

# Nevada Wildlife Action Plan

## What is a wildlife action plan?

Congress asked each state to develop a wildlife action plan, known technically as a comprehensive wildlife conservation strategy. These proactive plans examine the health of wildlife and prescribe actions to conserve wildlife and vital habitat before they become more rare and more costly to protect.

## Nevada snapshot

**Geography:** Nevada's diversity of life is derived from its geography; the many mountain ranges are effectively isolated from one another by arid and treeless basins. Nevada's borders encompass about 71 million acres, making it the seventh largest state.



Yucca Forest/USFWS

**Landscape:** The federal government administers 86% of the land base.

**Wildlife:** Among the 50 states, Nevada ranks eleventh in overall biological diversity, sixth in number of endemic species, third in number of species at risk and eleventh in the number of species extinctions.

## Nevada's planning approach

To develop the Nevada Wildlife Action Plan, the Nevada Department of Wildlife partnered with the Nature Conservancy's Nevada Chapter, the Lahontan Audubon Society, and the Nevada Natural Heri-

tage Program. A grant from the Nevada Division of State Land's Question One Conservation Bond program was awarded to assemble Nevada's Wildlife Action Plan.

With the help of experts from all taxonomic fields, the Plan Team identified a total of 263 Species of Conservation Priority, including 72 bird species, 49 mammal species, 40 fish species, 20 reptiles, 7 amphibians, 74 gastropods, and 1 bivalve. GIS and documented occurrences of



Collared Lizard/Christine Klinger, NDOW

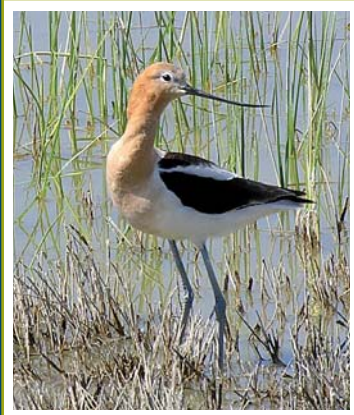
wildlife species within Nevada's landscapes were used to identify key areas essential to the conservation of fish and wildlife species.

Using data derived from the Southwest Regional Gap Analysis Project, the Plan Team organized the various ecological systems of the state into 27 key habi-

*"Given Nevada's tremendous population growth and its resulting development of open spaces, this Wildlife Action Plan is critical. The effort is cost-effective because it aims to conserve wildlife before species become rare and more costly to protect, thereby inhibiting Nevada's economic progress."*

*—Former Nevada Governor  
Kenny Guinn*

tat types. Multi-level strategies were devised for these 27 key habitats that integrate conservation needs for species



American Avocet in nest/Larry Neel, NDOW

categories, as well as for individual species. Each strategy describes the habitats, their values to wildlife, land uses within the habitat and problems facing the species and habitats. This information provides support to the goals, objectives and actions that follow. The Plan Team derived objectives and actions from existing conservation

plans, where available, and supplemented with new strategies, where necessary, in consultation with species experts and conservation partners. The draft strategy sections also underwent extensive expert review. Each strategy includes a list of key conservation partners, programs, and projects likely to fulfill the objectives for each key habitat, and each identifies preliminary focal areas for action through an intuitive process involving coordination with partners and concur-

rent planning processes.

## Primary challenges to conserving wildlife in Nevada

Nevada is uniquely challenged in developing effective wildlife conservation programs in part because of its arid climate, geography and relative scarcity of water resources, which has created a unique endemic biota easily subject to threats and stressors. Throughout Nevada, water is a scarce and valuable resource essential for both human needs and maintenance of wildlife and their habitats. Consequently, the alteration of hydrologic resources is a significant source of stress to wildlife resources. Nevada is also one of the fastest growing states in the nation, with human population creating a need for additional development into open space, causing habitat loss. Invasive, exotic and feral species are one of the most critical problems facing both terrestrial and aquatic species and habitats in Nevada.

Wildlife	Total number of species	Species of conservation priority*	Threatened/ endangered
Mussels	5	1	0
Snails	95	74	0
Crayfish	5	0	0
Fish	122	40	25
Amphibians	15	7	0
Reptiles	54	20	1
Birds	467	72	3
Mammals	136	49	0

*\* Species of Conservation Priority were determined through the implementation of three separate matrix evaluations – one each for nongame terrestrial animals, game animals, and aquatic animals – generally following standard species prioritization theory such as practiced by Partners In Flight. Consideration was given for state Natural Heritage Program rankings, as well as federal or state listing status. Each evaluation matrix process employed its own ranking criteria, but all considered the degree of threat facing a species, our current knowledge of the species’ life history and conservation need, and some kind of evaluation of the opportunity to effect significant conservation action given the Nevada conservation partnership’s interest in the species. For birds, additional consideration was given to species that had already been identified as priorities in some other conservation planning process at either the state, regional, or continental level.*

### Wildlife highlights

Highlight habitats	Wildlife (examples)	Issue (examples)	Action (examples)
<b>Sagebrush</b>  <b>Ownership:</b> <b>Public 86%</b> <b>Private 14%</b>	<ul style="list-style-type: none"> <li>Greater sage-grouse</li> <li>Brewer's sparrow</li> <li>Pygmy rabbit</li> <li>Sagebrush vole</li> </ul>	<ul style="list-style-type: none"> <li>Wildfire type conversion</li> <li>Depletion of understory</li> </ul>	<ul style="list-style-type: none"> <li>In collaboration with the BLM and Forest Service, update fire response plans for all districts using the latest information gathered from collaborative wildlife conservation planning efforts such as the Governor's Sage Grouse Conservation Team. Prioritize areas for rapid fire response; set fire response objectives for all lands in a district.</li> <li>Improve understory condition and diversity of native forb communities through progressive grazing management. Design grazing management strategies that initiate range recovery while providing the compensations necessary to maintain livestock operation objectives.</li> </ul>
<b>Intermountain Rivers and Streams</b>  <b>Ownership:</b> <b>Public 43%</b> <b>Private 57%</b>	<ul style="list-style-type: none"> <li>Lahontan cutthroat trout</li> <li>Willow flycatcher</li> <li>Northern leopard frog</li> <li>Northern river otter</li> </ul>	<ul style="list-style-type: none"> <li>Interruption of natural flow</li> <li>Degradation of habitat quality</li> <li>Invasive plants</li> </ul>	<ul style="list-style-type: none"> <li>Develop new and implement existing strategies to address and eliminate potential movement barriers to reconnect fragmented stream habitat complexes.</li> <li>Develop riparian wildlife objectives and best management practices; incorporate into NRCS Nevada WHIP Plan; in cooperation with NRCS, develop wildlife consultation services that provide quantified wildlife outputs for NRCS project proposals.</li> <li>Support actions by land management partners and local governments to control invasive and noxious plants and weeds.</li> </ul>
<b>Aspen Woodland</b>  <b>Ownership:</b> <b>Public 88%</b> <b>Private 12%</b>	<ul style="list-style-type: none"> <li>Northern goshawk</li> <li>Columbia spotted frog</li> <li>Mule deer</li> </ul>	<ul style="list-style-type: none"> <li>Stand regeneration</li> <li>Water table maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Develop aspen regeneration strategies at the landscape scale with consideration for the preservation of active Northern Goshawk territories in project design and implementation.</li> <li>Avoid spring development in and directly above aspen woodlands that withdraws water beyond sustainable levels.</li> </ul>

### Recommended actions to conserve Nevada's wildlife

One of the most critical ecological processes threatening wildlife conservation in Nevada today is the rapid conversion, due to wildfire, of sagebrush, Mojave, and shadscale shrub habitats to invasive annual grasses and forbs. The invasion of such aggressive species as cheatgrass, red brome, and medusa head converts rangelands to much more frequent fire cycles for which the exotic species are better adapted. Over time, these more frequent burn patterns select against native vegetation, eventually achieving permanent type conversion. Each year, if prudent, immediate action to re-seed with appropriate seed mixes is not taken, more native rangeland

will be burned by wildfire and exposed to extreme risk of invasion by exotic grasses and forbs. Fire rehabilitation at this scale is expensive, however, and many of the techniques for success are still being formulated.

### Working together for Nevada's wildlife

Public involvement and partnership development was facilitated throughout all development phases of the Plan. Open house meetings and focus group workshops were held across the state in order to get input and advice from

*“Our lands hold a wide and wonderful variety of wildlife and wildlife habitat. Threatened and endangered species serve as a red flag for the overall health of our environment. We must preserve a legacy of large landscapes to benefit the health of both wildlife and people, and to preserve those things which are so important to many of our family traditions.”*

*– Terry Crawforth,  
Former Director,  
Nevada Department  
of Wildlife*

the broadest possible array of conservation partners, including federal and state resource agencies, county governments, tribes, sportsmen’s groups, environmental groups, conservation organizations and others. In all, more than 150 individuals representing over 60 organizations attended the open houses and workshops. In May of 2005, a final partnership group including members from the Governor’s Sage Grouse Conservation Team was convened. This group developed a set of guiding principles for the Action Plan writing team to consider while preparing the Draft Plan. Nevada’s Wildlife Action Plan Team stayed in close contact, and coordinated, with federal land management agencies and Tribal governments throughout the development of the Strategy.

*“Nevada’s Wildlife Action Plan stands as a model for what public and private interests can achieve when they put their differences aside and work in partnership. The action strategies presented in the plan provide opportunities for conservationists and resource managers to work from the same playbook, toward the same goal: the long-term conservation of Nevada’s wildlife and their habitats.”*

– Kathryn Landreth, State Director,  
The Nature Conservancy in Nevada



Western toad/Anita Shaul



Hot Creek Spring/Anita Shaul, NDOW



Leopard frog/Anita Shaul, NDOW

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