



Fishes of Town Branch Creek



Southern Redbelly Dace
(Intolerant)



Fantail Darter
(Intolerant)



Bluegill Sunfish
(Tolerant)



Central Stoneroller
(Intermediate)

Blue Thumb & Town Branch Creek

Blue Thumb is an organization that focuses on stream health within Oklahoma. Stream health is a measure of the chemical, physical and biological factors that affect living things in the stream. Town Branch creek is a Blue Thumb monitoring site in Tahlequah. Blue Thumb uses a letter grading scale for water quality with A being the best and E being the worst. Town Branch Creek has consistent grade of D. Because of this consistently low grade, Blue Thumb continues to monitor the stream and uses fish as one indicator of the streams health.

OF FISH SPECIES
PRESENT BY
TOLERANCE LEVEL 2013

■ intolerant ■ tolerant ■ intermediate



OF FISH SPECIES
PRESENT BY TOLERANCE
LEVEL 2017

■ intolerant ■ tolerant ■ intermediate



What are fish?

Fish are aquatic organisms that lack limbs with digits and have gills. Fish can be used as good bioindicators because of their ability to respond to nutrient levels and health of a stream. Indicator species such as the Southern Redbelly dace, Fantail darter, Sunburst darter are intolerant to low water quality. Other fish such as the Bluegill sunfish, Green sunfish, Creek chub, and Central Stoneroller aren't considered indicator species because they are more tolerant to lower water quality.

Fishes of Town Branch Creek

Town branch creek is home to a diversity of fish species. Common species of the creek are the Southern Redbelly dace, Bluegill sunfish, Central Stoneroller, Orangethroat darter, Creek chub and different species of sunfish. The Southern redbelly dace pictured to the left is an intolerant indicator species that is present in high numbers. Central stonerollers are another indicator species that is also present in high numbers and pictured on the left. A commonly present tolerant species is the Bluegill sunfish pictured to the left.

Why do we care?

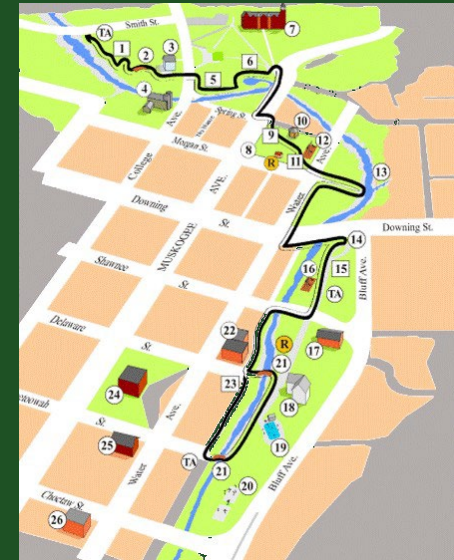
As pictured to the right, Town Branch creek goes through the town of Tahlequah. This has raised concern with the water quality due to runoff from the surrounding areas. If the health of this stream isn't monitored, many of these species could be at risk leading to a decline in population numbers. This would deprive us of an indicator and leave the stream with little to no life for the public to observe. We see that the number of intolerant species increased between 2013 and 2017, so we want to continue to see that trend moving forward.



Creek Chub
(Intermediate)



Sunburst Darter
(Intolerant)



General map of Town Branch
flowing through downtown
Tahlequah