

# MAKING A SMOOTH TRANSITION FROM PINE PLANTATION TO BOTTOMLAND HARDWOODS

A PERSONAL ACCOUNT

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It's no secret that hardwood prices are equaling or surpassing pine prices these days. Many forest landowners, myself included, have probably asked, "Why should I continue to site prepare, plant, and then fight back the hardwood competition, when in some situations I could allow hardwood timber to grow natural?"

Allow me to harken back to an article I wrote a couple years ago. In it I invited the reader to consider an important question: Is my land classified as one of the three broad groups suitable for hardwoods? I then referenced an article in *Alabama's TREASURED Forests* magazine (Summer 1987), in which AFC



Hardwood Specialist Tom Cambre identified three broad groups: major bottomland sites, minor bottomland sites, and upland hardwood sites. If you can answer 'yes' to this question, then keep moving forward. (see *Alabama's TREASURED Forests* magazine, Spring 2015)

This is still a good question to ask, but if you do not have a viable hardwood site, you had best stick with pine.

Permit me to share some of my own 'unscientific' research on the Tallapoosa River bottomland I have owned for over 20 years. When I first bought the land, like a good forester I planted the old cotton field in loblolly pines. This rich bottomland soil could

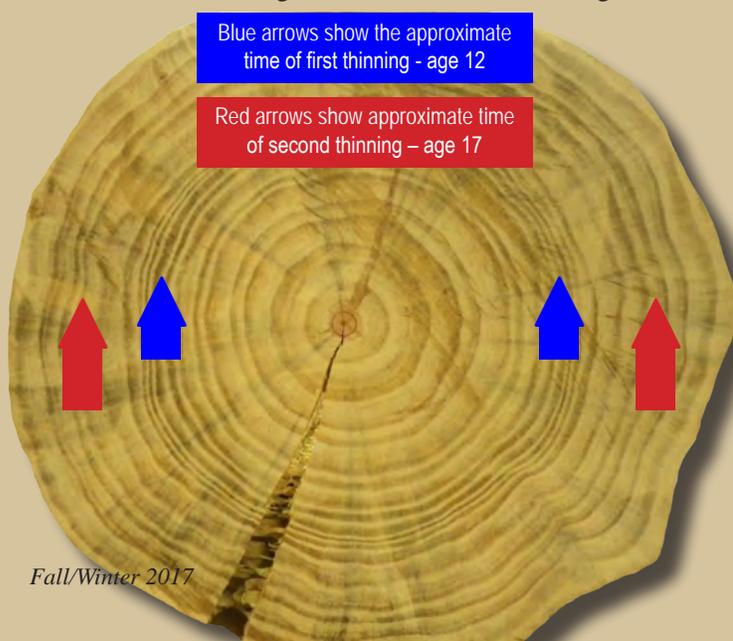


have grown a great stand of hardwoods, but since pine was dominating the market in Alabama, I saw no reason in 1995 *not* to plant pines.

Managing the pine stand as most foresters and forest landowners do, I conducted a prescribed burn as soon as possible, and thinned as soon as it was commercially viable. Then I continued to burn regularly, usually every two years. All of these prescribed burns were in February after deer season ended. I'm a simple man, so I can only focus on one thing at a time.

These management practices proved very successful. However, especially after the first thinning when the timber was at age 12, I began to notice a fair amount of cherrybark oak naturally sprouting and coming into the understory. Knowing this was good bottomland, I continued watching the situation with interest, and the idea began to materialize of one day allowing this site to regenerate to oak.

I continued to conduct a winter burn about every two years, and thinned the stand again when the timber was at age 17.



Blue arrows show the approximate time of first thinning - age 12

Red arrows show approximate time of second thinning - age 17

Thinning heavier than most landowners traditionally do, I wanted the stand to be more open for deer hunting and to allow the residual trees more growth potential. This process worked well as you can see from the 'tree cookie' photo showing growth rings of one of the trees after harvesting. I conducted one last prescribed burn in the winter before the final clearcut harvest was performed the following September.

After giving it a great deal of thought, I decided to proceed with my plan of transitioning the stand from pines to hardwoods. The next spring, I was pleasantly surprised with the amount of oaks – mainly cherrybark oak – that had naturally regenerated.

Recently while reviewing the stand, I was pleased to see that a few of the cherrybark oaks are at least 12 feet tall; some even taller in their third growing season. There are actually other river bottom hardwoods growing (sycamore, water oak, hickory, sweetgum, etc.), but I am delighted with the amount of cherrybark in the composition and that they are doing so well.

I attribute the current success of this stand to the frequent winter burns that kept top-killing the cherrybark oak. The oaks would re-sprout, then a couple of years later be top-killed again, but all the while building a great root system that was primed to take off once the pines were removed.

One more recommendation is that it seems wise to manage the understory of the pine stand with chemicals as well as fire. I would frequently walk through the loblolly pine stand using a chemical treatment method called 'hack & squirt' to treat a few problematic species such as privet, tallow, and chinaberry. These invasive species can take over and dominate a site, preventing the natural hardwoods/oaks from getting a good start. (see "Hack & Squirt: A Poor Man's Way to Improve His Forest" in *Alabama's TREASURED Forests magazine*, Fall 2011)

So far, so good! More about this experiment later – as I make the transition from pine to hardwoods on my river bottomland! 🍷