



Strategy Habitat: Aspen Woodlands

Ecoregions:

Aspen woodlands are a Strategy Habitat in the Northern Basin and Range and Blue Mountains ecoregions. However, aspen also can be found in the East Cascades ecoregion.

Characteristics:

Aspen forms woodland or forest communities, dominated by aspen trees with a forb, grass or shrub understory. Aspen generally occurs in areas which have additional moisture but are well drained, such as mountain slopes, rock outcrops and talus slopes, canyon walls, and some seeps and stream corridors. Aspen also can occur in riparian areas or in moist microsites within a drier landscapes. Characteristic understory grasses include Idaho fescue, pinegrass, Great Basin wildrye or blue wildrye, and shrubs include sagebrush, snowberry, serviceberry, and roses. Aspen habitats are dependent on disturbance, with fire and blowdown as the major disturbances. Aspen sprouts after fire and spreads vegetatively in large clones. With no disturbance, stands between 50-100 years old are replaced by other vegetation types. Aspen does not occur in the hottest, driest portions of the Northern Basin and Range ecoregion.

Conservation overview:

Aspen is on the edge of its range in Oregon and is more common further east in the Rocky Mountains and north into Canada. However, it is locally important in eastern Oregon, especially in the Northern Basin and Range and Blue Mountains ecoregions. In a landscape dominated by shrubs and grasses, aspen provide additional structure, useful as nest sites and hiding cover for wildlife. Aspen is a deciduous tree, and stands generally have high invertebrate prey diversity and densities. A suite of associated species, particularly songbirds, is entirely dependent on aspen. Aspen is important for birds in both migration and breeding seasons. It also provides fawning and calving habitat, hiding cover, and forage for mule deer and elk. Other wildlife that uses aspen include

bats, black bear, beaver, rabbits, ruffed grouse, and blue grouse. Tree swallows, woodpeckers and other birds nest in cavities.

Aspen stands contribute to watershed health by serving as snowdrift banks. The stands accumulate snow in the form of drifts that melt slowly, releasing a steady source of water during warmer months that feeds springs and augments streams, benefiting terrestrial and aquatic species.

Throughout the west, there is concern about the loss of aspen habitats and the lack of aspen regeneration in remnant stands. Aspen stands often depend on natural fire to reduce competition from conifers and stimulate the growth of suckers from roots. In addition to the changes from fire suppression, uncontrolled grazing can prevent regeneration and invasive species degrade understories. Within a stand, the aspen trees are clones arising from an interconnected root system. While the root systems may last for thousands of years, individual trees may only live for 100-150 years. Many existing stands are reaching the end of their natural life cycle, and, without young aspen trees to replace them, the stands will be lost completely. Juniper encroachment is a significant threat to aspen between 5,000 and 7,000 feet.

Restoration of aspen habitats will require a landscape approach to restoration and management. One such large-scale approach is the Blue Mountain Habitat Restoration Project in Wallowa County. This project was funded in part by the Wildlife Conservation and Restoration Program, and partners include Wallowa Resources, USFS, American Bird Conservancy, Blue Mountain Elk Initiative, Mule Deer Foundation, Rocky Mountain Elk Foundation, ODFW, and several private charitable foundations. The project is investigating cost-effective ways to maintain, enhance, and restore aspen habitats.

Limiting factors in Aspen Woodlands:

Factor: Altered fire regimes and juniper encroachment: Fire suppression has resulted in juniper encroachment and lack of reproduction in aspen clones.

Approach: Carefully reintroduce natural fire regimes using site-appropriate prescriptions (accounting for the area size and vegetation characteristics that affect resiliency and resistance to disturbance). Use mechanical treatment methods (e.g., chipping, cutting for firewood) to control encroaching junipers, recognizing that reintroducing a disturbance regime may be necessary to reinvigorate aspen reproduction. Apply treatments with respect to time of season and location. If desired for songbird conservation, remove juniper tree skeletons following prescribed fire because they could be used as predator perches.

Factor: Lack of reproduction: In addition to fire suppression, historic overgrazing has limited reproduction in clones of aspen stands.

Approach: Changes in grazing timing and intensity have helped aspen reproduction in some areas. Use temporary ungulate exclosures to encourage reproduction at high priority sites.

Factor: Degraded understories: Invasive plants, introduction of non-native pasture grasses, and historic overgrazing has altered the understory of many aspen stands.

Approach: Control invasive plants using site-appropriate methods and reintroduce native bunchgrasses and flowering plants at priority restoration sites.

Factor: Fragmentation: While some aspen patches naturally occurred in isolated patches, habitat conversion has increased fragmentation and isolation of aspen.

Approach: Analyze historic and current aspen distribution at the watershed scale to plan restoration activities that increase connectivity of aspen patches.

Factor: Mapping limitations: Current mapping efforts do not adequately document aspen stands due to their small patch size. Lack of adequate maps affects ability to restore connectivity of aspen patches at a landscape scale.

Approach: Support efforts to map aspen and other important habitats at fine (less than 100 feet pixel) scales.



Blue Mountain Elk Initiative

The Blue Mountains ecoregion is home to some of the largest populations of Rocky Mountain elk in the world. These remarkable herds attract over 70,000 hunters, photographers and wildlife observers each year, individuals who bring millions of tourism dollars to the region. Native American tribes also have an ongoing interest in elk for harvest and as cultural symbols. Elk often are attracted to high-protein crops such as alfalfa, and damage to agricultural areas has been an ongoing situation for many years. Wildlife managers and land management agencies must balance many competing interests and issues regarding elk populations.

To address some of these issues, the Blue Mountain Elk Initiative (BMEI) was formed about 15 years ago. Members of the BMEI include county,

state, tribal, and federal governments; non-governmental organizations (e.g., Rocky Mountain Elk Foundation; Oregon Hunter's Association; Oregon Farm Bureau; Oregon Small Woodlands Association); and business and industry representatives. BMEI focuses on improving management of elk habitat and reducing damage to private properties. BMEI collaboratively funds many projects to achieve these goals and BMEI-funded projects have improved over 1.5 million acres of elk habitat in the Blue Mountains ecoregion. Example projects include: riparian restoration; forage enhancement via prescribed burns, fertilization, seeding, and planting; invasive plant treatments; juniper removal; road closures; salt stations to help elk distribution; water developments; and fence construction. For more information, see www.fs.fed.us/pnw/bmnri/initiatives.htm.