

Brittany Conklin

Redbreast sunfish_RS8F22



PHOTO OF SAMPLE SPECIES: LEPOMIS AURITUS

TAXONOMIC INFORMATION

Kingdom: Animalia

Phylum: Chordata

Class: Actinopterygii

Order: Perciformes

Family: Centrarchidae

Genus: *Lepomis*

Species: *L. auratus*

COLLECTION & DIVERSITY INFORMATION

Redbreast sunfish_RS8F22 was collected from a stream in Rock Springs Park, Gwinnett County GA, coordinates 34.0400° N, 84.0209° W. The Shannon H' value associated with this location is 1.324792053 and the H' var for this location is 0.004891892.

DISTINGUISHING MORPHOLOGICAL CHARACTERISTICS

Redbreast sunfish, like other sunfish, have deep, moderately compressed bodies with a blue/green coloration. Both males and females have vertical rows of red-brown/orange spots on the sides of their bodies. The name “red breast” comes from the red/orange complexion that breeding males can develop, but otherwise they have a yellowish color on belly, breast, and lower parts of the head. The operculum or gill cover has a distinguishing long black lobe. They may have up to a dozen vertical bars on its side, which grow wider and fainter as they mature and they frequently have bright, broken lines near their eyes. Red breast sunfish typically have 10 or 11 spines on their dorsal fins and

BASIC ECOLOGY

Redbreast sunfish frequent cool, slow-moving water such as pools and backwaters of streams and rivers in the eastern United States and Canada. They prefer areas with woody debris, stumps, undercut banks, and rocky points with a sandy bottom and generally avoid areas that are stagnant or heavily vegetated. They are also very sensitive to pH, requiring a pH between 7.0 and 7.5. Redbreast sunfish are opportunistic feeders, competing with other sunfish and larger predatory fish for immature aquatic insects, mayflies, small fish, and dragonfly larvae. Larger piscivorous fish are the main predators of smaller redbreast sunfish. The redbreast sunfish is a spring spawner when water temperature is between 16–26 °C. The male builds a nest or uses a previously abandoned nest that the females enters, lays her eggs, and leaves. The male Redbreast sunfish remains to guard the eggs, and in some cases, the young for a short period. They spawn typically reach reproductive maturity in the second year of life, with a maximum lifespan of around eight years. The Redbreast sunfish experience little disturbance from human activity due to large populations and secluded areas.

DNA SEQUENCE

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NCCNCCTTCTTCTCCCCANCNATAGAATAGAAGAAGGGGANGAAGCCGGANNGGTAGAGCACAGTCTATAAGCCTACTTNAATAGA
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