



# NEWS FROM THE FOREST

TCESF Newsletter

Winter 2017/18

## Greetings from the Forest

With the groundhog seeing his shadow this year, it seems like winter is never going to end. Temperatures in southeast North Carolina this season have ranged from 90 degree days to freezing conditions in the teens. We experienced snow, sleet, rain, and plenty of warm days also! However, the drastic fluctuations have not kept Rangers Meggs and Harmon from their multitude of winter maintenance projects this season. Come out and visit Turnbull Creek Educational State Forest after we open on March 13th and see what we've been up to! We look forward to seeing you!

## TCESF Happenings

Once you arrive at the forest and begin to mill around, you will immediately notice some changes from last fall. From the entrance gates you will see most of our forest understory beginning to show hints of green among a sea of black. This winter season Rangers Meggs and Harmon, along with staff from all over our Forest Service district, had enough favorable weather days and conditions to complete hazard reduction burns on most of the forest. In fact, we were able to burn over 570 acres of the total 890 that makes up Turnbull Creek ESF.

In addition to burning, we've also completed a significant logging operation on the forest. Twenty-four acres of loblolly and slash pine timber were logged with about 15 acres of that being clearcut for final harvest. Flip to page four for photos showing the logging operation. Other exciting happenings include trail maintenance, exhibit updates, and generating new ideas for signage and programs here on the forest.

## Visitor Hours

*Mid-March through Mid-November*

*8:00a.m. to 5:00p.m.*

*Monday through Friday*

*Saturdays by request*

*4803 Sweet Home Church Rd.*

*Elizabethtown, NC 28337*

*(910) 588-4161*

*turnbullcreekesf.ncfs@ncagr.gov*



Not all forest creatures are hibernating this time of year!

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## **Woods on Fire: A Good Thing?** *Written by Chris Meggs*

For many years, we have all heard Smokey Bear's message about keeping the forest safe from wildfire. Smokey has done an outstanding job of helping us all to be conscious of our use of fire. It is important to remember that there is a difference between an unwanted wildfire and a prescribed fire, which is intentionally set by trained professionals to help manage the forest. A prescribed fire, also known as a controlled burn, is a very cost-effective method of achieving the goals of sound forest management.

One type of prescribed burning is called hazard reduction burning, which is more commonly shortened to HRB. The main purpose of an HRB is found in the title itself, hazard reduction. When we conduct an HRB, we are removing most of the fuel on the ground such as pine needles, leaves, twigs, sticks, and pine cones. We conduct this burning during the winter months when the trees are dormant and the temperatures are much lower. This results in a fire that has lower flame lengths and is much less likely to harm the timber. We know that the worst fire weather in North Carolina is coming up shortly when spring arrives. By removing this fuel, we are reducing the danger of a potential wildfire in the spring months. Since we have already burned the fuel with an HRB, a wildfire would either not be able to start at all, or would have very little fuel to allow it to be very intense.

We manage our forest for more than just timber production, we also manage for wildlife, which benefit from HRB. The wildlife that call our forest their home is very important to us and we want them to have the best habitat possible. An HRB clears the ground, which allows new seeds to germinate giving our plant-eating wildlife a greater food supply. It also gives insects less hiding places, and our birds such as the wild turkey use this as a dinner bell. It doesn't take long either. When rangers check the fire lines on the day after an HRB, they often see several turkeys as well as other birds and other animals too.

An HRB is extremely useful in pine management. Our forest is predominately pine timber and we manage it accordingly. When we are managing for pines, there are often undesired species such as turkey oak that grow in the same area. These species also need water, sunlight and nutrients, so they are competing with our pines for these resources. All our pine species have developed a very thick bark, which protects them from fire. The smaller turkey oak trees do not have this thick bark, so some of them are actually killed by an HRB. This will allow us to reduce unwanted competition without having to use chemicals.

Smokey's message is still important, but sometimes when you see fire in the woods, it isn't a wildfire. It could possibly be a prescribed fire, which is a good thing. If it is a prescribed fire, you should see people monitoring the lines and keeping it contained. Remember that the use of prescribed fire should only be done by those that are trained and experienced with how to do this safely. Call your local N.C. Forest Service office if you own forest property and are interested in having a prescribed fire to manage it.



**Prescribed burning has a variety of benefits to forested areas as well as young planted stands, as long as conditions are favorable.**



*Photos from left to right: bark beetle bug spot, freshly cut timber, loader cutting logs*

## The Benefits of Logging

When we talk to our classes that visit the forest about cutting down trees, students often respond that it is a bad thing. Usually the responses revolve around lack of proper management and deforestation in places such as rain forests. From that discussion we spring in to talking about different items the students utilize every day that are made from wood, where the wood comes from and how it is processed. The rangers talk to the students about taking care of the forest and, with proper management, replanting forested areas that are clearcut. Beyond the “goods from the woods” that we get from harvesting logs, there are several other benefits to forest management through logging.

The first and likely most important benefit is the monetary gain from logging. Like any harvested crop, timber sales often fluctuate with markets and demand for the product. Unlike any agriculture crop, timber is harvested after decades of growing. Logging can generate income for landowners, however, to keep the practice sustainable, we recommend replanting the timber for the next crop to be produced.

Secondly, logging is beneficial toward forest health. Like any other living thing, trees have a life span. As trees age, their ability to grow slows down, their production of oxygen slows, and their susceptibility to insect infestations and disease increases. There comes a time when a standing tree is no longer a benefit to the forest ecosystem, and would be best to harvest. In our case here on the forest, a stand of timber developed a “bug spot” where a pine bark beetle infestation occurred (see photo above, left). As per our knowledge of these beetles, the rangers and district staff knew that the infestation would likely spread throughout the stand if we didn’t harvest the timber. The stand in which the bug spot was located was due to have a final harvest (clearcut) based on the age of the trees within it, so we elected to harvest.

Often, as a forest grows the trees that are planted, or those that naturally regenerate a stand, have a tendency to get crowded. When crowding occurs the trees have to compete with each other for resources, such as sunlight and nutrients, in order to grow. When such competition occurs, the trees do not grow as big or as fast as they do without competition. Crowding can also lead to higher susceptibility to insect infestations and disease. If trees are crowded, and not growing to their full potential, it can be damaging to the forest ecosystem as a whole. How do you solve this problem? Stands of timber can be thinned prior to their final harvest. In fact, some stands can be thinned multiple times throughout their life span. How do you know when to thin? Good question!

The North Carolina Forest Service recommends that landowners have a management plan for their forested lands. We have foresters on staff that can make recommendations on proper management, such as when to thin, when to clearcut, how to manage for things like wildlife, hunting, or pollinators, and much, much more. Our well-trained staff can visit your forested areas, take some measurements and give landowners a good idea of the overall health for their stand of timber. All of this information can be very valuable so that landowners get the most from their forestland. Interested in getting a management plan for your land? Contact your county forest ranger office today!



A pull row from stand thinning, with clearcut harvest in the background.



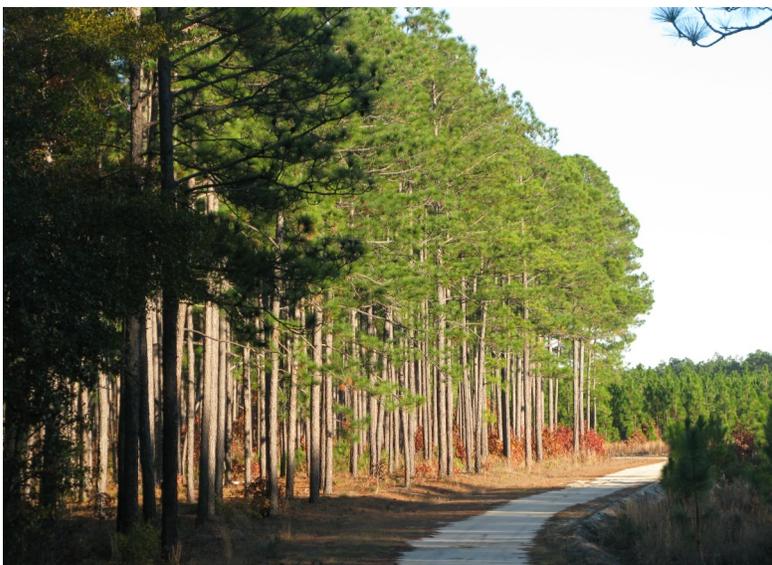
Cut trees piled up by skidder, awaiting processing at the logging deck.



Skidder takes logs to logging deck, where loader runs logs through delimiting machine and cuts logs to size.



Cut and delimited logs are loaded onto a log truck for travel to mill.



Timber stand before cutting, Fall 2017.



Stand after cutting, clearcut in front with thinning at the back Jan. 2018.

## New for 2018!

In our last newsletter, we announced that TCESF was under construction. Apart from the prescribed burning and logging operations that have really altered the terrain of the forest, we've made some subtle updates here and there also. When the logging took place, we harvested a few trees around the fire control exhibit and picnic shelters to open those areas up. The rangers have also been working to clear downed trees along the trail areas for ease of access around the stand that was logged. Ranger Meggs, with help from one of our district staff, built a new table for our papermaking class located within the forest products exhibit. Both Rangers Meggs and Harmon have worked to keep visitor areas free of limbs and debris from all the high winds we've experienced this winter.

There is still more to come! In 2018, we aim to update some of our signage throughout TCESF. Ranger Harmon is working to create a wildlife and birding observation deck on the forest. Improvements to our forest products and fire control exhibits are in the works as well. Stay tuned to our quarterly e-newsletter for future updates and forest activities. Maybe we'll have a few surprises up our sleeves!



**Always something exciting to see at Turnbull Creek ESF!**

Turnbull Creek Educational State Forest  
4803 Sweet Home Church Road  
Elizabethtown, NC 28337

## Upcoming Events

- **Forest opens for group tours  
March 13, 2018**
- **Spring Bird ID  
EE workshop  
with NC WRC  
March 24. Call  
us for info.**
- **Call to book  
your field trip  
to TCESF  
today!**

PLACE  
STAMP  
HERE