

Firebreak

Alabama Guide Sheet No. AL 394



Definition

A firebreak is a strip of bare land or vegetation that slows down fire. Firebreaks help protect soil, water, air, plant, animal, and human resources by preventing the spread of wildfire or controlling prescribed fires.

Criteria

Firebreaks may be temporary or permanent and consist of fire-resistant vegetation, non-flammable materials, bare ground, or a combination. They should be located to minimize risk to the resources being protected. The width of firebreaks may be increased to enhance wildlife habitat. The selection of plant species should be based on ability to retard fire, wildlife habitat enhancement, and ease of maintenance.

Where possible, constructed firebreaks should tie into existing natural barriers. Natural barriers include lakes, streams, ponds, roads, cultivated fields, pastures, and utility right-of-ways. Firebreaks should be located on ridge tops, on the contour, and through the forest at intervals of 1/8 to 1/2 mile. Closer intervals may be used in areas of high risk or for prescribed burning purposes.

Where Firebreaks Should be Applied

1. Parallel to public roads and railroads that are adjacent to forest land boundaries.
2. Parallel to forest land property boundaries.
3. Within forests where necessary.

Types of Firebreaks

Typical types of firebreaks are access roads,

vegetated firebreaks, plowed or disked firebreaks, and grazed firebreaks. Plowed or disked firebreaks should be limited to soils with slight erosion hazard. Access roads, vegetated firebreaks, and pasture firebreaks may be used on any soils provided erosion control measures such as water breaks or broad-based drainage dips are used when erosion hazard is moderate to severe.

Access Roads

Existing access roads may be used if they are properly maintained. All burnable material should be removed from the roads in early spring and fall just before the critical fire seasons. New roads may be constructed to provide protection from fire and to provide access for forest management. When locating new roads, aerial photographs, contour maps, and soil maps should be used. Roads should not be located along streams and in natural depressions. Access roads should be at least 10 feet wide, or wide enough to accommodate one-way truck traffic. The maximum grade should not exceed 10 percent and should be broken every 300 to 500 feet on long, climbing grades. Proper drainage is essential for the maintenance of roads. Roads used for firebreaks may be vegetated to help reduce erosion and enhance wildlife habitat. A list of recommended plant species can be found in "Erosion Control and Wildlife Plantings for Forestry Operations." Copies are available at your local NRCS office.

Vegetated Firebreaks

Vegetated firebreaks can be constructed by bulldozing, plowing, or disking and then vegetated to either perennial grasses or perennial grasses and legumes. Refer to "Erosion Control and Wildlife

Plantings for Forestry Operations.” The firebreaks may be overseeded each fall with either legumes, small grains, or ryegrass. Vegetated firebreaks should be at least 10 feet wide and may be used for access. They should be limed and fertilized periodically and reseeded when necessary. Vegetated firebreaks may be mowed or grazed to avoid build-up of dead litter and to help control weeds and woody vegetation.

Plowed or Disked Firebreaks

Many different types of equipment may be used to construct plowed or disked firebreaks. The desired result is a bare area at least 10 feet wide that contains no burnable material. Plowed or disked firebreaks should be limited to areas with slight erosion hazard. Firebreaks should be either plowed or disked to remove all burnable material before the fire season.

Grazed Firebreaks

Grazed firebreaks can be used in areas where livestock are present in sufficient numbers to keep the

firebreaks closely grazed. This type of firebreak protects the forest and provides additional grazing for livestock. The preferred width of grazed firebreaks is 65 feet or more with a minimum width of 16 feet. Fescue, bermuda, or bahiagrass should be planted. Grazed firebreaks may be overseeded each fall with legumes, small grains, or ryegrass. They should be grazed properly and mowed when needed. The firebreaks should also be fertilized and limed periodically and reseeded when necessary.

References

USDA-NRCS Conservation Practice Standard Code 394 - Firebreak. January 1999.

Firebreaks Protect Forest Lands, Alabama's Treasured Forests, Fall 1983

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