

Jennifer Regnier

Redbreast Sunfish: LM 1

Also known as *Labrus auritus*

Kingdom: Animalia

Phylum: Chordata

Class: Actinoterygii

Family: Centrarchidae

Family: *Lepomis*

Species: *Lepomis auritus*



Sample data:

Sample collected from a headwater stream located in Little Mulberry Park (Latitude: 34.0533673 Longitude: -83.8911392) of Gwinnett County, Georgia, USA via a minnow trap baited with cooked chicken breast. Shannon index value (H') for site where fish was collected was found to be 1.722 and Shannon Equitability Index (EH): 0.747933.

Morphological characteristics

Average length 4" or 11 cm. Largest recorded weight 0.79kg. Overall body coloration olive-green with slight vertical striping or bars that increase in intensity approaching the lateral line. Distinct feature of an exaggerated black opercular flap extending from gill plate, larger than those seen in other sunfish of its class. Males have darker and more apparent ventral coloration of orange to red than those seen in females. Caudal or rudder fin may have orange to red tint.

Ecology

Distribution

Native range of eastern parts of United States and Canada in cool-rivers with currents but also observed in streams and freshwater lakes. Preferred habitat structures around bank areas and submerged trees. Underwater or overhanging trees provide protection from the sun and other dangers, along with a space to hunt mayflies, smaller fish, and dragonflies. Preferred pH range of 7.0 – 7.5. Lower survival rates linked to changes in pH and lack of movement within the water.

Reproduction:

After reaching reproductive maturity at two years of age, individuals may mate with multiple partners. Female lays her eggs in a nest in shallow water made by a male that guards the eggs and may subsequently protect fry for a short span of time after hatching. Spawn will move towards deeper water and may live for up to eight years.

Species interactions:

Redbreast Sunfish young are prey for larger piscivorous fish due to the shared habitat area. They compete with other sunfish and larger predatory fish for food sources consisting of mainly larva from mayflies, dragonflies, and other small fish or crayfish. Human influence can be seen in the landscapes of their habitats by clearing branches and other debris that sunfish utilizes for protection of solar radiation, temperature, and hiding places.

Sample DNA Sequence:

>LM1F22

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