## Sharing the tools to restore shortleaf pine in East Texas

Shortleaf pine has long defined the forested landscape of the South, but each day more acres of this species are lost.

As a district forester for the <u>Texas A&M Forest Service's</u> Jacksonville District, which covers three counties at the western fringe of East Texas's Piney Woods, Jason Ellis has found that regional pride is often a powerful motivator for private landowners to join in the effort to regenerate shortleaf pine.

"Sometimes it's enough to tell a landowner that they are helping to restore a species that we always had in the South but now we're losing," Ellis said.

Shortleaf pine is a fire-adapted species that plays an important role in forest health by providing superior wildlife habitat and biodiversity. The loss of shortleaf pine stems from an interplay of factors including increased urbanization and fire suppression in the region.

When Ellis first became interested in restoring shortleaf pine, he encountered a lack of information on how to do so. Shortleaf pine had rarely been cultivated because loblolly pine was the preferred species of the timber industry, leaving Ellis with few sources of guidance.

"We didn't have a lot of experienced folks to ask, because people haven't really planted it," he said.

With a shortleaf pine restoration grant from the USDA Forest Service, he was able to gain valuable experience on a project to manage stands of very mature shortleaf pine on the <u>I.D. Fairchild State</u>

<u>Forest</u>, a nearly 3,000-acre mixed shortleaf pine and hardwood forest in Cherokee County, Texas. Today, Ellis works to reestablish shortleaf pine across much of the forest, to maintain high-quality habitat for the endangered <u>red-cockaded woodpecker</u>, and to lead habitat restoration projects to reintroduce eastern wild turkey.

When Ellis shares his expertise in shortleaf pine restoration with private landowners, one of his most effective teaching tools are demonstration areas on the I.D. Fairchild State Forest. In 2011, he successfully harvested a stand of timber and left a shelterwood of shortleaf pine to demonstrate to landowners how they can capitalize on natural regeneration. In a shelterwood, some of the mature trees are retained, spaced about 70 feet apart on a grid pattern. These remaining trees have a robust crown with ample cones that seed the ground when they fall, aiding in regeneration.

Ellis has found that natural regeneration is considerably more appealing to some landowners than replanting following clear-cut, also called artificial regeneration, which is more expensive to prepare for planting and may seem more extreme. "Landowners are interested in forest health," he said. "They understand that they can't just do nothing and expect a healthy forest. When you tell them about the shelterwood option, they really like that a clear-cut is not the only option for regenerating a stand of timber."

Over the past 14 years, Ellis and his staff have conducted tree planting, multiple prescribed burns, mulching and herbicide applications on different areas of the demonstration forest to give landowners an opportunity to see the various options for managing their properties. He has also leveraged social media to deliver key information through digital demonstrations on Facebook and Twitter.

"A lot of these are fairly standard forest management practices," Ellis said. "But I feel like we're showing these landowners a recipe for improving forest conditions on their properties."

The other half of the equation is to help landowners understand their personal objectives for managing the land and to come up with a plan that fulfills them. "You have to go in listening," he said. "Sometimes people know exactly what they want, but other times it's a piece of land they just bought or inherited, and you can help them figure out their goals for the property."

Ellis is regarded as the go-to expert in his three-county region, but he is quick to point out the partners that are essential to his efforts to educate landowners about sustainable management, including the USDA Forest Service and National Resources Conservation Service, the Texas Forestry Association, the Shortleaf Pine Initiative, Texas Parks and Wildlife and the National Wild Turkey Federation, among others.

But the most important partnership is the one he forges with the landowners themselves. "It's a very rewarding thing when you develop a plan together and over time you see the landowners implement it," he said. "Some of these landowners even become like family."