

Conservation Practices for Birds in Nevada

evada's sagebrush community is critical to the success of more than 50 species of birds. Some bird species use this habitat type exclusively. Twenty-eight species of sagebrush occurs in Nevada, most commonly in valleys and mountain ranges north of the Mojave Desert from 4,500 to 10,000 feet elevation.

Nevada Partners in Flight (PIF), a group of state and federal agencies, conservation organizations, and research institutions, has identified bird species in Nevada that are declining. One of the goals identified in the PIF Bird Conservation Plan is to work with Nevada's farmers, ranchers, and other private landowners to reverse the decline of these "priority species" by protecting and conserving their critical habitat.

Sagebrush exists as the lone plant type across extensive areas or in mixed landscapes with other plant types including pinyon-juniper, mountain mahogany, montane shrub, montane riparian, aspen, and conifers.

Sagebrush provides habitat for a variety of bird species. In the upper elevations, sage brush communities provide nesting, foraging and cover for the Brewer's sparrow, white-crowned sparrow and black rosy finch. Mid-elevation sage brush with mountain brush, deciduous and conifer forests are critical habitats for the green-tailed towhee, vesper sparrow, northern goshawk, northern harrier, golden eagle, gray-crowned finch and black rosy finch. Lower elevation sagebrush communities with low rainfall, are home to loggerhead shrike, sage sparrow, black-throated sparrow, Brewer's sparrow, vesper sparrow, gray flycatcher, burrowing owl, ferruginous hawk, sage thrasher and the western meadowlark. The greater sage grouse moves seasonally between all three habitats. Sage grouse will breed in multiple elevations depending on snowpack. The birds rely on riparian areas and wet meadows for brood rearing activities. In the fall and winter months, the birds move to upland areas as their diet shifts to sagebrush.

In Nevada, wildfires have impacted almost 3.8 million acres of sagebrush habitat since 1946. Over the last decade, the state has lost roughly 190,000 acres of sagebrush habitat each year. Two million acres have been lost to fire since 1990. The loss of sagebrush directly impacts sagebrush dependent bird species. The lower elevation sagebrush land-scape is especially susceptible to cheat grass, and the increased occurrence of fire that often follows cheat grass invasion. If fire enters these low elevation sage ecosystems, the habitat may be permanently lost. Even in the best scenario, habitat recovery may be a long, arduous, and expensive proposition, as sagebrush requires 15-20 years to reach its climax community. Healthy sagebrush communities are characterized by a healthy understory that includes native perennial forbs such as Indian paintbrush and globemallow, as well as an abundance of native perennial grass such as Idaho fescue.

Resource agencies and government agencies should review the state's Sage Grouse Plan when considering development in sagebrush habitats. Large connected areas of sagebrush are critically important as wildlife corridors. When development must occur, developers should leave the bulk of the sagebrush community intact and only disturb the habitat needed to secure an adequate firebreak.

Priority Bird Species

Vesper Sparrow

In Northern Nevada, the Vesper sparrow nests in various open shrub habitats (*A.t. wyomingensis, A.t. vaseyana, A.t. spiciformis*) from 5,500 to 9,000 feet. Nests are generally placed on the ground in areas with a minimum of 20 percent native, perennial grass/ forb cover. Nests are often located at the base of a shrub stock or in the center of a tuft of perennial grass. The Vesper sparrow nesting season extends from mid-April to mid August depending on latitude and elevation. This sparrow with the diagnostic broad white outer tail feathers eats both seeds and insects and migrates to the southern U.S. and Mexico in winter.

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Sage Thrasher

The Sage thrasher is commonly found across most of Nevada during its breeding season. It is primarily found

in sagebrush habitat between elevations ranging from 4,900 to 8,200 feet. It builds its nest in the branches of a shrub or on the ground under a shrub. Sage thrashers are primarily insect eaters, but they will consume fruits and berries in season.

Recommended Conservation Practices

- Implement livestock grazing strategies that maintain a productive native perennial grass/forb understory in sagebrush habitat.
- Restore sagebrush rangelands by planting sagebrush and perennial understory and controlling annual invasive vegetation.
- Protect sagebrush rehabilitation sites with fence and defer grazing until these tracts are well established.

Sagegrouse

Greater sage grouse are found in scattered pockets of suitable habitat across all the counties in Nevada except Clark and Carson City. These birds depend heavily on sagebrush for food; as much as 98 percent of the adult's diet is sagebrush. They also use sagebrush for cover and shelter. Sage Grouse chicks utilize insects for their first two months of life.

Sage grouse require a variety of habitats to support the life processes of this bird, including windswept ridges for wintering; barren, rocky, exposed sites for strutting; sagebrush uplands for nesting and winter use; and stringer and wet meadow complexes for brood rearing. Habitat conversions using mechanical alterations and fire in breeding habitat are detrimental.

Recommended Conservation Practices

- Maintain a mosaic of sagebrush habitats throughout sage grouse range.
- Protect important water sources in sage grouse habitat.
- Provide sufficient residual cover in wet meadow and uplands habitats for nesting and brood rearing.
- Promote restoration of native vegetation following wildfire.
- Protect strutting grounds and adjacent habitats.
- Implement livestock grazing strategies that maintain a productive native perennial grass/forb understory in sagebrush habitat.

Reference for specific habitat requirements – see guidelines from the Western Association of Fish and Wildlife Agencies.

Where to Get Assistance and More Information

This fact sheet covers some of the basic considerations and conservation practices that will benefit priority bird species relying on sagebrush habitat areas for their survival, as identified in the Nevada Partners in Flight Bird Conservation Plan (PIF BCP). We recommend you seek the advice of a biologist, conservationist, or resource planner to help you meet your objectives. The Nevada Department of Wildlife, Natural Resources Conservation Service, or your local conservation district can provide this assistance. All of these offices have received a copy of the plan, which contains more detailed information on how you can help these birds remain a part of your community.

Sources of Cost-share Assistance for Wildlife Habitat Improvement

Nevada Department of Wildlife Landowner Incentive Program USDA Natural Resources Conservation Service Wetlands Reserve Program (WRP) Wildlife Habitat Improvement Program (WHIP) Environmental Quality Incentives Program (EQIP) Landowner Incentive Program through the Conservation Districts US Fish and Wildlife Service Partners for Wildlife Intermountain West Joint Venture

Nevada Division of Forestry (NDF) Stewardship Incentive Program