

# Stewardship Notes

Indiana Division of Forestry

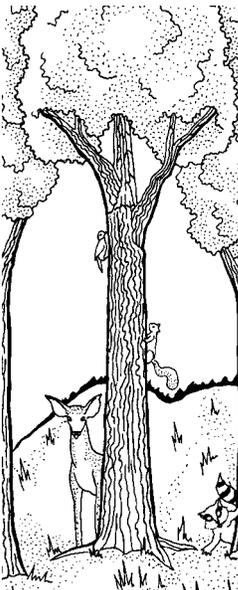


## Timber Stand Improvement

The woodlands of Indiana contain a rich diversity of living and non-living things that provide aesthetic beauty, watershed protection, wildlife habitat and timber resources. However, the arrangement and quantity of these things are not always as well placed as is desirable. By manipulating certain elements in the woodland through timber stand improvement (TSI), a forest can be healthier and more productive, and can meet the land use objectives and needs of the private forest landowner.

TSI involves deadening harmful grapevines, releasing crop trees, killing cull trees, and thinning trees that are overcrowded. Following this work, the remaining trees will have access to more sunlight, nutrients, and water, and will be able to grow faster and healthier.

Grapevines can cause serious damage to trees by competing for sunlight and nutrients and by creating excess weight in the crowns of trees. This extra weight can break the tops out of trees during snow, ice or wind storms. Some vines can be left, however, in cull or dead trees in the woods, or in lower value trees along the forest edge. These vines are important for various species of wildlife which not only use grapes as a food source, but also utilize the ravelings he vines to build and line nests. Other vines, such as poison ivy and Virginia creeper, do very little damage to tree growth and should be left untouched.



Thinning overcrowded stands, releasing crop trees, or deadening cull trees can be accomplished with either an axe or chainsaw, and chemicals where appropriate. Always be sure to wear appropriate safety equipment when using any of these tools.

When left alone, a woods will develop slowly, and those things that are most valuable may not develop to full potential. By applying some forest improvement work to the woods at the proper time, the forest will be healthier and will produce benefits that have far-reaching environmental impacts for future generations.

For more information, or to receive the detailed TSI manual *Forest Improvement Handbook*, contact your district forester, or the Division of Forestry.