



TEXAS A&M FOREST SERVICE

Timber Management: Pre-Commercial Thinning

Purpose:

Pre-commercial thinning releases over-crowded pine stands to prevent stagnation and increase the growth of remaining trees. Pre-commercial thinning is usually applied to stands with trees less than 5 inches in diameter. It produces no immediate income for the landowner, but the cost is justified by the increased value of future growth.

Methods:

Trees are typically removed by mowing, disking, chopping, cutting or prescribed burning. Trees to be thinned can be individually selected or complete rows removed. Individual selection can be time consuming and costly. For this reason, row-thinning or prescribed burning is usually used on large areas.

Row Thinning:

Row thinning removes all trees in strips 6 – 8 feet wide with 6 – 8 foot wide uncut strips between. Strips can run in one direction, or cross in a checkerboard fashion. Retain crop trees that are straight, well formed, well spaced and disease free. Mow, disk or chop to obtain proper spacing of 400 - 800 desirable trees less than five inches in diameter per acre.

Prescribed Burning:

Careful use of prescribed burning with backfires can successfully thin dense pine stands. Burning kills many small trees but spares larger trees, which will later become crop trees. Backfires kill very few pine saplings with ground line stem diameters over 1.5 inches. The best age for burning can be as young as three years or as old as eight years. As might be expected, fires this close to the crowns of young trees will scorch the needles. It looks bad, but scorching usually does not kill pines. Backfires are slower and more expensive than other firing methods; however, they are effective and their cost is a fraction (5% to 15 %) of the cost of mechanical or hand thinning. Prescribed burning should be done only by trained and experienced personnel under exacting weather conditions.