

Lake Eustis pupfish

Cyprinodon variegatus hubbsi



(Photo by FWC)

Taxonomic Classification

Kingdom: Animalia

Phylum: Chordata

Class: Actinopterygii

Order: Atheriniformes

Family: Cyprinodontidae

Genus/Species: *Cyprinodon variegates*

Subspecies: *Cyprinodon variegates hubbsi*

Common Name: Lake Eustis pupfish

Listing Status

Federal Status: Not Listed

FL Status: State Species of Special Concern

FNAI Ranks: G5T2Q/S2 (Globally: Demonstrably Secure, Sub sp. Imperiled [classification as subspecies questioned/State: Imperiled)

IUCN Status: Not ranked

Physical Description

The Lake Eustis pupfish is a small fish that can reach up to three inches (7.6 centimeters) in total body length. This species generally has a light brown body with dark vertical stripes around the body and a white dorsum (back), except for breeding males who have a blue back with a clear tail and back fin (Florida Natural Areas Inventory 2001).

Life History

The diet of the Lake Eustis pupfish primarily consists of crustaceans and aquatic insect larvae (Johnson and Snelson 1978).

Little is known about the reproduction of the Lake Eustis pupfish. Female pupfish spawn throughout the year, with the female carrying seven to 29 eggs at one time. During spawning, the males will develop nests by constructing depressions in the sand while vigorously defending it from other males. Females are not chased away and are courted instead (Johnson and Snelson 1978).

Habitat & Distribution

The Lake Eustis pupfish inhabits freshwater lakes along clean, white sandy beaches subject to heavy wave action in areas largely devoid of vegetation in Lake, Marion, and Orange counties (Gilbert et al. 1992).

Threats

The small geographic range and narrow habitat niche inhabited by this species in the heavily populated Central Florida region suggests that habitat loss and contamination are potential threats to the Lake Eustis pupfish. Lack of exotic aquatic vegetation management, alteration of lake shore habitat, and introduction of non-native, predatory fish are other threats that may cause population declines.

Conservation & Management

The Lake Eustis pupfish is protected as a State Species of Special Concern by [Florida's Endangered and Threatened Species Rule](#).

[-Biological Status Review \(BSR\)](#)

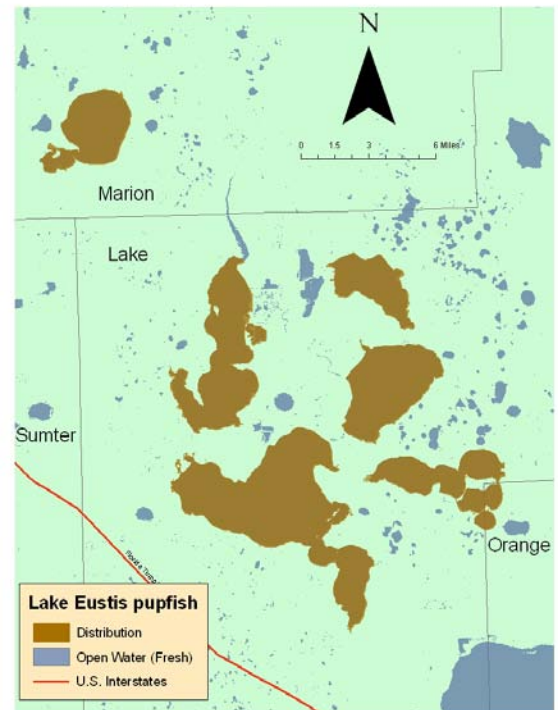
[-Supplemental Information for the BSR](#)

Other Informative Links

[Florida Natural Areas Inventory](#)

References

Florida Natural Areas Inventory. 2001. Field guide to the rare animals of Florida.
http://www.fnai.org/FieldGuide/pdf/Cyprinodon_variegatus_hubbsi.PDF



Gilbert, C.R., W.E. Johnson, and F.F. Snelson. 1992. Lake Eustis pupfish *Cyprinodon variegatus hubbsi*. Pp. 194-199. In C.R. Gilbert, ed., Rare and Endangered Biota of Florida. Vol. II. Fishes. University Presses of Florida, Gainesville.

Johnson, W.E., and F.F. Snelson. 1978. Lake Eustis pupfish, *Cyprinodon variegatus hubbsi* Carr. Pp. 15-17 in C.R. Gilbert, ed., Rare and Endangered Biota of Florida. Vol. 4. Fishes. University Press of Florida, Gainesville.