



D. Raver US FWS

Delaware Tidal Largemouth Bass Survey

Coded Wire Tag (CWT)

Injecting a CWT into a bass fingerling.



Using a tag detector to search for CWT-marked bass.



Call if you catch a tagged bass on the Broadkill River.



For more information on the tidal bass survey contact:

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The largemouth bass is the most sought after freshwater fish in Delaware. Although considered by many to be a pond fish, largemouth bass also inhabit the freshwater portions of many of our tidal rivers and streams; in fact, the Nanticoke River has the most popular largemouth bass fishery in Delaware.

Since 1989, Division biologists have been monitoring these tidal bass populations. Early surveys indicated that spawning could be a limiting factor in largemouth bass abundance in this habitat. Bass, like all other members of the sunfish family, are nest builders. Heavy silt loads and the ebb and flow of tides make this nesting behavior difficult. Silt can coat the eggs and smother them. Nests built at high tide can be left high and dry during extreme low tides. Abundance and aging data indicated that year-class strength (number of fish produced each year) was extremely variable. More recent data suggest that heavy rainfall events during June and July may strongly influence year-class strength.

In 1995, the Division decided to evaluate a stocking of advanced (3 to 5 inch) fingerling bass in an effort to supplement natural reproduction, especially during poor reproduction years. Adult bass were collected from the Nanticoke River, placed in small ponds and allowed to spawn naturally. By late summer, the resulting fingerlings had reached a minimum size of 3 inches. They were removed from the pond, marked with a 1/16th inch wire tag (CWT – coded wire tag), and stocked into the Nanticoke at several locations. By fall 1996, several of these CWT-bass were identified during weigh-in at a Nanticoke River bass tournament. Since then, between 6,000 and 8,000 fingerlings have been stocked into the Nanticoke system annually.

The fingerling program has been expanded to the Broadkill River to supplement natural reproduction there also and over 2,000 fingerlings have been stocked annually since 1996. Monitoring of tidal bass populations has begun in several other tidal rivers including the St Jones and Mispillion. Adult bass are being marked with streamer tags to check survival, growth, and movement of the Broadkill River population. Although fishing effort in the Nanticoke River has increased substantially since 1989, the tidal bass stocking program and the popularity of catch and release angling have contributed to a viable bass fishery.



Age and size variability indicates a well-balanced population.