



## **USDA-CSREES 2007 National Water Quality Conference**

### [Pigeon River Recovery Project: 2006](#)

Since 2001, the Pigeon River Recovery Project has re-introduced 12 fish species (over 14,000 individuals) into the Pigeon River, an Appalachian stream that once was so polluted North Carolina classified the best use of her waters to be for waste disposal. The river has historically suffered from the cumulative effects of years of pollution and hydrological alteration. In recent years, water quality improvements in the river have led state, federal, and private agencies to re-introduce native species into the river. During the past five years, fish have been collected from tributaries to the Pigeon River, reference streams within the French Broad basin, and from the upper reaches of the Pigeon River itself. To assess survival of relocated species, fluorescent visible implant elastomer (VIE) tags were employed to tag darter species, which were easily observed by snorkelers. Reproduction was first documented in gilt darters in 2003. Monitoring surveys over the past two years have documented gilt, bluebreast, and stripetail darters and, mountain madtoms in the Pigeon River near Newport, TN. During the fall of 2005, a snorkel survey was conducted of the lower Pigeon River (~5 miles) downstream of the release site. At nearly every riffle snorkeled, both sexes of healthy gilt darters of every age were found inhabiting the cobbles. The gilt darter appears to be successfully re-colonizing the Pigeon River in TN. In North Carolina, three shiners (mirror, telescope and silver) and the gilt darter of the five originally re-introduced species have been collected during monitoring efforts. Some of these shiners have been found over two miles upstream of their release site. Conservation Fisheries Inc. propagated the first tangerine darters in captivity in 2005 and has produced over 100 young in 2006 with the goal of re-introducing it into North Carolina and Tennessee.

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