

Blue Gill Fish



Figure 1. Bluegill fish.



Figure2. Bluegill fish caught at Lake Lanier, Buford, GA

Blue Gill fish is a species of fish native to North America and that lives in streams rivers, lakes, and ponds. This species of fish usually lives in rocky places with warm and quiet water. They would eat anything that fits on their mouth making the aquatic insect their favorite meal.

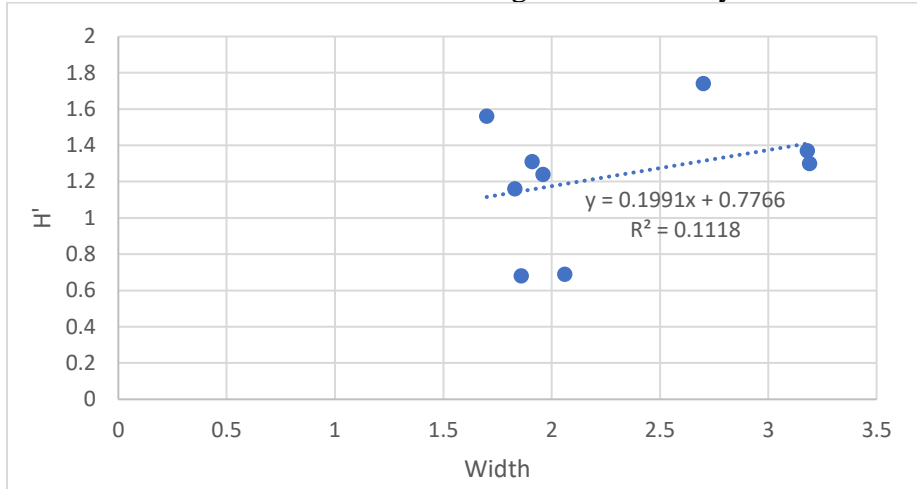
When they reproduce their eggs are often eaten by other bluegills, sunfishes, snails, and other different species of fishes that lives in the same stream. They are very fast so once they reach maturity, they are hard to catch so predators like the largemouth bass have a harder time catching them.

The blue gill has a black spot at the edge of the dorsal fin. His head and chin are dark blue. It has a yellow breast, and it usually has a purple color on the lower jar. They are oval and flattened from side to side. Males are more colorful than females, males are larger than females and usually their size is between 7 to 15 inches.

When the bluegill is old enough and it starts reproducing everything depends on the temperature of the water, the competition, and the food. They build nest, in shallow waters with a lot of sand or rocks at the bottom. A female can produce around 60.000 eggs.

The DNA of this Blue Gill fish was collected in Little Mulberry Park, located in Gwinnet County, Dacula, Georgia. This location was a headwater stream, and it is located in the Atlantic Ocean stream. These are pictures of a blue gill it is not the one that was caught but it gives an idea of how they look.

The following graph shows a regression between the H' values and the width from the different locations fishes were collected including Little Mulberry Park and this specific blue gill fish



Graph 1: Regression data with H' values and width of the different streams.

The following table shows a Shannon H' value for this specific Bluegill fish that was found in Little Mulberry Park

Taxonomy information of a Bluegill fish

| | |
|---------|---------------------|
| Kingdom | Animalia |
| Phylum | Chordata |
| Class | Actinopterygii |
| Order | Perciformes |
| Family | Centrarchidae |
| Genus | Lepomis |
| Specie | Lepomis macrochirus |

DNA Sequence of a Bluegill fish

LMF16_CO1

TCCGGGTGCTGAAGAAGAAGGATGTGGGTCCCCGCCCCCGCTGGGTCAAAGAAAG
TGGT
GTTTAGATTACGGTCTGTAAGTAGTATTGTGATGCCTGCAGCAAGGACTGGAAGGGA
AAG
CAGGAGTAAGACGGCAGTAATTAGGACTGATCAGACAAATAAAGGGGTCTGGTACT
GGGA
AATAGCAGGGGGCTTCATGTTAATAATTGTGGTAATAAAATTAATAGCTCCCAGGAT
TGA
AGAGACCCCTGCGAGATGCAGGGAGAAGATAGTAAGGTCGACTGATGCTCCTGCAT
GGGC
TAGGTTACCAGCGAGAGGGGGGTAAACGGTTCATCCTGTGCCAGCCCCGGCTTCAA
CCCC
GGAGGAGGCGAGAAGAAGAAGGAAAGAGGGGGGGAGAAGTCAAAGCTTATGTTA
TTTAT
TCGGGGGAATGCTATATCGGGGGCTCCAATCATTAAATGGGACAAGTCAGTTGCCAA
AGCC
ACCAATCATAATTGGTATTACTATAAAGAAAATTATTACGAATGCATGTGCTGTCAC
AAT
TACGTTATAAATTTGGTCGTCGCCCAGGAGAGCGCCTGGTTGGCTGAGCTCTGCTCG
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