



OKALOOSA DARTER

Etheostoma okaloosae



LOYOLA
UNIVERSITY
NEW ORLEANS

SURVEYING



Survey methods

Visual surveying is possible in clear streams where the darter is found. This method provides an accurate population density estimate, reduces adverse handling effects and habitat disturbance. The traditional survey method of seining with nets does not detect presence of darters as consistently as visual surveys.

MONITORING



Monitoring methods

Monitoring for the Okaloosa darter is conducted at the end of the summer when both adults and new recruits are present in the stream. This is also the time when the creeks are most suitable for the visual surveying.

Fish counts are coupled with habitat evaluations, stream morphology mapping and water quality measurements to evaluate and compare changes with fluctuations in the darter population. At some locations darters are marked with a harmless fluorescent dye to monitor movement, pictured above.

Biologists also monitor stream restoration projects by evaluating fish and invertebrate population response, documenting habitat changes, and tracking fish movement. Currently, a genetics study is underway to better understand the darter population and how the subpopulations in each creek system relate to each other.

- Listed as Endangered in 1973 (population 1,500)

- Only exists in six creeks in Northwest Florida

- Lives along margins of clear-flowing streams in vegetation and woody debris

- Two to four year lifespan

- Spawns in vegetation (Mar. - Oct.)

- Size: three inches long

- 98.7 percent of darter habitat found on Eglin Air Force Base, remaining habitat found in Niceville and Valparaiso

- Stream restoration projects have significantly improved darter habitat within Eglin's boundaries

- Proposed downlisting to Threatened in 2010 with an estimated population of more than 600,000