NATURAL RESOURCES CONSERVATION SERVICE

CONSTRUCTION SPECIFICATIONS

FOREST STAND IMPROVEMENT

1. Scope

This work consists of the manipulation of species composition, stand structure, and stocking by cutting or killing selected trees and understory vegetation. This specification will be used to carry out this practice. Practice application will be documented in the technical notes and narrative statement in the conservation plan.

2. Improvement Methods

Give first priority to weeding areas that have highest potential for wood crop production. In dense, young native or planted stands, it is often necessary to remove part of the trees so that stand may be opened up and the remaining trees can grow at a faster rate. Thinning will be prescribed where needed.

In many stands where trees of undesirable species are competing for soil nutrients, moisture, and growing space with more desirable trees, weeding will be prescribed. The undesirable trees will be cut or killed to reduce the competition with the better trees.

The future value of any individual tree is directly related to the kind of product that can be manufactured from the tree. Limbs and knots have a major downgrading effect on timber quality and consequently on value. To improve the future value of the stand, individual trees may be designated for pruning, if such pruning will materially increase the market value of the mature tree.

Kill weed trees by girdling, frilling, and treating with a herbicide or cutting and treating with a herbicide on the stump. Frilling or cutting and treating with a herbicide are usually the most desirable methods for treating small areas, single trees, or thin stands. Trees that have been killed may be left standing. If trees are to be planted on the area planned for weeding, it may be desirable to plant the area first. When the seedlings are established, then open up the overhead canopy by weeding.

Frilling and treating with a herbicide. Frill with an axe at a convenient height above soil surface. Immediately apply chemical herbicide in accordance with directions given on container. Trees 5 to 12 inches in diameter should be frilled and treated with a herbicide. December 15 to March 15 is the best period for frilling and treating with a herbicide. Large trees may be girdled 2" deep with chain saw and treated.

Cutting and treating with a herbicide. Cut and treat the stump with a chemical herbicide best suited to kill the species. Apply chemical immediately after cutting in accordance with directions given on container. Trees 1 to 5 inches in diameter should be cut and treated with a herbicide. In some stands stumps may be allowed to sprout back where low habitat is lacking and desired.

Girdling. Girdle the tree about breast height, being careful to cut completely through the cambium layer all the way around the tree. Girdling is an alternative for killing a few large weed trees larger than 12 inches in diameter (may be done with chain saw).

In many cases, one application of the above described practice on any particular stand of timber will not be sufficient in itself to maintain good condition until maturity. The landowner should maintain the stand through occasional repetitions of the pruning and weeding techniques and through application of proper harvesting methods.

If pesticides are used, follow the directions and heed all precautions on the container label. Apply only in accordance with federal, state, and/or local laws.