

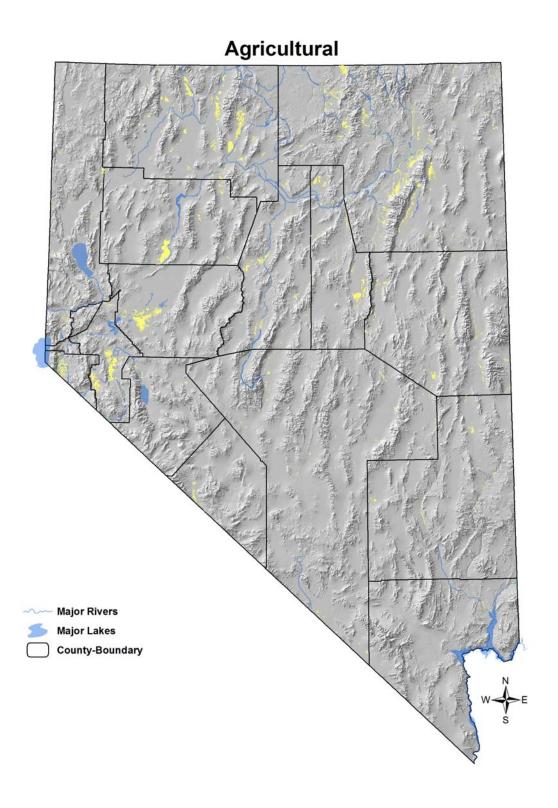
Agricultural area south of Lovelock, Pershing County. Photo by Elisabeth Ammon.

Key Bird-Habitat Attributes

Plant Species Composition	multi-species mixtures ideal for grass; crops including barley, corn, wheat and similar large-seeded crops good for fall migrants; alfalfa suitable for Greater Sage-Grouse
Ideal Scale for Conservation Action	whole field and border habitats
Crop Management	Haying schedules that avoid the main breeding season (May – mid-June) most suitable; flushbars on agricultural equipment extremely beneficial
Trees	Old-growth deciduous trees desirable for nesting and perching of raptors and owls
Windbreaks and Hedgerows	Rows of native willows, alders, and other shrubs along ditches and streams particularly suitable for some species
Other Features	Protection of nearby streams, springs, rivers from chemical and livestock impacts enhances overall wildlife value of agricultural lands; Establishment of feral cats should be discouraged

Conservation Profile

Conservation Frome	
Estimated	323,600 ha (800,000 ac)
Cover in	1.1% of state
Nevada	
Landownership	Private = 89%
Breakdown	BLM = 5.1%
	Tribal = 3.0%
	Other = 2.9%
Priority Bird	Swainson's Hawk
Species	Bald Eagle
	White-faced Ibis
	Long-billed Curlew
	Sandhill Crane
	Short-eared Owl
	(Greater Sage-Grouse)
Indicator	Bobolink (in northern and NE Nevada)
Species	
Past Impacts	n/a
Most Important	Habitat Conversion
Current	Change in Agricultural Practices
Threats	
Habitat	2 years
Recovery Time	
Regions of	Overton and Pahranagat Valley areas
Greatest	in the south, Lahontan, Smith, Ruby,
Conservation	and Paradise valleys in the north
Interest	
Important Bird	Lower Muddy River and Pahranagat
Areas	valleys, Boyd Humboldt Valley
	Wetlands, North Ruby Valley, Ruby
	Lake, Carson Valley, Lahontan Valley



Agricultural lands support a number of priority bird species in Nevada, most importantly perhaps the Long-billed Curlew, Sandhill Crane, White-faced Ibis, and Swainson's Hawk. Greater Sage-Grouse also make use in the summer of some crops for cover, forage, and night-roosting. For the purpose of this plan, we refer to agricultural lands as actively irrigated crop lands, excluding only those hay fields and pastures that are not irrigated. Farming is fairly limited in Nevada, with only an estimated one percent of farmlands of total land cover. Priority species that are supported by farming use the fields during migration, breeding, and to some extent, in the winter. Floodirrigated crop lands provide foraging for invertebrate probers, such as White-faced Ibis, while the drier meadows support Long-billed Curlew and Short-eared Owl. Old, deciduous border trees support raptor nests and roosts, and other native buffer zones around fields are often used by ground-nesters, such as Cinnamon Teal. Nearby wetlands are beneficial in agricultural settings for a variety of birds, as these provide additional foraging opportunities, particularly for birds that rely on aquatic invertebrates. Crop waste from fall tilling supports migrating waterfowl and Sandhill Cranes. In meadows, high species richness in graminoids and forbs increase habitat value for several species.

The primary threats to agricultural areas are habitat conversion for urban and other uses, and changes in agricultural practices from light, small-scale operations to intensive, large-scale farming. If herbicides, insecticides, and rodenticides are used intensively, they present a threat to birds using agricultural lands and associated wetlands. Finally, misperceptions about damage by birds to livestock, seedlings, and crops may still persist in some regions.

Agriculture or Wet Meadow Not To Scale Swainson's Hawk Bald Eagle (winter) Cinnamon Teal Northern Pintail Sandhill Crane White-faced Ibis (Tricolored Blackbird) Long-billed Curlew Short-eared Owl Wake Was Large Deciduous Tree Pond Feature Transition into Agricultural Field Greasewood/Sagebrush buffer with willows and native uplands particularly suitable Uplands high herbaceous plant diversity most suitable in meadows; flood irrigation suitable for several species; large-seeded crops suitable for fall migrants

Suitable Patch Size: Whole field or meadow, plus 100 m buffer

Conservation Strategies

Habitat Strategies

- 1. Manage at the scale of one or multiple irrigated fields, ideally with each field having a buffer of native vegetation, and the entire area having a 100 m (110 yards) buffer of mostly native vegetation (but may include maintenance roads, ditches, fences, or trails). Single old trees or tree stands are beneficial to several species and attract species that feed on rodents. Bordering windbreaks and hedgerows are particularly valuable if they consist of native species such as willow, alder, rose, etc.
- 2. If wetlands are nearby, any measures to protect water quality are beneficial to birds. Shorelines should also be protected to the extent possible, as ground-nesting species will be attracted to them.
- 3. Removal of invasive plants should be followed by active restoration of native vegetation or crops in the removal sites, as weedy species often take advantage of disturbed soils and become more easily re-established in the absence of competition.

Public Outreach

- 1. Promote pride of landowners in wildlife attracted to their property. Outreach may include tips on agricultural practices and habitat features that enhance habitat value to birds.
- 2. Provide educational materials on threats from domestic and feral cats to birds, benefits of birds to agricultural operation (control of rodents), and on wildlife-compatible crop management, grazing practices, and weed control.

Research and Planning

1. If losses of crop lands to other land uses continue, planning for mitigation of habitat loss may be necessary.