

Tree Planting

Getting trees to grow involves much more than simply sticking them in the ground. Without some thought, site preparation, and follow-up treatment, survival rates can be quite disappointing.

Many well-meaning tree planters learn these lessons the hard way.

The notion of a “nurturing nature” is largely mythical, at least if survival is any measure. The odds of a tree naturally surviving the first year are in the magnitude of billions to one. Humans can improve the odds dramatically through appropriate planning or timber harvest.

The first step is to select the correct tree species for the site and soil. Michigan has about 100 tree species and over 450 kinds of soil. Making an appropriate match is essential to success. Rarely are tree seedlings available for free. Seedlings can be purchased through County Conservation Districts or commercial nurseries.

When selecting seedlings, you’ll often encounter numerical labels such as “3-0” or “2-1”. These numbers refer to the total age of the seedling and, second, the number of years since a seedling was “lifted” or “wrenched”. Lifting prunes the roots, concentrating root mass, so that transplanted seedlings have a better, denser root system. This gives them an edge to better survive the trauma of transplanting.

Time spent in preparing the site will greatly increase the odds of survival. For the most part, that means reducing the vegetation competition. Other plants typically out-compete trees for both light and underground nutrients. Nature presents an incredibly hostile environment.

Proper planting technique is as essential as site preparation. Roots must have a hole of an appropriate size. Long roots folded into the bottom of a hole will spell disaster down the road. Sunny, warm weather will dry out the young rootlets in short order. So, keeping seedlings shaded and cool at all times is important.

Proper spacing between trees will vary with the species, soil, equipment, reason for planting, and other factors. The closer the trees are planted, the sooner the canopy will “close” and promote better form, and competing vegetation will be shaded out earlier. However, thinning will likely be needed sooner than if the trees are planted widely.

Once the trees are in the ground, the job isn’t over, unless high mortality rates are acceptable. Planting a few hundred trees requires a fair amount of sweat equity. Protecting that investment with follow-up treatment is a good idea. Keeping competing vegetation at bay is essential. Good initial site preparation will help. However, within the next five years, and until the tree is tall enough to stand above other plants, the seedlings will usually require some assistance. Remember, competition is not only above-ground for light, but also underground for nutrients.

In many parts of Michigan, seedlings will also need to be protected from deer and rabbits. Sometimes, a planting tube will work. Sometimes, a fence cage is best. Hardwoods (broad-leaved trees) need to be protected year-round. Protecting the entire tree will be necessary. Conifers are most vulnerable in the late winter and early spring. Usually, only the terminal bud needs to be protected. This can be done with a variety of commercial or home-made bud caps, or for longer-needed seedlings, a couple wraps of wide masking tape in the fall will do.

Skipping any of these steps will increase the amount of mortality. The money and effort of actually planting the trees is usually considerably less than that for site preparation and seedling protection. Remember that nature loves to kill trees.

The factor we have no control over is weather. A well-planned and implemented planting can turn to dust with a drought, or wilt from an excessively wet year. A cold, windy winter with little snow can kill. Once the trees reach head-height, then a number of insects and diseases can come into play.

It's true that planting trees carries a fair amount of risk. There are no guarantees. However, following planting guidelines and maintenance will greatly improve the odds for a successful effort. It's a good thing so many people love trees enough to work at it.

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