Where Applicable:

Aerial application of herbicide is used for the control of herbaceous weeds and grasses in areas recently planted with pine seedlings. Applications are generally made on improved pastures, old fields, cutover areas, and prepared sites where vegetation control is desired across the entire treatment area.

Description:

Aerial applications of herbaceous weed control are typically made by helicopter with accompanying fuel and chemical support trucks. Herbicides are site specific. Each one is best suited for a particular purpose on a given site. Factors influencing suitability of an herbicide are: type of vegetation to be controlled, species of tree to be over-sprayed, soil type, time of year, proximity to water bodies, age of seedlings to over-spray, sensitivity of surrounding areas to damage from herbicides, and cost. After selecting the proper chemicals for the property based on the dominant species present, the company representative will usually delineate the treatment area boundaries with a Global Positioning System (GPS) unit. A suitable location for landing, refueling, and refilling the chemical tanks is then located on or within a reasonable distance from the property. The treatment area is aerial sprayed during the early periods of active growth (Feb-May) for herbaceous weeds and grasses using soil active and/or foliar active chemicals depending on the growth stage of targeted species. Great care should be taken to avoid application on non-target areas and operations should cease when wind speed exceeds 10 miles per hour. 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, handling, mixing and application instructions, disposal of chemicals and containers, etc.).

Benefits:

This practice is extremely beneficial to young pines by eliminating competing weeds and grasses within the same growing zone. Eliminating these shallow rooted species increases the amount of available moisture, nutrients, and sunlight for seedlings. This helps to promote growth and improve overall survival of newly planted seedlings during the first three critical years of establishment. Competition control results in more rapid growth of planted pines producing larger timber yields and shorter rotations for landowners.

Other Recommendations:

Best results are obtained when the application is made during the early stages of active weed growth (February- mid May) before an established root system is developed however, each herbicide may vary as to the best time of year to apply. Generally avoid spraying when rainfall is expected within 6 hours. Do not spray when seedlings are under stress. For most herbicides, evidence of yellowing, wilting and dying should be apparent within three weeks under normal rainfall conditions. A total of 5 to 10 gallons of spray solution should be applied per acre depending on vegetation density. Contact an herbicide specialist for a chemical prescription tailored specifically to your treatment area. It is recommended that you have a contract with the vendor and a guarantee on the chemicals used should the application be ineffective in controlling the target species. All Texas Forestry Best Management Practices for silvicultural chemicals should be followed.

Cost:

Aerial broadcast for herbaceous weed control ranges in cost from $40-$65/acre depending on tract size, vegetative cover, availability of vendors, chemical costs, application rates, etc.

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