SHEEP AND THE ENVIRONMENT

SHEEP AND WILDLIFE

Four essential elements are needed for a healthy wildlife habitat — adequate food, water, cover, and space. How well a land provides these basics will determine the number and species of wildlife it can sustain. Sheep are a low-cost, energy efficient way of enhancing all four habitat essentials. Prescribed grazing — in which sheep are managed to obtain specific results — can improve the yield, accessibility, and nutritive quality of forage; the abundance of prey; and the amount of water, warm and secure cover, and space available to wildlife.

- Improved rangeland conditions contribute to a significant increase in United States wildlife. Since 1960, elk populations have increased by nearly 800%, moose by 500%, bighorn sheep by 435%, and antelope by 112%.
- In western Oregon, early summer grazing delays plant maturity resulting in a higher quality forage for black-tail deer and other big game animals in fall and winter. Sheep grazing also improves forage quality in the early spring by reducing dead plant matter, which gives new plants room to grow. Black-tail deer sharing these sheep-grazing habitats have heavier average body weights, are in better physical condition, and breed earlier than deer feeding in ungrazed areas.
- Sheep help control noxious weeds such as leafy spurge and spotted knapweed that crowd out the native plants that provide forage for wildlife. A recent U.S. Forest Service study of Montana's Lolo National Forest concludes that forage loss due to spotted knapweed in big game winter range could result in a loss of 220 elk annually by 1998.
- In the Southwest, prescribed sheep grazing can increase the abundance of prickly pear, an important food for javelinas, and shrubs that are a main winter food source for mule deer, pronghorns, feral horses, and rabbits that provide prey

for golden eagles and other raptors. Also, in grasslands and desert shrub rangelands of Arizona, New Mexico and Texas, sheep grazing during dormant periods promotes growth of forbs that pronghorns feed on year-round.

- In the Sonoran and Mojave Deserts, sheep grazing of perennial grasses and shrubs makes room for the annual forbs and grasses that are a critical food supply for desert tortoises.
- In the oak-juniper woodlands of Central Texas, late-summer sheep grazing on perennial grasses improves white-tailed deer habitat by promoting the growth of shrubs and forbes preferred by the deer.
- In mixed grass prairies, prescribed sheep grazing improves prairie dog habitats, which in turn aids black-footed ferrets, an endangered species whose primary food source is prairie dogs.
- In alpine areas, early-summer sheep grazing promotes growth of graminoids, a true grass forage preferred year-round by bighorn sheep. Mountain meadow sheep grazing also increases forage for ground squirrels that serve as prey for many raptors.
- In sage grouse wintering areas, light sheep grazing can uncover sagebrush plants from under deep snow, providing needed forage for the grouse. Fall grazing in sagebrush areas improves summer food supplies for sage grouse.
- The Environmental Protection Agency in its publication, Livestock Grazing on Western Riparian Areas, suggests using sheep to obtain better wildlife distribution in riparian areas. According to the Society of Range Management, proper grazing improves plant growth and diversity, which in turn increases species of wildlife.
- Free water is essential for many wildlife species. Water tanks, ponds, and reservoirs maintained by sheep operators are a vital source of free water for resident wildlife species, including deer, elk, coyotes, and water fowl.
- Extensive research shows that grazing is a natural ecosystem process universal to rangelands worldwide. Although livestock are not native to western rangelands, most western grazing lands evolved under heavy grazing by native herbivores such as bison. Studies show that sheep grazing functions similarly to native herbivore grazing in the harvesting of plants and the overall effect on the nutrient cycle. Studies conclude that "conservative livestock grazing appears to be sustainable over the longterm."

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Sheep and Wildlife is a publication of the American Sheep Industry Association (ASI), which represents more than 100,000 U.S. sheep and angora goat producers. Sheep are a natural, low-cost means of managing our wildlife habitats, even as they produce important resources, such as wool, meat, and lanolin. ASI is committed to proper grazing that benefits the environment, wildlife, the taxpaying public and consumers. For additional copies of this and other ASI pamphlets on sheep and the environment, contact the American Sheep Industry Association 6911 S. Yosemite St., Centennial, CO 80112, (303) 771-3500.