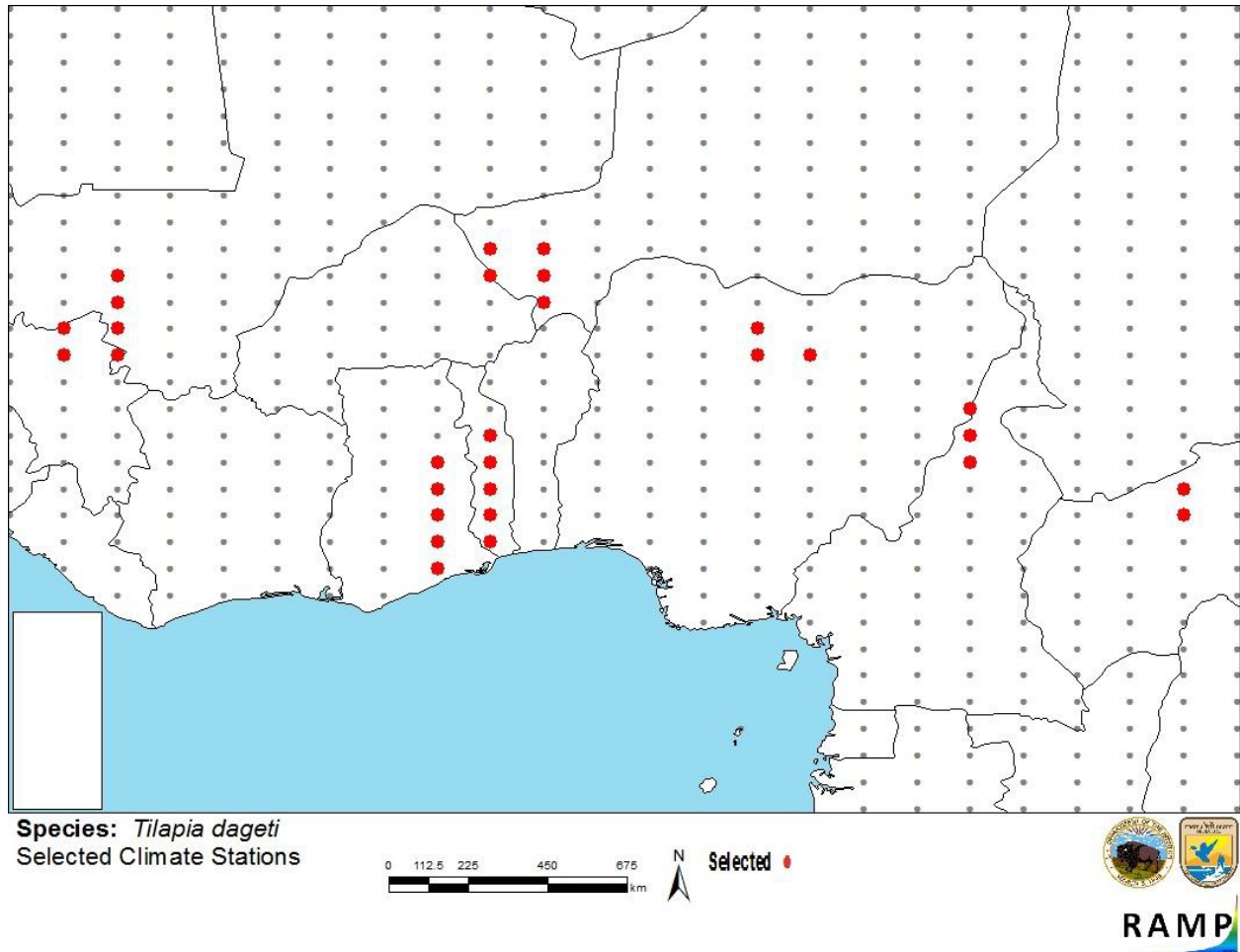


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *T. dageti* climate matching. Source locations from GBIF (2015).

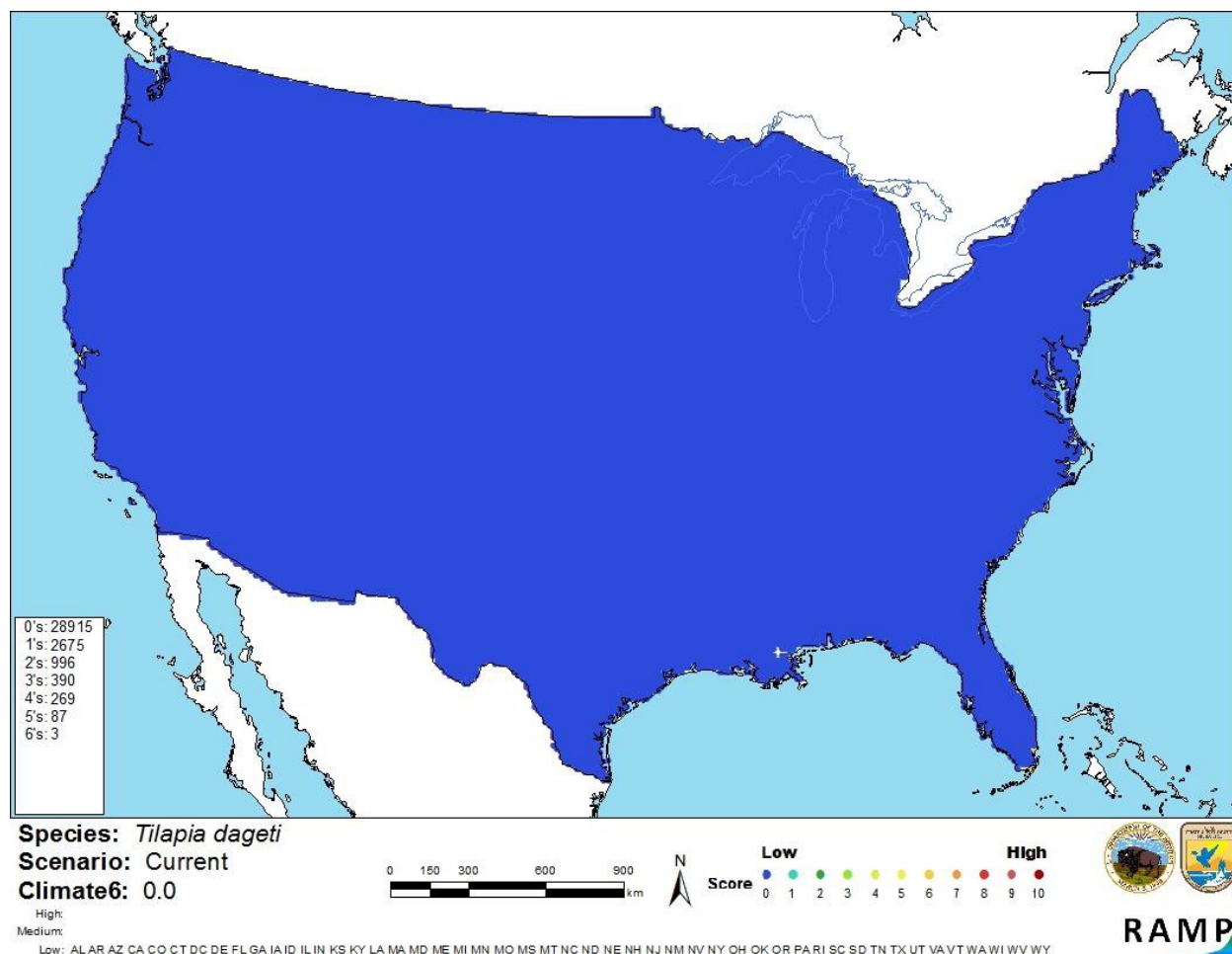


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *T. dageti* in the continental United States based on source locations reported by GBIF (2015). 0= Lowest match, 10=Highest match. Counts of climate match scores are tabulated on the left.

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

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.

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).

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

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.

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.

Teugels, G. G., and D. F. E. Thys van den Audenaerde. 1991. *Tilapia*. Pages 482-508 in J. Daget, J.-P. Gosse, G. G. Teugels, and D. F. E. Thys van den Audenaerde, editors. Check-list of the freshwater fishes of Africa (CLOFFA), volume 4. ISNB, Brussels; MRAC, Tervuren, Belgium; and ORSTOM, Paris.

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.