



## **Your Future Forest Depends Upon You and Your Land**

So, you just completed harvesting your oak stand that was past its prime. Or perhaps you are considering converting an old field to a forest. In either case, you can do it the easy way or the hard way. The easy way involves realizing what your land is capable of growing and then giving some thought as to what your future woodland will look like. The hard way is to ignore either one, or both, of these steps.

The Ozarks have the greatest diversity of tree and shrub species in Missouri and can be used to grow trees for wildlife and commercial forest products. Soil depth, moisture and fertility are important site factors that are heavily influenced by aspect, or the lay of the land. North- and east-facing slopes tend to be cooler, moister and more fertile than west- and south-facing slopes. The same can be said for bottomland sites compared to ridge tops.

Desirable timber species typically found on these better sites include scarlet, northern red, shumard, black, and white oak. Not only are these species valuable for timber, they are good mast producers for deer and turkey. Many landowners do not realize that when it comes to managing their woodlands, they can have their cake and eat it, too!

Shagbark hickory, white ash, and black gum round out the major tree species found on north- and east-facing slopes.

South- and west-facing slopes with their hotter and drier climate along with thinner soil, and ridge tops are best suited for shortleaf pine and eastern red cedar. One can also plant species such as white and post oak, black oak and shagbark and mockernut hickory. But, these species are more suited in providing food for wildlife more than commercially valuable timber trees.

A special mention should be given here to black walnut. It can be found growing anywhere in the Ozarks. But, this species is particularly picky as to where it will thrive. Walnut requires at least three feet of unrestricted soil depth; anything less will result in severely stunted growth and low nut yields.

In the eastern Ozarks, cherrybark oak, sweetgum and tulip poplar are common. Shrub species include flowering dogwood, aromatic sumac, hazelnut, redbud, ninebark, wild plum and deciduous holly. These are all excellent choices for rounding out new forest plantings.

In cutover situations involving north- and east-facing slopes, the best strategy for most Ozark oak stands is to let the next forest come from stump sprouts. These sprouts take advantage of their already established root systems and literally jump out ahead of the competition. After a couple of years, one simply has to go through and select the most vigorous sprout on each stump.

But, along ridge tops and south- and west-facing slopes Ozark landowners have better options; shortleaf pine or an oak-pine mixture. On these sites, a prescribed burn is conducted by foresters under exacting weather conditions to expose the bare mineral soil and reduce oak competition to ensure successful pine establishment.

When it comes to pine, some people ask if it's easier to sow seed instead of planting seedlings. While it may seem cheaper, it requires many more seed to account for poor germination rates and predation by foraging critters. For example, instead of 725 pine seedlings per acre, you will have to sow as many as 5,000 seeds per acre! And if your luck is like mine, you will end up with too few pines in some areas and too many in others.

Let's move on to our old field. This is the woodland owner's "blank canvas" and (keeping in mind the right species on the right aspect) allows one to truly express him or herself. Here the landowner must purchase seedlings.

There are three nurseries in Missouri that grow forest tree seedlings: the Missouri Department of Conservation's George O. White Nursery in Licking; Ripley County Farms in Doniphan; and Forrest Keeling Nursery in Elsberry. All three produce what are called bare root seedlings. In addition, Forrest Keeling produces RPM® (containerized) seedlings. As is the usual case, there are advantages and

disadvantages to both types of seedlings. RPM® seedlings are larger than bare root seedlings; but, they are more expensive. Therefore, they are usually reserved for prime areas like bottomland plantations that will receive a considerable amount of after-planting care. But, properly planted, quality bare root seedlings that receive good weed control during the first 2-3 years in the field produce excellent forest stands.

In next week's article I will not talk about the best time to plant, but more importantly how to best prepare your planting site to minimize weed problems.

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