



Conservation Practices for Birds in Nevada

Wetlands and Lakes

Nevada's wetlands and lakes are critical to the success of more than 100 species of birds. These species depend on farmers and ranchers managing their land and water with conservation in mind.

Nevada Partners in Flight (PIF), a group of conservation groups, state and federal agencies, and research institutions, have 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.

Nevada's wetlands include a variety of perennial and ephemeral marshes, open waters, and playas that are located across the state. Many of Nevada's Great Basin marshes provide habitat that is unique to the world. As established in the Clean Water Act, wetlands are generally defined by the extent of water and type of aquatic vegetation found therein. An estimated 267,074 acres of emergent marsh, 183,747 acres of open water, and 758,020 acres of playa wetlands occur in Nevada. These wetlands provide a variety of habitats that are critically important to bird migration, nesting, foraging, and cover.

Existing in a desert climate, Nevada's wetlands are highly dependent upon conservation and proper use of available water. In order to support priority species, an adequate quantity and quality of water must be available to support the entire ecology of each of Nevada's wetland habitats. The way that ranchers and farmers seasonally manage their water can make all the difference for wildlife. For instance, calling for water, flood irrigating fields, and discharging waters to drains are all opportunities for wildlife to benefit from existing resources. Cooperative efforts are essential to maintaining the state's wetland habitats.

PRIORITY BIRD SPECIES

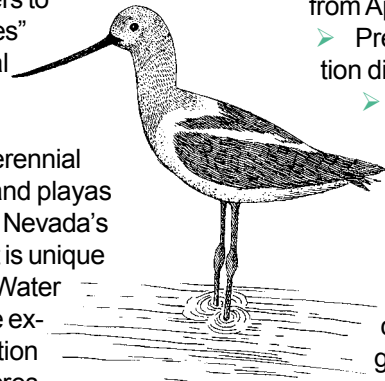
WHITE-FACED IBIS

White-faced ibis nest in colonies throughout Nevada's perennial wetlands and prefer hardstem bulrush and cattail marshes associated with flood-irrigated agri-

culture. Smaller colonies are found in isolated perennial marshes and ibis will use other cover types during times of drought. The priority wetlands supporting Nevada's largest nesting colonies of white-faced ibis are located at Carson Lake, Stillwater National Wildlife Refuge, and Ruby Lake National Wildlife Refuge, all in northern Nevada.

RECOMMENDED CONSERVATION PRACTICES

- Manage perennial stock ponds, reservoirs, ditches, and natural marshes for mature hardstem bulrush habitat at a constant depth of 12 to 24 inches from April 15 to August 15.
- Prevent non-point and point source pollution discharges to wetlands.
- Consider managing wetlands for winter waterfowl and recreational hunting to support conservation practices.
- Consider conservation easements to lessen tax burdens for conservation practices.
- Consider sales of unused or excess water rights to local conservation groups working to benefit wetlands.



AMERICAN AVOCET

American avocets commonly nest in shallow flooded wetlands and pastures. While avocets are found nesting in colonies on large wetlands, they can also be found scattered across Nevada as solitary nesters on small stock ponds, pasture, playas and riverbanks. Saline conditions of drain water or evaporated ponds support the brine flies, brine shrimp and aquatic invertebrates necessary for avocet foraging.

RECOMMENDED CONSERVATION PRACTICES

- Flood saltgrass pastures at a constant depth between two to six inches from April 15 to August 1 each year.
- Consider participating in the Wetland Reserve Program offered by NRCS.
- Consider conservation easements to sustain proper management practices for avocets.
- Avoid off-road vehicle use and reduce stocking rates for livestock during the critical nesting periods from April 15 to August 1.
- Consider managing wetlands for winter waterfowl and recreational hunting to support conservation practices.
- Consider sales of unused or excess water rights to local conservation groups working to benefit wetlands.

BLACK TERN

Black Terns nest in loose colonies on perennial fresh water marshes. Black terns forage over the open waters of ponds and reservoirs, feeding on a variety of insects, small mollusks, and minnows. They nest where thick mats of submergent vegetation can support their floating nests.

RECOMMENDED CONSERVATION PRACTICES

- Sustain perennial wetlands with fresh, non-saline water supplies under management strategies that grow thick mats of submergent aquatic vegetation.
- Manage wetlands to prevent saline or non-point pollution discharges, which contaminate wetlands and compromise their freshwater qualities.
- Manage and maintain wetland emergent vegetation at a 50:50 ratio with open water.
- Avoid the application of mosquito abatement that would harm aquatic insect life in wetlands with suitable Black Tern nesting conditions.

SHORT-EARED OWL

The short-eared owl is an early season nester in wetland meadows and marshes. This species requires residual vegetation to support nesting cover and their primary prey species, voles. On meadows, short-eared owls will nest on a high hill with thick vegetative cover that stays above the floodwaters and saturated soils. In marshes, short-eared owls nest in dry stands of cured hardstem bulrush/cattail where voles are plentiful. Short-eared owls may roost in wet or dry residual stands of cattails and hardstem bulrush in the winter.

RECOMMENDED CONSERVATION PRACTICES

- Manage livestock grazing to maintain a suitable stubble height of 4-6 inches in wetland pastures or meadows.
- Consider excluding livestock from a portion of a meadow in order to accumulate residue for next year's nesting owls.
- Graze meadows in mid to late summer to make voles more accessible to owl fledglings.
- Leave residual cattail or hardstem bulrush stands in perennial wetlands.
- Avoid prescribed fire or herbicide programs that destroy residual stands used as a roost site for owls.

CLARK'S GREBE

Clark's grebes inhabit perennial wetlands where small forage fish are available. Clark's grebes prefer marshes with a 50:50 mix of open water to emergent marsh. They either build nests

of cut cattails and hardstem bulrush in thick stands of emergent vegetation, or semi-floating nests on thick mats of submergent pondweed. They nest individually or in loose colonies of varying size. Optimal Clark's grebe habitat requires stable water conditions and water quality that supports a perpetual fishery.

RECOMMENDED CONSERVATION PRACTICES

- Ponds and reservoirs must maintain water depths of six to eight feet to allow optimal conditions for forage fish year-round.
- Water quality must be maintained at levels that support aquatic life.
- Aquatic emergent vegetation should be managed at a level to provide nesting material for grebes.
- Reservoir management strategies should be implemented to avoid late season drawdowns during years of delayed nesting.
- Consider managing farm ponds for fee-based recreational fishing to offset costs of conservation practices.

LONG-BILLED CURLEW

Long-billed curlews nest and forage in wetland meadows throughout the Great Basin. Residual meadow vegetation provides important cover for nesting from May to mid July. Long-billed curlews use flood-irrigated agricultural lands extensively for foraging, as well as during migration. These birds nest quite often in native hay meadows and pastures, particularly along river floodplains and wetlands or lakes. Long-billed curlews feed on insects and terrestrial or aquatic invertebrates.

RECOMMENDED CONSERVATION PRACTICES

- Manage livestock on lowland floodplain pastures to retain patches of eight inch stubble height for the nesting season from May 1 to July 15.
- Adopt grazing strategy on irrigated pastures to include stubble heights of less than eight inches with scattered patches of residual, taller vegetation from May 1 to July 15.
- Consider incentive programs to fence wetland meadows and native pastures adjacent to wetlands.
- Incorporate grazing, irrigation, and harvest rotation systems to allow rest of specific pastures for curlew nesting.
- When possible, delay hay cutting until July 15.
- Restore wetland meadow habitats by controlling the elevation of the water table and controlling invasive brush on hydric soils.
- Delay irrigating and cutting of meadows in this habitat type until after July 15 for nesting birds.

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 wetlands and lakes 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 Division 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

- USDA Natural Resources Conservation Service
- Wetlands Reserve Program (WRP)
 - Wildlife Habitat Improvement Program (WHIP)
 - Environmental Quality Incentive Program (EQIP)

- US Fish and Wildlife Service (USF&WS)
- Partners for Wildlife
 - Intermountain West Joint Venture
 - Nevada Division of Forestry (NDF)
 - Stewardship Incentive Program