

BlueHeadChub\_DC12F22

# *Nocomis leptocephalus*

Stephanie Lopez

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**Kingdom:** Animalia

**Class:** Teleostei

**Family:** Cyprinidae

**Genus:** Nocomis

**Species:** *Nocomis leptocephalus*

Location: Duncan Creek Park (34.0712° N, 83.9026° W)

H' Values: 1.421735033

Var H' = 0.0014698

## Morphology

The *Nocomis Leptocephalus* (commonly known as the Blue Head Chub) can be identified by its unique physical features of a short snout and large scales. They can also be distinguished by their visible features which include bright orange fins, and brassy green color. They can occasionally be identifiable from a spot found on the caudal fin. The average adult size ranges from 3 to 6 cm.

## Ecology

The *Nocomis Leptocephalus* reside in Freshwater such as creeks and small to medium rivers with warm to cool waters. They are typically found in areas with sand or gravel which is necessary for reproduction. They use these areas to build nests that protect and fertilize their eggs. The females release their eggs to areas with sand or gravel, where the male can then fertilize them and make a nest to guard them until they hatch. Yellowfin shiners are also known to be dependent on Bluehead Chubs. This is because the shiners cannot reproduce without a pre-existing chub nest. In exchange,

the yellowfin shiner, increases the chub's chance of survival. When the yellowfin shiners lay their eggs in a bluehead chubs' nest, the bluehead chub eggs now have a reduced chance of being attacked by a predator fish since. This is because once the yellowfin shiners are introduced, there is a 50/50 chance of either fish offspring to get attacked rather than 100% bluehead chubs if left in the nest alone.

## **DNA Sequence**

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NCCTTNCTTCTTTTCCCCAAAAGCCAGGAAACNNGGGGCCCGAAGCGGGAAAAGTGGG
AACCGCTAAAAGCCTACCTTAAAAGAGCCGAAAAAGCCAACCCGGAGCACTCCTGGG
NGATGACCAGAGTTATAACGTAATCGTCACTGCCCACGCCTTCGTAATAATATTCTTTA
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GCACCAGACATAGCATTCCCACGAATAAATAACATAAGCTTCTGACTCCTACCCCAT
CATTCCTGTTACTGTTAGCCTCTTCTGGTGTTGAGGCTGGGGCTGGGACAGGTTGAACC
GTATACCCTCCTCTCGCAGGCAACCTCGCCCACGCAGGAGCATCAGTAGATCTTACGA
TCTTCTCTTTCATTTAGCAGGTGTGTCATCAATTTTAGGAGCAGTTAACTTTATTACC
ACAATCATTAACATGAAACCCCCAGCCATTTCCCAATATCAAACACCTCTCTTTGTATG
AGCCGTA CTTGTAACCGCTGTTCTTCTACTTCTATCGCTACCTGTCTGGCTGCGGGTA
TTACAATACTTCTCACTGATCGTAACCTAAACACCACATTTTTTGACCCCGCAGGCGGA
GGAGACCCAATCCTGTACCAACACCTATTCTGATTCTTCGGTCACCCTGAAGTGTCAA
GTTTTTTTCCCGGGA
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