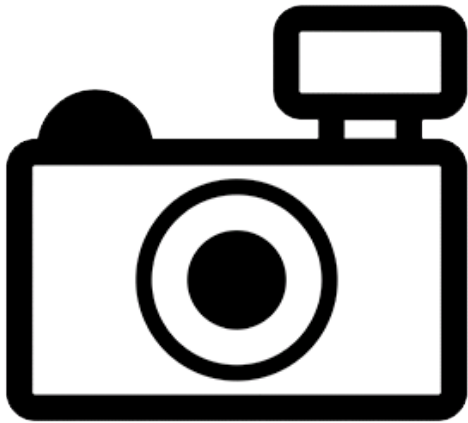


Blotched Filamented Barb (*Dawkinsia srilankensis*)

Ecological Risk Screening Summary

U.S. Fish & Wildlife Service, February 2013
Revised, March 2019
Web Version, 10/10/2019



No Photo Available

1 Native Range and Status in the United States

Native Range

From Froese and Pauly (2019a):

“Asia: restricted to the eastern slopes of the Knuckles Hills in the Kalu River at Pallegama, Sri Lanka at elevations of 300-500 m. Very rare and the only known existing population is in imminent danger of extinction due to the siltation of the Kalu caused by gem mining upstream.”

Status in the United States

No records of *Dawkinsia srilankensis* in the wild or in trade were found for the United States.

Means of Introductions in the United States

No records of wild populations of *Dawkinsia srilankensis* were found for the United States.

Remarks

Dawkinsia srilankensis was previously known as *Puntius srilankensis* (Fricke et al. 2019), and therefore a search was conducted under both names.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From Fricke et al. (2019):

“**Current status:** Valid as *Dawkinsia srilankensis* (Senanayake 1985).”

From Froese and Pauly (2019b):

“Biota > Animalia (Kingdom) > Chordata (Phylum) > Vertebrata (Subphylum) > Gnathostomata (Superclass) > [...] Actinopterygii (Class) > Cypriniformes (Order) > Cyprinidae (Family) > Barbinae (Subfamily) > *Dawkinsia* (Genus) > *Dawkinsia srilankensis* (Species)”

Size, Weight, and Age Range

From Froese and Pauly (2019a):

“Max length : 10.0 cm TL male/unsexed; [Pethiyagoda 1991]”

Environment

From Froese and Pauly (2019a):

“Freshwater; benthopelagic”

Climate/Range

From Froese and Pauly (2019a):

“Tropical”

Distribution Outside the United States

Native

From Froese and Pauly (2019a):

“Asia: restricted to the eastern slopes of the Knuckles Hills in the Kalu River at Pallegama, Sri Lanka at elevations of 300-500 m. Very rare and the only known existing population is in imminent danger of extinction due to the siltation of the Kalu caused by gem mining upstream.”

Introduced

No records of introductions of *Dawkinsia srilankensis* outside of its native range were found.

Means of Introduction Outside the United States

No records of introductions of *Dawkinsia srilankensis* outside of its native range were found.

Short Description

From Froese and Pauly (2019a):

“Adults of *Puntius srilankensis* are distinguished from *P. filamentosus*, *P. singhala* and *P. assimilis* by possessing a [sic] prominent black markings on body anterior to anal-fin origin. They differ from *P. exclamatio* by the absence of an elongate, tear-shaped black blotch above and [sic] [the] anal fin; from *P. arulius* and *P. tambraparniei* by having mouth inferior and lower lip medially absent (vs. mouth subterminal, lower lip entire) [Pethiyagoda and Kottelat 2005].”

Biology

From Froese and Pauly (2019a):

“A mid-water fish found in areas of rapidly flowing water with pebbly substrate (not found in silty substrate). With a clearly defined territory (of several square meters) and without lateral spatial preferences. Individuals of the same size often form loose schools. Presently not available in sufficient numbers to be exported by the aquarium trade.”

Human Uses

From Froese and Pauly (2019a):

“Fisheries: of no interest; aquarium: potential”

Diseases

No records of diseases found for *Dawkinsia srilankensis*. **No OIE reportable diseases (OIE 2019) recorded for *Dawkinsia srilankensis*.**

Threat to Humans

From Froese and Pauly (2019a):

“Harmless”

3 Impacts of Introductions

No records of introductions of *Dawkinsia srilankensis* outside of its native range were found.

4 Global Distribution

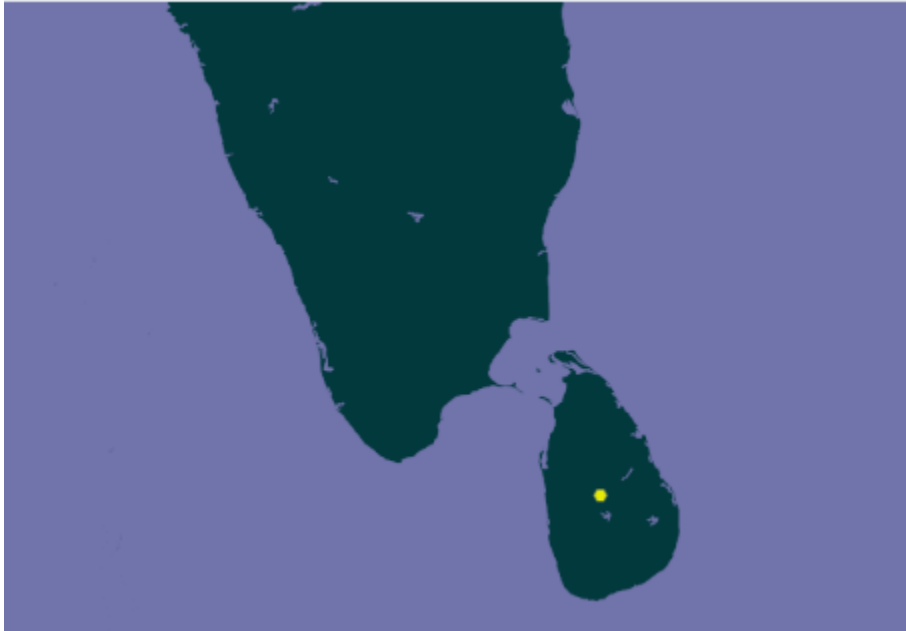


Figure 1. Known global distribution of *Dawkinsia srilankensis*. Location is in Sri Lanka. Map from GBIF Secretariat (2019).

5 Distribution Within the United States

No records of wild populations of *Dawkinsia srilankensis* were found for the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match for *Dawkinsia srilankensis* was low for the vast majority of the contiguous United States. There were no areas of high climate match. Southern Florida was the only area with a medium climate match. The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous United States was 0.000, low. (Scores between 0.000 and 0.005, inclusive, are classified as low.) All States had low individual climate scores except Florida, which had a medium climate score.

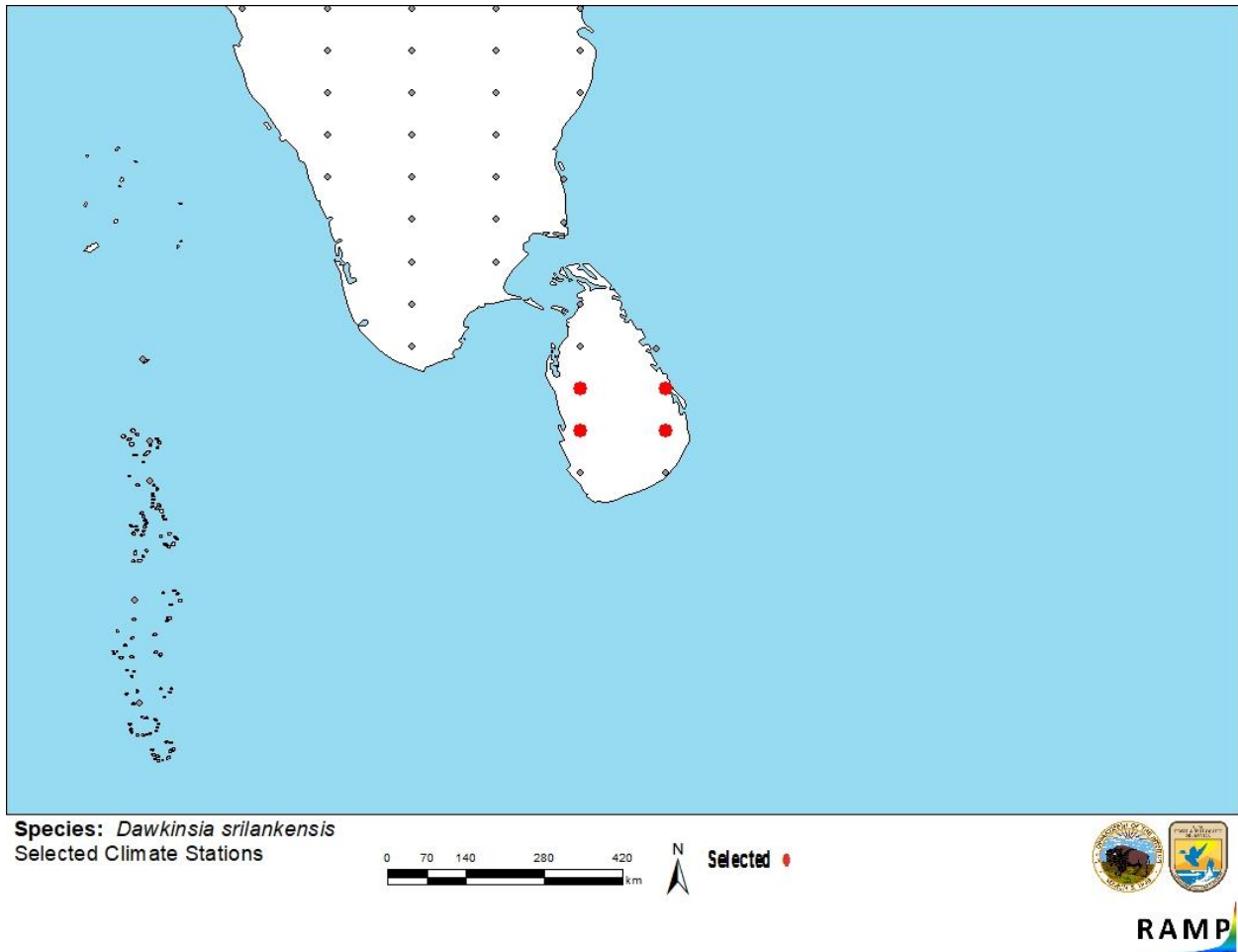


Figure 2. RAMP (Sanders et al. 2018) source map showing weather stations in Sri Lanka selected as source locations (red) and non-source locations (gray) for *Dawkinsia srilankensis* climate matching. Source locations from GBIF Secretariat (2019). Selected source locations are within 100 km of one or more species occurrences, and do not necessarily represent the locations of occurrences themselves.

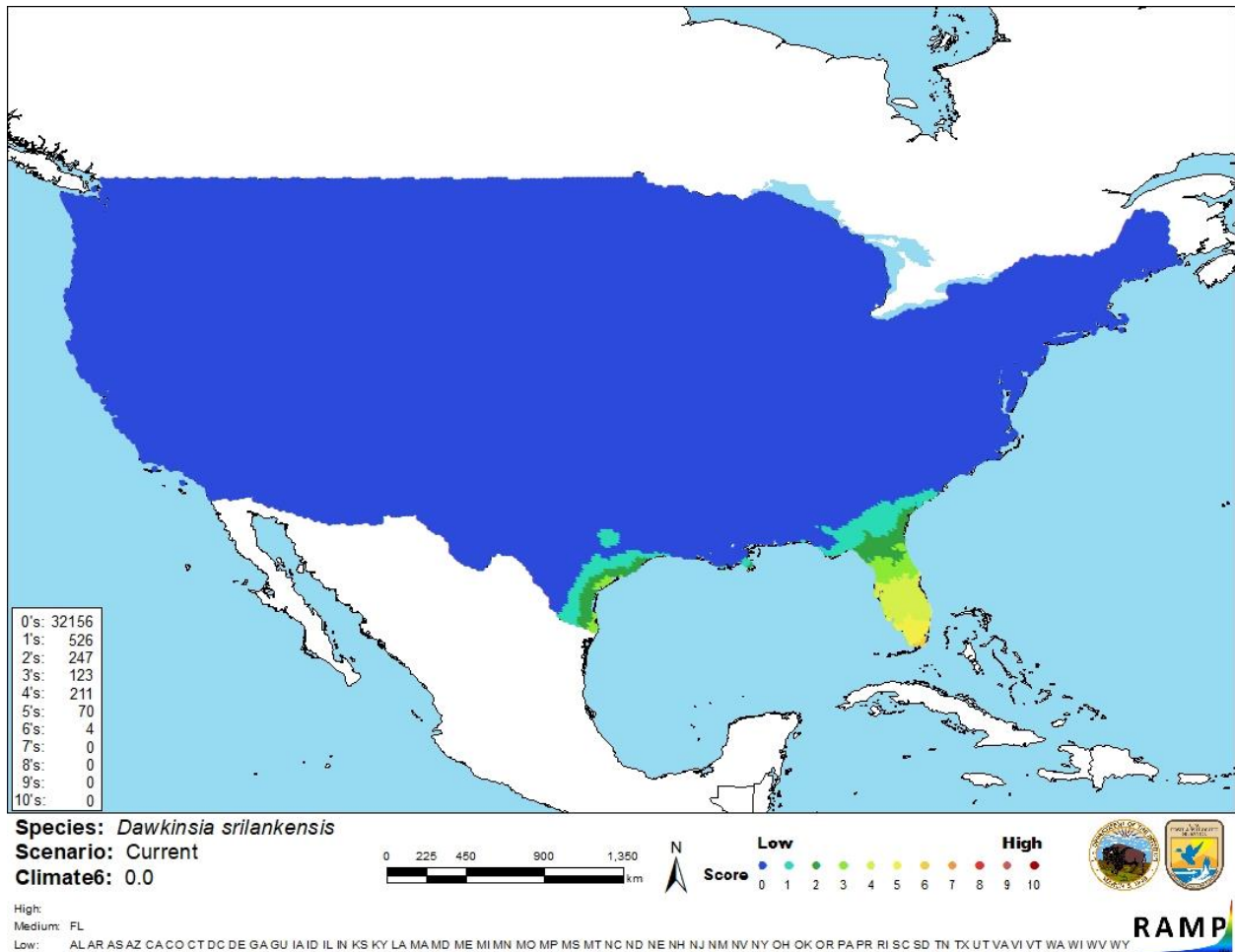


Figure 3. Map of RAMP (Sanders et al. 2018) climate matches for *Dawkinsia srilankensis* in the contiguous United States based on source locations reported by GBIF Secretariat (2019). 0 = Lowest match, 10 = Highest match.

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
≥ 0.103	High

7 Certainty of Assessment

The certainty of assessment for *Dawkinsia srilankensis* is low. Information about the biology and distribution of *D. srilankensis* was available. No reports of introductions of *Dawkinsia srilankensis* were found, so impacts of introduction are unknown.

8 Risk Assessment

Summary of Risk to the Contiguous United States

The Blotched Filamented Barb (*Dawkinsia srilankensis*) is a fish restricted to Sri Lanka. According to Froese and Pauly (2019a), this species is very rare and is in danger of extinction. This history of invasiveness is uncertain. It has not been reported as introduced or established anywhere in the world outside of the native range. This species is not harvested for the aquarium trade due to its low numbers. The overall climate match for the contiguous United States was low. The only area with a medium climate match was southern Florida. The certainty of assessment is low due to lack of information. The overall risk category for *Dawkinsia srilankensis* 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 rare with a restricted distribution.**
- **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.

Fricke, R., W. N. Eschmeyer, and R. van der Laan, editors. 2019. Eschmeyer's catalog of fishes: genera, species, references. Available: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>. (March 2019).

Froese, R., and D. Pauly, editors. 2019a. *Dawkinsia srilankensis* (Senanayake, 1985). FishBase. Available: <http://www.fishbase.org/summary/Dawkinsia-srilankensis.html>. (March 2019).

Froese, R., and D. Pauly, editors. 2019b *Dawkinsia srilankensis*. In World Register of Marine Species. Available: <http://www.marinespecies.org/aphia.php?p=taxdetails&id=1011985>. (March 2019).

GBIF Secretariat. 2019. GBIF backbone taxonomy: *Dawkinsia srilankensis* (Senanayake, 1985). Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/7823716>. (March 2019).

OIE (World Organisation for Animal Health). 2019. OIE-listed diseases, infections and infestations in force in 2019. Available: <http://www.oie.int/animal-health-in-the-world/oie-listed-diseases-2019/>. (October 2019).

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

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.

Pethiyagoda, R. 1991. Freshwater fishes of Sri Lanka. The Wildlife Heritage Trust of Sri Lanka, Colombo, Sri Lanka.

Pethiyagoda, R., and M. Kottelat. 2005. A review of the barb of the *Puntius filamentosus* group (Teleostei: Cyprinidae) of southern India and Sri Lanka. Raffles Bulletin of Zoology Supplement 12:127–144.