

FIELD NOTES

News for Members and Friends of Tar River Land Conservancy

Fall 2015

SHORTLEAF PINES PLANTED ON CONSERVATION PROPERTY

Tar River Land Conservancy (TRLC) and its partners have completed the first step in converting 23 acres of abandoned agricultural fields to native shortleaf pine forest. Just over 12,000 tree seedlings were planted in March 2015 on land owned by TRLC. The reforested fields are located on a 220-acre conservation property that adjoins Brogden Road and Ledge Creek near the Town of Stem in Granville County. Inspections by TRLC staff indicate that almost all the shortleaf pine seedlings survived the first growing season and are thriving.

Shortleaf pine – also known by its scientific name *Pinus echinata* – can reach 100 feet tall and 3 feet in diameter over a lifespan of 200 years. Historically found in almost every county of North Carolina, the acres of shortleaf pine forest have declined across the state over the last century with the reduction of controlled burning, conversion of shortleaf forests to agriculture and development, harvesting of aging trees, and reforestation with other tree species. Shortleaf pine has been replaced in many areas by loblolly pine, which has invaded or been planted on cutovers or abandoned fields.

“Shortleaf pine has several characteristics that make it attractive to landowners interested in managing for both wildlife habitat and high quality timber,” noted Rob Montague, Granville County Ranger with the NC Forest Service (NCFS). “In comparison to loblolly pine, shortleaf pine has superior wood properties, excellent tree form, small knots, drought tolerance, and resistance to ice damage.”

The reforestation project was made possible through financial and technical support from the NC Forest Service, USDA Natural Resources Conservation Service, American Forest’s Global ReLeaf™ program, NC Wildlife Resources Commission, and the Granville County Soil & Water Conservation District.

“The shortleaf pine restoration is part of Tar River Land Conservancy’s larger vision for managing the 220-acre property for watershed protection, wildlife habitat, public hiking, and conservation education,” indicated Derek Halberg, TRLC’s Executive Director. “Seven additional acres on this property were replanted with native grasses and wildflowers in April 2015 to improve habitat for wildlife and pollinator insects.”

A combination of herbicide treatment, mowing, and plowing of root mats was completed before planting to give the shortleaf pine seedlings the best chance to grow following planting. TRLC purchased containerized seedlings – rather than bare-root seedlings traditionally used in reforestation – to increase the survival of seedlings during the first growing season. Seedlings were planted using tractors with specialized tree planting attachments. TRLC and NCFS officials expect to monitor the reforestation area closely over the next few years before the project is considered a success.

“The Forest Service encourages landowners to plant shortleaf where the conditions are right,” said Mr. Montague. “The 23 acres replanted by the Conservancy is the largest to be converted to shortleaf in Granville County. We hope to include the property in demonstration tours that are offered to landowners, foresters, and wildlife biologists.” For more information about the benefits of planting shortleaf pine, contact the NC Forest Service by visiting www.ncforestservice.gov and clicking on “Contact Your County Forest Ranger”.



ABOVE: Randy Abbott (driving tractor) and J.R. Stainback plant shortleaf pine seedlings on land owned by Tar River Land Conservancy on Brogden Road in Granville County.

FOUNDING TRLC BOARD MEMBER TIM VALENTINE PASSES



I.T. “Tim” Valentine, Jr., of Nashville, NC, died November 10, 2015, at age 89. Mr. Valentine was a life-long resident of Nash County, practicing law for many years with the firm that is now known as The Valentine Law Firm. His many accomplishments include helping found Tar River Land Conservancy (TRLC) in 2000 and serving on the TRLC Board of Directors until 2003.

“Tim was a man with a great heart and spirit,” recalled Camilla Herlevich, also a founding member of the TRLC Board of Directors. “We were lucky that he lent his considerable energy and intellect to conservation. He was so much fun to be with!”

Prior to his volunteer work with TRLC and other groups, Mr. Valentine served six terms in the U.S. House of Representatives, starting in 1982, representing the 2nd District of North Carolina. He also served in the NC House of Representatives from 1955 to 1960.

TAR RIVER SPINYMUSSELS RELEASED IN FISHING CREEK

Thanks to a collaboration of several conservation agencies, the population of the endangered Tar River Spiny mussel is growing in Fishing Creek and Little Fishing Creek in Nash and Halifax Counties, NC. The US Fish & Wildlife Service (USFWS), the NC Wildlife Resources Commission (NCWRC), and NC State University's College of Veterinary Medicine have released over 8,500 individual Tar River Spiny mussels into these creeks since December 2014. The mussels were bred and raised at the NC State's Aquatic Epidemiology and Conservation Laboratory and the NCWRC's Marion Conservation Aquaculture Center over the past five years.

"The release of captive-raised Tar River Spiny mussels into Fishing Creek is a critical step in preventing the species' extinction and recovering healthy wild populations," stated Sarah McRae, USFWS aquatic biologist. "This mussel was once prevalent in many streams in the upper Tar River Basin, but its numbers have declined considerably over the decades. The surviving wild populations of the Tar River Spiny mussel are small to extremely small in size." The captive-raised mussels will significantly increase the population in Fishing Creek and Little Fishing Creek, giving the species the chance to breed and expand in its native habitat.

The Tar River Spiny mussel is one of only three freshwater mussels with spines in the world. The species was added to the federal list of endangered species in 1985. Populations of Tar River Spiny mussels declined as habitat was impacted by silt, polluted runoff, and wastewater discharges. Tar River Spiny mussels and other freshwater mussels play important roles in keeping streams healthy. Mussels are natural filters in the environment. They siphon water to feed on algae, plankton, and silts – helping purify the water they inhabit. Freshwater mussels are also an important food source for many species of wildlife including otters, raccoon, muskrat, herons, and some fish.

The locations of the Tar River Spiny mussel releases were carefully selected by NCWRC biologists based on historic collection localities, favorable stream conditions, and approval from neighboring landowners. Locations include several properties along the creek owned by the Tar River Land Conservancy (TRLC) and privately-owned farms protected with conservation easements. TRLC has preserved over 1,900 acres of wetlands and woodland along Fishing Creek and Little Fishing Creek since 2000. TRLC hopes to preserve more of the forested properties that buffer these creeks to give the mussels time to breed and recover.

The Tar River Spiny mussels grown in captivity were raised in tanks at the Marion Conservation Aquaculture Center for an average of three years before release into Fishing Creek. "Before we release mussels into the wild, we laser etch unique identification numbers into the shell or attach glue-on tags to the shell," said Dr. Tyler Black, NCWRC aquatic biologist. "We also measure the shell length of the mussels and record their release location using GPS. We will monitor the release locations through time to see how many mussels survive and hopefully document increased wild reproduction." To watch a video produced by the USFWS about this project, please visit www.youtube.com and search for "recovering the Tar River Spiny mussel".



TOP: Biologist Dr. Tyler Black of the NC Wildlife Resources Commission holds endangered Tar River Spiny mussels.

BOTTOM: Biologists Tom Fox (left) and Sarah McRae release Tar River Spiny mussels into Fishing Creek in October 2015.



TRLC thanks members Randy and Barbara Guthrie of Granville County for adopting Gooch's Mill Road through the NCDOT Adopt-A-Highway Program. For information about adopting a road in your area, please contact Sheryl Munt at 919-496-5902 or smunt@tarriver.org.

CREEDMOOR RECEIVES LAND TRUST AWARD

The City of Creedmoor received the 2015 Local Government Conservation Partner Award from the NC Land Trust Council for its work with TRLC to protect over 600 acres of land since 2006. The NC Land Trust Council presents the award annually to a local government that shows sustained commitment to partnering with land trusts for land conservation initiatives or that has promoted policies that positively influence land and water preservation.



"We are very happy that Creedmoor received this award," stated Derek Halberg, TRLC Executive Director. "City officials deserve to be honored for their efforts to preserve open space and natural areas in this community while also promoting a progressive vision for economic growth."

In recognition of the award, Creedmoor received a framed photo of Holman Creek showing land preserved with the city's assistance upstream of Lake Rogers. The photo can be viewed in the Board of Commissioners' meeting room in Creedmoor City Hall.