



TEXAS A&M FOREST SERVICE

Reforestation: Prescribed Burning for Site Preparation

Prescribed burning is one of the least expensive and oldest forms of site preparation. This technique can be used to prepare a site for planting or to prepare the seedbed for natural regeneration purposes.

Prescribed burning can be a beneficial management tool when used properly with trained personnel. However, due to the risk of escaped fire, accidents caused by smoke, and other liability concerns, it should only be performed by experienced individuals. Prescribed burning can be conducted by broadcast burning or windrow (pile) burning. Broadcast burning is burning conducted over the entire treatment area while pile burning is restricted to windrows or piles of debris. An acceptable burning plan should first be formulated with appropriate documentation prior to conducting the burn. This plan will detail all information regarding the planned prescribed fire and should be followed as closely as possible.

The next step is plowing firebreaks around the area to be burned. Depending on the size of this area, interior firebreaks may be needed.

Neighboring landowners, the Texas A&M Forest Service, and local fire department dispatch locations should be notified before a burn is started. Once the proper weather conditions (temperature, humidity, wind speed and direction, etc.) are available and the proper equipment (dozers, hand tools, etc.) and personnel are on site according to the burn plan, the fire can be started. Burning may be accomplished by backfiring, strip firing, or any number of other firing methods. All fires should be watched closely for spotting over the firebreaks and completely extinguished before leaving the area.

Benefits:

Prescribed burning has many uses and benefits. It can be

used to reduce hazardous fuels, to prepare sites for seeding and planting, to improve wildlife habitat, or to temporarily control competing vegetation. This operation can benefit the site in several ways. Most nutrients are returned to the soil in a more readily available form than they were prior to burning. This is an advantage over shearing and raking where nutrients can be tied up in debris piles. Burning can be used to help control hardwoods less than 3" in diameter. However, the best vegetation control may be achieved using a combination of chemicals and burning. Burning also eliminates soil compaction and movement of soil caused by the use of heavy equipment with other site preparation methods.



Other Recommendations:

Burning season will be dependent on the goals of the burn. For example, to prepare a site for planting (debris reduction), burns should be conducted in late summer so that an optimal amount of slash is removed. The increased availability of nutrients following a prescribed fire may result in increased growth rates of competing vegetation. Herbicide applications for herbaceous weeds and grasses may be needed to reduce competition with young pine seedlings. Burning on steep slopes, deep sands, or other highly erodible soils is not recommended.