

Tree Tips

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It won't be long now before a drive from the Atlantic coast to the Western border of Maryland will treat travelers to an increasingly vivid riot of fall colors. Ever wonder why Appalachian folks get a bigger share of fall beauty than us in Delmarva? The fact of the matter is that they have more deciduous trees (also known as hardwood or broadleaf), and we have more conifers (also known as softwood or needleleaf). This means that we have more year-round green, while they get a brilliant blast of color before the trees go bare for the winter. To really understand why this is so, you need to know a little more about history, site conditions, and tree adaptations.

Loblolly pine is well-suited for the climate and soil of lower Delmarva, and is currently the most profitable timber product in this region. Although loblolly was probably always part of the mix of trees present in lower Delmarva, historical records show that hardwoods were likely dominant until humans began to exert their influence.

Native Americans are thought to have used fire as a powerful management tool, clearing forest undergrowth for better game habitat and hunting, and keeping hardwoods out of the wetlands from which they harvested reeds used in building. Land cleared by fire is a perfect starting point for loblolly pine, with exposed mineral soil and full sunlight. Loblolly seeds falling naturally on this land had an easy time getting a strong foothold and eventually outcompeting hardwood species. Wildfire became even more common after colonization and the growth of the railroad industry, as wildfires started by sparks flying from a wood- or coal-powered locomotive were common.

Land that was mechanically cleared for timber often came back as loblolly, even when hardwoods were dominant before the harvest. The same was true of abandoned farm fields.

Soil types and management practices common to the lower peninsula also helped make loblolly popular. Soil that has more large particles like sand and loam and fewer small particles like clay allows rain water to drain through quickly. This trait means that rainwater doesn't stand in puddles on the surface for very long, but it also means that many of the nutrients that would otherwise be available for plants and trees to absorb are instead dissolved in the rainwater and washed down through the soil to a depth where roots can no longer reach them. This process is called leaching. Ditching and draining also move water off the land quickly, which carries nutrients downstream, away from plants that might use them. Needleleaf trees are well-suited to growing on poor soils, so they make a good fit for places with these conditions, like much of the Delmarva peninsula.

Hardwoods are not completely uncommon in lower Delmarva, but the wet conditions increase the amount of rot and stain in the timber, and historically poor management has decreased the genetic

quality of the available stock. For these reasons, there is very little market for hardwood timber products in the region, causing many landowners to plant softwoods when they have the choice.

As you travel north you'll cross a fuzzy but very real line somewhere in the neighborhood of Queen Anne's or Caroline counties in Maryland or Kent county in Delaware. This is the northern boundary of the natural range of loblolly pine. Keep going north through Delmarva and you will see less and less softwood and more and more hardwood. Hang a left and the land begins to first undulate and then become downright mountainous as you cross from the coastal plain first into the Piedmont and then into the Appalachian ridge and valley region. As the higher proportion of hardwoods increases the splendor of the fall color show, the mountainside slopes spread out the multi-colored crowns in front of you.

Although we may not have the same spectrum of color here in Delmarva, on your way home from your trip west through a blizzard of falling leaves, you can rest easy knowing that as the Westerners' trees become dry and skeletal for the winter, you still have the year-round comfort of the evergreen conifers.