

A Walk in Woods and Back in Time

Remnant Longleaf and Cat-face Snags in Nash County

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I recently took a walk back in time while visiting a forest stand in Nash County. Accompanying me in this venture into the past was NCFS Water Quality Forester Aaron Levine and Forestry Consultant Ricky Swanson. It was Aaron and Ricky who first discovered the tract we visited - a forested pine stand with remnant longleaf pine trees nearly 100 years old.



The fact that these relic pines had survived all these years on the western edge of the longleaf range was intriguing enough, but we also found several “catface” stumps still intact and standing. If those trees could talk they would tell a tale of days long gone when the woods were intensively worked to collect the gum of the longleaf pine tree. Resin or crude turpentine is produced when the bark is removed in a chevron slash that creates the open wound or “face”. The resulting resin drains into a notch, the “box”, cut into the base of the tree to be collected and distilled into turpentine. Cat faces like the ones we found were often 20 feet tall and cut into three sides of the tree. In the 1800’s turpentine was a highly valued product used for medicine, paint thinner, fuel for lamps, and processing rubber. Turpentine was the third largest export of the South behind only cotton and tobacco. North Carolina accounted for as much as 95 percent of the production until after the 1860’s when producers moved further south in search of fresh forests.

This 95 year old Longleaf Pine, *Pinus palustris*, is located just outside the range of longleaf in western Nash County.

Besides the remnant living longleaf pines, the half dozen or so “catface” stumps, and the location of the tract in western Nash County, another unique feature of the tract, but perhaps one that should not be too surprising, is the site itself. The snags we found



The snags found on site depict the “box’ cut at the base of the tree and the “catface” hacks extending 20 feet up the trunk of the tree. Each of these snags were hacked on three sides of the tree. The collection and processing of the thick sticky resin was a laborious year round job that required a large workforce,

are adjacent to or within a streamside management zone delineated by Aaron for the planned timber harvest. The predominant soil type, a Norfolk loamy sand, is well drained but, would have be considered wet in nature adjacent to the intermittent streams. Of course, since “palustris” is Latin for “of the swamp” we know longleaf does indeed thrive in these wetter, well drained, sandy soils. Nonetheless, I couldn’t help but wonder how the frequent, low intensity fire shaped this forest before European settlement.

The turpentine industry in the South declined dramatically in 1910; not long before the forest we were standing in began. As we walked out of the woods that day I asked myself a question perhaps I will never know the answer to, “How old are these snags and in what year did the first “box and hack” occur.” Another question that remains unsolved and to me is a unique feature, one I had not seen before, was the horizontal hacks seen in these snags for the first couple of feet. “Why are those hacks not diagonal like the majority of the “catfaces” we find?”

Aaron Levin is leading an effort to harvest the “cat-faced” snags, as the tract is soon to be harvested and the snags likely destroyed. “I’m hoping to have two of the largest ones preserved “totem-pole” fashion and displayed at both Clemmons and Jordan Lake Educational State Forests and possibly Bladen Lakes State Forest”, Aaron remarked. “We also intend to preserve a smaller portion of one to become part of the longleaf display the NCFSS uses at workshops and other Information and education events.”

Removing resin (or crude turpentine) from the longleaf pine was a laborious task. First a quart size hole, or “box,” was hollowed into each side of the tree about a foot from the ground. Using a scraper, called a “hack”, a strip of bark was removed above the box. This strip, or “face”, was twelve inches wide and twenty inches long. Resin would seep from the trees, flow down the face and into the box. The box was emptied seven or eight times per year. This “dipping” of turpentine did not kill the longleaf pine since the resin is not part of the tree’s nutrient system. The face would be extended each season until it reached a height of about twenty feet. At that height the tree would cease to produce enough crude turpentine to be profitable. Once removed from the longleaf pine, kegs of crude turpentine were taken to distilleries, put into large copper kettles and brought to a boil. The resin would vaporize and condense in a cooling tower. The condensed liquid became the refined or “spirits” of turpentine. Spirits of turpentine was used in paints and medicines, as a solvent, a fuel for lamps, and in processing rubber in the 1800s. The rosin left in the bottom of the kettle would be used for water- proofing leather or mixed with lard and lye to season home made soap.

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