



Put the Right Tree in the Right Place

Trees provide many benefits to landowners, including shade, beauty, income, privacy, cleaner air, and higher property values. But the key to maximizing these benefits is putting the right tree in the right place.

Different trees have specific characteristics that make them useful in the landscape, but they also have different growth requirements that should be considered. This creates a complex series of factors to consider.

To ensure that they are putting the right tree in the right place, landowners should consider the desired function of the tree, the intended location, the tree's hardiness, the size and shape of the tree at maturity, soil conditions at the site, the tree's tolerance for shade, and any potential pest problems. In addition, specific landscape positions need to be considered. For example, ridge tops or open areas with southern or southwestern exposures may be peculiarly hot or windy and stressful to the tree. Bottomland sites that flood could be stressful as well.

Soil factors are probably what landowners overlook the most when selecting locations for trees. Soil depth, structure, pH and moisture can make the difference between success and failure for the growth of a tree. For example, deep-rooted species need adequate soil depth for their structural roots, whereas shallow-rooted species may do all right on sites where soils thinly cover bedrock or a hard clay layer.

Tree species that need soils that are light and sandy should not be planted in rocky or clay-type soils. Also, each tree species has a tolerance range related to acidity and alkalinity. Landowners should match these

requirements with the soils where they plan to plant or manage their trees.

An excellent contact for this type of soil information is the local USDA Service Center. The local soil and water conservation district office located within the service center can provide individuals with site-specific soil information, maps and planning guidance.

Another good source for soil information is Web Soil Survey managed by the Natural Resources Conservation Service (<http://websoilsurvey.nrcs.usda.gov/app/>). The Web Soil Survey provides individuals electronic access to relevant soil information and other related information necessary for making wise land-use and management decisions. The site allows visitors to print soil maps, limitation or suitability maps, and soil reports such as forest productivity and soil drainage properties.

A healthy forest begins with careful planning. With a little research and a simple layout, landowners can have well-planned forests containing trees that grow well in the soils and landscapes of their farms. Planting the right tree in the right place assures a lifetime of satisfaction and keeps problems to a minimum.

<http://websoilsurvey.nrcs.usda.gov/app/>.

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