Aerial Herbicide Application - (Woody Release)

Where Applicable:

Application of broadcast herbicide for the mid-rotation or post planting control of woody brush species is often advisable on cutover and semi-open tracts of land. Hardwoods often establish themselves within a pine stand even after initial steps to remove them occurred at the time of planting. These hardwood sprouts will compete with young pines for moisture and sunlight inhibiting growth and survival. This practice is most suited to stands with ≥10% hardwood component.

Description:

Hardwood release is usually conducted during the late summer or early fall of the year anytime after planting has occurred. Since most herbicides used for release are foliar active (taken in though the leaves), it is best to allow the site to green up before commencing application. Best results are obtained when the application is made during translocation of food reserves from the leaves to the roots (August-October). Application of the chemical is most often conducted from the air, using a helicopter equipped with a boom-type spray rig.

Common herbicides for the control of woody vegetation include various formulations of the chemicals imazapyr (Arsenal), glyphosphate (Accord), and triclopyr amine or ester (Garlon). These chemicals act to inhibit enzyme production (imazapyr and glyphosate) or to regulate growth (triclopyr) in hardwood tree species. In order to facilitate adherence to the leaf surfaces of plants, these herbicides are often combined with a surfactant during the mixing process. It is a violation of Federal Law to use these products in a manner inconsistent with their labeling (see specimen labels for general information, directions for use, precautionary statements, mixing and application instructions, etc.). All applicable Texas Forestry Best Management Practices for silvicultural chemicals should be followed.

Benefits:

Chemical release operations remove unwanted vegetation in competition with young pines. Reducing the amount of hardwood competition present on the site may help increase survival and growth of newly planted pine seedlings by redistributing moisture, nutrients, and available light that would have otherwise been used by the hardwoods. Application of Woody release is especially important to the survival of young pines during droughty periods, when seedlings are already stressed due to lack of adequate water.

Cost:

Release treatment costs vary from $60-80 per acre depending on location of the site, tract size, chemical costs, availability of vendors, etc.

Additional Information:

For more information on forestry herbicides, including application rates, targeted species, and material safety data sheets (MSDS) consult the online CDMS herbicide database on the Internet. The database has label and safe handling information for all major forestry herbicides. The CDMS web address is: http://www.cdms.net/pfa/LUpdateMsg.asp