

TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

Portland, Oregon

SOIL CONSERVATION SERVICE

Biology - No. 17

HABITAT MANAGEMENT

For

ELK



In the State of Oregon

Oregon has two recognized sub-species of elk, *Cervus canadensis*. (1) Rocky Mountain elk are distributed throughout the Blue and Willowa Mountains of northeastern Oregon. (2) Roosevelt elk are numerous in the Coast Range Mountains of western Oregon and to a lesser extent in the Cascade Range. Roosevelt elk are considered to be the larger. Annual harvest of elk in Oregon often exceeds 10,000 animals.

Elk, the largest member of the deer family in Oregon, are gregarious animals usually observed in herds or groups which vary from 5 to 15 animals or more. Larger bulls live apart from the herd except during the August, September, October breeding season. Elk are polygamous and individual bulls gather and hold as many cows in their harem as possible. Elk calves are born in May and June. Cow elk are among the best of wild mothers, being able to defend their offspring against almost all natural enemies.

Elk cows normally breed the third fall after birth and produce a single calf. In Oregon, elk calves are produced in the proportion of about 45 to 60 calves per 100 cows in good habitat. Survival of calves is high.

Bull elk make up the bulk of the elk harvest in Oregon. A young bull elk in its second year normally has spike antlers; after that the antler points may vary from 2 to 4 or 7 or more on each side. Except for spike bulls, antler points do not indicate age. After the elk hunting season in Oregon, surviving bull elk are in the proportion of about 8 to 15 bulls per 100 cows. Average age of individuals in a vigorous elk herd

in Oregon is about 5 years although some individuals may live up to an age of 10 years or more.

Habitat Needs

Feed

Elk predominantly feed on grass and forbs but do eat a considerable amount of browse. The latter is particularly true for Roosevelt elk.

Choice plant foods for Roosevelt elk include all available clover-like legumes except lupine; elderberry, salmonberry, vine maple, red huckleberry, elk sedge, orchard grass, bent grass, sweet vernal grass, false dandelion, trailing blackberry, sword fern and salal. In a Coos Bay study, trailing blackberry and false dandelion were the two most important plants for elk.

Choice plant foods for Rocky Mountain Elk includes bitterbrush, mountain mahogany, willow, elk sedge, sandberg blue grass, green cheat grass, wheat grasses, alfalfa, cereal wheat and orchard grass.

Water is necessary and is usually abundant where elk are found. Studies have shown that water for elk should be available within one half mile of food and cover.

Cover

Elk effectively use cover and rough ground to escape hunters and to find relief from severe weather. In eastern Oregon, elk often take refuge in dense lodgepole pine thickets and, when disturbed, may travel considerable distances. In western Oregon, cover is so dense and rank that elk usually remain in the same general vicinity when escaping enemies. In the Blue Mountains of Eastern Oregon studies have shown that tree cover patches should be at least 30 to 60 acres in size, have a crown closure of 70 percent and the trees should be at least 40 feet tall. Elk rarely feed more than 600 feet from cover.

Management

Hunting

In Oregon the general deer season precedes the elk season and this activity makes the elk wary and difficult to hunt. Severe weather forces elk to migrate to winter ranges at lower elevations, particularly in the Cascade Mountains and in eastern Oregon.

Because elk, especially the Rocky Mountain sub-species, range widely and are often scattered by deer season activities, it is difficult to manage for them on an individual landowner basis. Good range management with domestic animals and protection from uncontrolled hunting are effective tools if the area is large enough.

Elk deprecations on agricultural land can be damaging, often occurs after the regular hunting season, and is difficult to control. State Department of Fish and Wildlife biologists can suggest a number of alternatives to prevent or alleviate damage caused by elk. Some of the methods used to control elk damage include fencing, paneling haystacks, hazing, and special hunting season.

Elk are capable of damaging or destroying fences, particularly when frightened. One ranch operator in elk country saved his fences by placing poles along the top so that elk could see them and jump over.

References cited: Wildlife Habitats in Managed Forests. Forest Service; USDA; July 1979; Handbook No. 553

Ecology of Roosevelt Elk; Oregon State Game Commission; 1971; 44 pages.

Outdoor Almanace; Oregon Dept. of Fish and Wildlife.

Contact State SCS Biologist for additional information.