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BUREAU OF LAND MANAGEMENT

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MANUAL TRANSMITTAL SHEET

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Subject: BLM Manual 5716 – Protective Measures

1. Explanation of Material Transmitted: This release transmits the revised Manual 5716 – Protective Measures. Reformatting and deletion of outdated techniques using certain chemicals is the primary reason for this transmittal.
2. Reports Required: None.
3. Material Superseded: Manual 5716. Release number 5-20
4. Filing Instructions: Remove and replace in accordance with the below instructions.

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Chapter 1 - Overview

1.1 Purpose

This section provides standards and guidelines for protecting seedling and sapling size stands from animals, insects, and disease.

1.2 Objectives

Protective measures are designed to reduce the destruction of naturally or artificially sown seed; the destruction of or damage to trees; and damage to the forest site, such as soil compaction resulting from overgrazing.

1.3 Authority

See 5700.03

1.4 Responsibility

See 5700.04

1.5 Definitions

Reserved

1.6 Policy

See 5700.06

Chapter 2 - Protective Measures

2.1 Determining the Need for Protection.

Damage to trees by insects, disease, or animals that is severe enough to affect survival or growth is recorded during the regeneration stocking survey. If damage is occurring, the examiner determines the percent of plots affected and the potential effectiveness of alternative treatments as described in 5705.53. The procedure does not apply, however, to surveys made prior to the establishment of conifers. Judgment is then the only basis for determining the need. It is usually assumed that there is a need to protect artificially sown seed.

2.2 Coordination.

Protection measures involving pesticides, burning, or land clearing are closely coordinated with technical BLM experts, other federal agencies, state agencies, organized interest groups, and other interested parties such as adjacent landowners.

2.3 Safety and Pesticides.

Chemicals used to control forest pests are extremely dangerous and special measures are necessary to insure the safety of users. Always follow instructions on product labels.

2.4 Direct Control of Animals

A. Seed Treatment

Reserved

B. Seedling Treatment

Treating seedlings with a repellent can be an effective stop-gap protection from rabbits, deer, and mice. The effectiveness varies, depending on the animal species involved; individual animals; plant species being protected; geographic location; abundance of other animal food; and the time of year. Repellents may give good protection under one set of conditions and little or none under another. Protection is limited to treated portions of the seedling; new growth is not protected.

C. Baiting

1. Deer Mice (*Peromyscus*). (Reserved)
2. Meadow Mice (*Microtus*). Reforestation of grassy areas may be hampered by high populations of meadow mice. Repellent should be applied in late summer or early fall. Succeeding treatments are not recommended within six months of the initial treatment.

3. Chipmunks and Golden Mantled Ground Squirrels. Endrin tree seed treatments on sugar and ponderosa pine are usually ineffective against these rodents. Bait in late summer or early fall prior to hibernation for golden mantled ground squirrels. Chipmunks may be baited in the spring to protect emerging seedlings and in the fall to protect seed.
4. Rabbits, Hares, and Mountain Beaver. For mountain beaver, apply bait in spring, summer and fall and sword fern fronds in winter. For rabbits and hares, bait during late fall and winter when succulent plants are not available.
5. Pocket Gophers. (Reserved)
6. Porcupines. (Reserved)

D. Hunting

Properly organized hunting is a useful animal control tool for such animals as deer, elk, and porcupine.

Game Animals. State Game Agencies are responsible for managing and regulating game animals. Emergency or special hunts may be arranged in areas where excessive damage is sustained.

E. Mechanical Protection.

Techniques are available to provide mechanical protection to either seeded and planted trees by preventing access to entire plantations or individual trees. These techniques have limited application and are usually quite expensive. They should usually be limited to areas where severe damage has occurred or is anticipated.

1. Fencing. Fencing involves the use of woven wire or nylon net materials to exclude big game or livestock from entire plantations.
2. Screening. Individual trees or seedspots can be protected from some animals by wire screens. Screens may also reduce light intensity on the protected spot.

2.5 Animal Habitat Manipulation.

Reforestation-inhabiting animals, such as rabbits and mountain beaver, are often dependent upon heavy concentrations of slash and vegetation. Only by destroying this favorable habitat can

effective and lasting control be achieved. Treatments described in 5710, such as burning, clearing, and spraying in combinations, can be used.