Greetings from the Forest!

They say the one thing that is a constant in life is change. A managed forest will see a lot of change in its lifetime, and Turnbull Creek Educational State Forest (TCESF) is no different. Logging, burning, spraying, and planting, are just a few of the phases that our 890-acre forest undergoes on a frequent basis. All of which we saw (in different stands) this past winter. Change is good; it rejuvenates a forest, keeps it healthy, and allows it to grow to its full potential.

TCESF Happenings

This winter has been quite busy at TCESF. In January 2019, a 45-acre tract of land was clearcut, and another twelve acres were thinned. The 16-acre stand that was clearcut and sprayed back in the summer of 2018 finally got some fire to it and was then planted in Longleaf seedlings during the month of January. We were also able to have a couple of good hazard reduction burn days and complete a total of 98 acres of burning. Thanks to a lot of help from our district equipment operators, we were able to rehabilitate many of our old fire lines on the forest, which was much needed. Apart from the land management activities, we were able to support our forest wildlife through a partnership with the N.C. Wildlife Resources Commission, whose staff installed two Red-Cockaded Woodpecker nest boxes on the forest.

TCESF was also tasked with hosting a two-day landowner workshop this past winter for our district. One day was focused on land management for timber sales and hazard reduction burning, while the second day was an introduction into longleaf pine land management, as well as pine straw production and sales. Both days featured a field trip portion at our forest and proved to be a great opportunity for the landowners to learn about forestland management.
Photo Essay: Sound Forest Management Makes for Healthy Trees

Left: Knowledge is Power. TCESF, along with speakers from our district and the Central Office in Raleigh, held a landowner workshop with special emphasis on forested lands and benefits of timber production, as well as pine straw production from Longleaf.

Right: The Next Generation. We encourage landowners to plant trees where their lands have been clearcut. As a timber stand ages, growth begins to slow. With harvesting and replanting, new growth occurs, more oxygen is produced, and a healthy forest is reborn.

Left: Burn, baby, burn. Understory growth (bushes, grasses) often compete with trees for nutrients, which slows growth. Regular prescribed burning can lessen the competition and also reduce the hazard of a potential wildfire.

Right: Show Me the Money. Harvesting timber can be a lucrative cash crop when completed with the proper guidance and know-how. The N.C. Forest Service always recommends having a management plan in place for your forestland and hiring a consultant to assist with the timber selling and logging process. The benefits of having a plan and an experienced forester is immeasurable.

Left: Whole New World. The landscape looks different when a logging job is completed. So long as land managers continue to plant trees, the cycle begins again and a new forest develops.
Yet another exciting happening at TCESF was the installation of Red Cockaded Woodpecker (RCW) nest boxes in a newly established nesting area on the forest. Last summer, we discovered a new cavity tree pop up in a straw raking stand deeper into the forest. Cavity trees are trees that RCWs have drilled holes into, with the intention of creating a nest. After investigation, one tree became three trees! We’ve had a long-standing cluster of RCW’s near the entrance of our forest, but this is the first time we’ve seen them in the forest interior. After this discovery, we were contacted by N.C. Wildlife Resources Commission biologist John Carpenter (who monitors all of our RCW cavity trees) about the opportunity to host a training session for the installation of cavity tree nest boxes, which will help our new cluster of birds thrive at that location. Trainees within the agency have to successfully place a number of nest boxes before they can be certified to do so independently. Thanks to trainee and N.C. Wildlife Biologist Chesley Ward, observer and RCW Biologist Brad Allen, and then-intern Amber Bledsoe, we are now the proud owners of two new installed nest boxes and look forward to their progress over time.

The process for installing nest boxes in longleaf trees isn’t too complicated, so long as you don’t have a problem with heights! (1) Staff members must climb their chosen tree using a specialized ladder to reach an acceptable height to install a nest box. On installation day, a tree was chosen based on its location, diameter at the installation site, and overall health. (2) Then, outfitted with a harness and tool kit, work began to cut a hole into the tree using a small chain saw. (3) After cutting and chipping away at the hole with a chisel, the nest box was pushed into the hole to ensure a snug fit. (4) If the nest box fit properly, Ward continued by adhering the nest box to the tree using a wood putty. This gave the box a little extra security for staying put in the tree. The installer then used a battery-operated light and mirror to ensure that the interior of the nest box is sound and ready for occupancy. (5) After the nest box was fully installed, Ward spray-painted the box to match the color of the tree. He also chipped divots into a circular pattern around the box and sprayed streaks of white on the outer bark to simulate sap running down the tree.

“The paint and chipping of the bark is like a beacon on a runway for the birds to find the nest box. The birds are opportunists, and if they see that a nest has been started, they will utilize it”, says Allen.

We hope to see them using the boxes very soon, as nesting season for RCW’s is April-June.
Fire Line Rehabilitation—Why Bother?

On the 890 acres of Turnbull Creek ESF, we have miles and miles of scattered plowed fire lines that have gotten deeper through years of prescribed burning seasons. They’ve gotten so deep, Ranger Meggs began referring to them as “rifle pits.” TCESF, in conjunction with our district equipment operators, came up with a solution: rehabilitation of the fire lines.

“One of the biggest issues to mitigate was water retention in the fire lines. We wanted the water to drain naturally, which wasn’t happening as rutted as the lines were becoming. Also, small wildlife such as turtles and reptiles could become stuck in these deep wells. We wanted to make sure that didn’t happen,” said Meggs.

Equipment operators brought in the same dozers that normally plow the fire lines, but with the plow dropped off and just the front blade attached. The blade pushed the raised dirt mounds edging the fire line back into the line and made a soft sand fire break instead of a deep-ditch line.

“This practice will ultimately improve water quality on the forest, help small animals traversing the fire lines, and still provides us with sufficient coverage to keep prescribed burns within bounds,” said Meggs.

Since the fire lines have mineral soil in them, minimal raking or leaf blowing will be required to spiff up the lines for burning.

A freshly rehabilitated fire line.

Upcoming Events

- Forest opens for group tours March 19th
- Spring Project Learning Tree Workshop April 18th
- Spring Bird ID EE workshop with NC WRC May 20th. Call us for info.
- Forest closed for Spring Permit Turkey Hunt- April 25th-27th
- Call us today to schedule a visit!