

Timber Stand Improvement

Timber Stand Improvement (TSI) means managing a forest to allow the most valuable trees to grow and getting rid of the less valuable trees. Value is calculated in both economic and ecological terms. Trees that will someday make good lumber are left, as are trees that will make good habitat. Trees that will not make good lumber and will not make good habitat are taken out to make room for more valuable trees. When a TSI project is done in a forest, it is noticeable years later when looking at the mature species that are present in the forest.

A natural walnut stand, now along the Lost Creek Hiking Trail, originated on open pasture land around 1945. In 1979, a Timber Stand Improvement project removed low value elms and box elders, leaving two acres of nearly pure walnuts. Following wind damage in 2010, some damaged trees were harvested for lumber and veneer. The residual stand has been thinned, allowing the best quality walnuts to grow freely for the next few decades.

Desirable walnut trees have been newly “released” on a half-acre site along the trail. Undesirable species and poorly formed walnuts were cut down to allow the best trees to grow freely. Though the walnut trees in this area are the same age as walnut trees on better bottomland to the east, they are distinctly shorter due to poorer soils that are visible at the creek crossing.

MORE RESOURCES:

Timber Stand Improvement

<http://nrs.fs.fed.us/fmg/nfmg/docs/mn/TSI.pdf>

Timber Stand Improvement—A guide for improving your woodlot by cutting firewood

By Bruce Palmer, Missouri Department of Conservation

http://mdc.mo.gov/sites/default/files/resources/2010/10/timber_stand_improvement_10-20-10.pdf

Thinnings and Woodland Stand Improvement

My Minnesota Woods, University of Minnesota

<http://www.myminnesotawoods.umn.edu/2007/04/thinnings-and-stand-improvement/>



As part of a current Timber Stand Improvement project, these walnut trees have been newly “released” on this half-acre site.



This is what the Timber Stand Improvement project done in 1979 looks like today.