Conservation Practices for Birds in Nevada

Nevada’s agricultural lands are critical to the success of more than 100 species of birds. These species depend on farmers and ranchers managing their lands with conservation in mind. 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.

Most of Nevada’s agricultural lands are in valley bottoms and floodplains. Irrigated cropland and pastureland are distributed throughout the state and cover approximately six million acres. The majority of the crops grown are hay, wheat and potatoes. Native vegetative communities adjacent to agricultural lands include greasewood-sagebrush in the north and salt desert shrub-creosote in the south. Farming practices such as growing hay, leaving stubble on harvested grain fields, and flood irrigation all contribute to nesting and feeding habitat for wildlife. Rotating land uses, resting pastures, or adjusting irrigation water application times can give nesting birds the time and space necessary to successfully reproduce.

Private landowners have an important role to play in the conservation of many of Nevada’s bird species. Strategies designed to improve overall land condition, such as restoration of vegetation in stream and river corridors, can have positive results for both birds and land productivity. Since birds do not utilize a single vegetation type for all of their life processes, they benefit when land managers can maintain a mixture of habitats. Even small patches of shrubs and/or perennial grasses can have value for wildlife. If native shrubs are not available, they can be planted under cost-share programs. Guidelines are available, such as the Natural Resources Conservation Service handbook, Conservation Plantings for Natural Resources Management. Tree plantings are also important components of bird habitat, especially for raptors. There are a variety of programs available to assist landowners with the specifications and cost of trees to plant for wildlife.

Some complex projects to improve bird habitats on private lands may require significant funding. There are a variety of programs available to assist landowners with financial costs incurred to establish or maintain wildlife habitat. A list of programs and associated agencies are listed on the back of this fact sheet.

Priority Bird Species

White-faced Ibis, Long-billed Curlew

The white-faced ibis and long-billed curlew use irrigated agricultural lands extensively during the breeding season and migration, but nest mostly on areas other than agricultural lands. The long-billed curlew nests in short grass pastures adjacent to wetland meadows or lakes, and feeds predominantly on insects and earthworms. The white-faced ibis prefers to nest in emergent marsh vegetation and favors tules in the Great Basin.

Recommended Conservation Practices

◆ Adopt grazing strategies on irrigated pasture to include stubble heights of less than eight inches with scattered patches of residual taller vegetation from May 1 to July 15.
◆ Incorporate rotation systems for grazing, irrigation and hay cutting to allow pastures to rest for nesting curlew from May 1-July 15.
◆ Retain a large portion of tules in and around ponds and water areas.

Bobolink

The bobolink prefers to nest on the ground in hay meadows that are flood irrigated or naturally flooded, with no canopy. Birds also roost on willow, bulrush, and cattail at the edges of hay meadows. Bobolinks arrive on their summer range in late May and early June, and most broods are off the nest by the end of June.

Recommended Conservation Practices

◆ Delay harvest of meadow hay until after the brood has left the nest (late June).
◆ Maintain natural hay meadows and saturated soils surrounded by willows or other shrubs and trees well into June.
◆ Maintain natural or flood irrigated meadows as long as possible.
◆ Retain a large portion of tules in and around ponds and wet areas.
Sandhill Cranes

Greater sandhill cranes prefer to nest in hay meadow habitats with a “mosaic” of wetland vegetation interspersed. These areas with “edge” effect are most desirable. Cranes have also been documented nesting in flooded greasewood or wild rye. They like to nest and roost in large, relatively flat river valley floodplains from 4,400 to 7,000 feet elevation, preferably on islands or peninsulas adjacent to marsh vegetation. However, they will also nest on river islands, riverbanks, and in large expanses of flooded meadow or alkali playa. Birds arrive on breeding grounds in March. Incubation time is 30 days and fledging time is 60 days.

Recommended Conservation Practices

◆ Maintain residual vegetative cover in nesting areas through the breeding season.
◆ Keep meadows wet through July.
◆ Limit or restrict livestock grazing on nesting areas through the nesting period.
◆ Postpone mowing until August.
◆ Retain and protect nest habitat from land use conversion.
◆ Create/protect nest islands in emergent hardstem bulrush, willow, greasewood and Great Basin wild rye habitat.
◆ Restore, maintain, and enhance wetland habitats.
◆ Protect riparian woodlands, idle borders, and vegetated waterways from human disturbance.
◆ Harvest grain fields late and leave residual grain on the ground.
◆ Utilize incentive programs and conservation easements to plant grain crops for staging and breeding cranes.

Swainson’s Hawk, Burrowing Owl, Ferruginous Hawk, Prairie Falcon, Short-Eared Owl

The Swainson’s hawk resides in agricultural valleys interspersed with cottonwood trees or on river floodplains with cottonwood and buffaloberry. The burrowing owl often nests in ground burrows around the fringes of agricultural land, and uses crop and pasture lands for foraging through the breeding season. The ferruginous hawk, prairie falcon, and short-eared owl use agricultural lands as wintering habitats. All three species breed in Nevada but not in agricultural areas.

Recommended Conservation Practices

◆ Leave live trees, snags, fence posts and power poles for raptor perches when possible. Also leave mature cottonwoods along floodplains.
◆ Leave corners, fencerows and drain ditches in native vegetation or plant native vegetation that will out compete undesirable plants.
◆ Participate in set-aside programs that leave lands idle or planted with cultivated crops.
◆ Be conservative when using insecticides and rodenticides.
◆ Leave badger and rodent burrows open to allow burrowing owls to nest.
◆ Maintain buffaloberry thickets and other shrubs of varying heights.

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 agricultural lands 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 PIF BCP 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