**PURPOSE:** A permanent firebreak is a strip of fire-resistant vegetation, bare ground or a combination that slows the spread of fire. Properly designed firebreaks may also provide wildlife habitat and access to the property. Firebreaks are also referred to as firelines and firelanes.

**EQUIPMENT:** Use a crawler tractor of JD 450 size or larger for clearing a firebreak. A mechanical spreader capable of spreading lime, fertilizer and seed is also required for establishing cover.

**LOCATION:** Locate firebreaks on ridge tops, on the contour, and through the forest at intervals of 1/8 to 1/2 mile. Closer intervals are recommended in areas of high risk or for prescribed burning.



Where possible, tie firebreaks into existing barriers such as roads, cultivated fields, pastures and utility rights-of-way. Do not tie lines directly into a lake, stream, pond or swamp. This practice is a violation of Alabama's Best Management Practices for Forestry because it is a threat to water quality.

Typical firebreaks are access roads, vegetated firebreaks, plowed or disked firebreaks, and grazed firebreaks.

**ACCESS ROADS:** Access roads may provide protection from wildfire and entry for forest management if properly designed and maintained.

- Roads should not be along streams and natural depressions.
- Do not incorporate stumps, logs, slash and other organic debris into roadbeds.
- They should be at least 10 feet wide. The maximum grade should not exceed 10% and should be broken every 300 500 feet on long, climbing grades.
- Use water diversion devices or broad-based drainage dips when erosion hazard is moderate to severe.
- Consider vegetation to reduce erosion and enhance wildlife habitat.
- Remove all burnable materials in early spring and fall before the fire seasons.

**VEGETATED FIREBREAKS:** Vegetated firebreaks are constructed by bulldozing, plowing or disking and then seeding.

- Select plants that retard fire, enhance wildlife habitat and offer ease of maintenance.
- Consider overseeding each fall with legumes, small grains, or ryegrass.
- Lime and fertilize periodically, and reseed when necessary.
- Vegetated firebreaks should be at least 10 feet wide.

 Mow or allow grazing to avoid build up of dead litter and help control weeds and woody vegetation.

**PLOWED OR DISKED FIREBREAKS:** Many different types of equipment are used to construct plowed or disked firebreaks. The objective is a bare area at least 10 feet wide that contains no burnable materials.

- Limit these firebreaks to areas with slight erosion hazard.
- Plow or disk to remove burnable material before the spring and fall fire seasons.
- GRAZED FIREBREAKS: Grazed firebreaks are used in areas where livestock can keep them closely grazed. This type protects the forest and provides additional grazing for livestock.
  - The preferred width of grazed firebreaks is 16 feet or more.
  - Plant with bahiagrass, small grains, ryegrass, legumes, or allow native species to reestablish on the firelanes.
  - Fertilize and lime periodically and reseed when necessary.
  - Graze properly and mow whenever needed.
- WATER DIVERSION: Develop water diversion devices on slopes to minimize erosion. Percent of slope will determine spacing and dimensions of the devices. Typically, they are 12 18 inches high and at a 30-degree angle downslope so water is diverted into forested areas. Fertilizing and seeding with species with dense deep root systems can stabilize firebreaks. Spacing should be based on the following criteria:

| Percent Slope | <b>Spacing in Feet</b> |
|---------------|------------------------|
| 3             | 200                    |
| 5             | 135                    |
| 10            | 80                     |
| 15            | 60                     |
| 20            | 45                     |
| 30            | 35                     |
| 40            | 30                     |

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