

## ACCESS FOR TREE PLANTATIONS

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To minimize future losses, landowners planting trees should plan for access and firebreaks. Access to timberland is urgently needed for fire control and for economy in management and logging. The advice and assistance of a trained forester should be obtained in laying out an access system for timberland.

Forest regeneration has grown to impressive proportions in the South, with several million acres now in tree plantations. Gone are the days of the vast cutover and exposed timberlands of the twenties. What is remembered of this growth are the CCC camps bristling with young men planting trees, the many tree-planting crews of lumber and pulp mills, the interest of the average landowner in forest land development, the development of machines and techniques to plant and seed the forest land more quickly, and the growth of young stands of trees to pulpwood and saw timber.

From the initial attempts at protecting these young stands from uncontrolled fire, we have witnessed the development of a network of radio-equipped towers and airplanes for detection, and mobile radio-equipped crews with bulldozers and fire plows for suppression.

However, excessive emphasis has been placed on producing timber as soon as possible. Foresters (public as well as private), agricultural workers, and landowners have been too intent on planting trees to give proper consideration to future access to these areas (fig. 1). This condition will most likely continue to worsen until the first improvement cutting; then roads will be needed to remove the products cut. This situation applies to thick natural and seeded stands as well and can be worsened by deadening cull trees to release the desirable trees.

Fire control is most hazardous in closely spaced tree plantations without access planted 10, 20, or even 30 years ago. It has been almost impossible for fire control crews to combat fires in plantations where the trees were too large to run over and too closely spaced to permit passage of the size of tractor and fireplow used by most fire control organizations. These fires are extremely hazardous when wind velocity is high and fire reaches into the crowns of trees. Many valuable acres of planted timberland are lost because access was not provided when the trees were planted.

When laying out an access system, old roads should be used as much as possible. It may be advantageous to locate roads on the property boundaries. Roads on ridgetops usually are suitable, and spacer roads may be made by skipping each fourth or fifth row when planting. In planning for access, consideration should be given to prevailing winds, erosion, drainage, and streams.

Where cull tree control will be required, cull trees along the roads and firebreaks should be felled away from the planned access to prevent blocking. Planting crews should be supervised and not allowed to plant seedlings in the roads.

Areas already established to trees without prior planning will need adequate access, and this access should not be very difficult to obtain if work is begun early. There roads can be constructed in young stands with a rotary clipper along planned routes and to the width desired. Bulldozer blades, fireplows, road patrols, and disks may be used to con-



Figure 1.--This fire control tractor was unable to penetrate this 18-year-old stand of loblolly pine planted on spacing of 5 x 5 feet.

struct access routes. In older stands it may be wasteful and expensive to use the above methods when the routes can be cleared when a sale is to be made. The roads should be selected and laid out, and the trees involved should be marked, tallied, and sold. Row cutting may be practiced and each fourth or fifth row may be clearcut, leaving a wide lane through the length of the planting.

All roads should be maintained to allow access when needed. Main roads should be wide enough to let sunlight and wind in to aid quick drying after rain. They should be sloped to prevent water from standing and holes being washed out from the traffic moving through. Also, when sales are completed, roads should be made passible for regular vehicles.

Access should be planned before it is critically needed.