



TEXAS A&M FOREST SERVICE

Reforestation: Disking for Site Preparation

Disking is applicable on sites suffering from light to moderate soil compaction from harvesting or past agricultural uses such as farming or grazing. This technique is also useful in incorporating organic matter into mineral soil on sites ranging from light to moderate vegetative/debris cover. Limitations include sites with debris or residual stems two inches or larger in diameter, excessive slope, extreme wetness, and large rock or other debris incapable of being disked.

Description:

Disking is accomplished by the use of a heavy track vehicle or rubber tired skidding tractors pulling a stronger, more robust version of the agricultural disk. It consists of a series of large-diameter, saucer-shaped steel blades joined at the center of an axle that allows them to roll when the implement is pulled. The concave blade surfaces face the leading end of the axle. The blade edges are sharpened, and usually serrated, to permit deeper penetration into the soil, cutting or breaking small stems and roots, and rolling over larger obstructions. Usually, two axles of the blades are set at a fixed angle to one another and pulled as a unit. Forestland disking should break a minimum of 6 to 8 inches of soil and should be done at least 2 months prior to planting to allow enough time for the soil to settle. After a proper site preparation burn, hand or wildland machine planting of seedlings can then be easily conducted.

Benefits:

This operation is beneficial in a number of ways. Disking is a cheaper alternative to heavier mechanical operations such as shearing and raking, where it can be utilized. Disking fractures compacted soils to improve root growth and development and allows for better aeration and moisture infiltration into the soil. Disking also reduces competition and incorporates organic matter into dryer soils where it will improve survival and early growth.

Other Recommendations:

Disking should be conducted during mid summer to mid fall followed by a prescribed-burn 6 to 8 weeks later after brown out. Disking should also be followed up with an appropriate herbicide application to help eliminate or control woody or herbaceous species in direct competition with seedlings for moisture and nutrients.

