

Daniel Ruiz

Bluehead_chub_DC14

Taxonomic Information:

Kingdom: Animalia

Phylum: Chordata

Class: Actinopterygii

Order: Cypriniformes

Family: Cyprinidae

Genus: *Nocomis*

Species: *N. Leptocephalus*

Scientific name: *Nocomis leptocephalus*

Location: (Duncan Creek Park in Gwinnett County, GA) – 34°04'20.6"N 83°54'19.1"W

Shannon Diversity Index

The Shannon index value (H') is an important numerical value that specifies the biodiversity of a site. In this case, the Shannon index value (H') for Duncan Creek Park where *Nocomis leptocephalus* was collected was 1.4217.



Morphology

Key morphological characteristics of Bluehead chub as seen in the figure above includes noticeably large, uniform scales throughout body, red coloration on the fins, and a darkened lateral band. They have a weak falcate pectoral fin and the reddish-orange coloration seen in the caudal fin is also seen on the iris of the eyes. Adult Bluehead chubs can grow fairly large with lengths varying between 70 and 160 mm.

Location, Reproduction & Interactions

Bluehead chubs are freshwater fishes that are native to Southeastern United States, and they reside in creeks, headwater streams, and rivers with sandy or rocky floors. The water temperatures they live ranges from warm to cool waters that are somewhat opaque (turbid). Bluehead chubs reproduce by external fertilization which is where the female fish releases eggs onto the bottom of a stream or river which allows males to release sperm to fertilize the eggs. The time of year when they spawn in usually in the spring and Bluehead offspring matures in about three years. Bluehead chub feed on insects and plants and they do not interact much with other species as they are mostly independent.

Genomic Sequence:

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GCTTTAAGCCTACCTTACTCGAGCCGAATTAAGCCAACCCGGATCACTCCTGGGTGA
TGACCAGATTTATAATGTAATCGTCACTGCCCACGCCTTCGTAATAATTTTCTTTATA
GTAATGCCAATTCTGATCGGCGGGTTTGGGAATTGGCTTGTACCTCTAATAATTGGT
GCACCAGACATAGCATTCCCACGAATAAATAACATAAGCTTCTGACTCCTACCCCA
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ACCGTATAACCCTCCTCTCGCAGGCAACCTCGCCCACGCAGGAGCATCAGTAGATCTT
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