

# Introduction

## Plan Conception and Objectives

The *Nevada Comprehensive Bird Conservation Plan* represents a concerted effort to summarize the best current knowledge about the conservation status of Nevada's birds and their habitats, to assess their conservation concerns, and to present effective conservation strategies. The plan is intended for an audience of resource managers, land owners, and other Nevada stakeholders in wildlife conservation. Because the plan was developed for a wide variety of agency and private partners, we intentionally focused on defining the most important bird conservation needs and effective strategies for any partner willing to engage in conservation implementation, rather than assigning roles and responsibilities to stakeholders.

Nevada is famously the driest state of the union, with an average of only 9 inches of precipitation annually, and its human population has been among the fastest-growing in the nation for most of the past two decades. These two facts conspire to generate significant pressure on our natural ecosystems, which are often more fragile and slow to recover from disturbances than is the case in more mesic regions. However, because 87 percent of Nevada's lands are publically owned and managed by federal and state agencies, Nevada also has unique opportunities for statewide conservation of birds and their habitats. Along with these opportunities comes the challenge of balancing conservation objectives with mandates for economic and recreational uses of public lands. This plan provides managers with a critical tool to assist them in addressing this challenge effectively.

This *Nevada Comprehensive Bird Conservation Plan* was first conceived in 2007, when the Nevada Working Group of Partners in Flight (NV-PIF) recognized the need for a revision of the original *Nevada Partners in Flight Bird Conservation Plan* (Neel 1999). The 1999 plan represented the first formal consensus among all major resource management agencies and other stakeholders regarding priority landbird species and habitat-based strategies for their management and conservation. However, at the time the original plan was written, information about the distribution and status of many of Nevada's landbird species was limited by the lack of comprehensive inventory and monitoring programs. Within the past ten years, however, several new datasets (described fully in *Appendix 1: Methods*)



Immature Northern Goshawk.  
Photo by Fred Petersen.

have become available that add significant knowledge to those previously available. Other planning tools, such as the *Partners in Flight North American Landbird Conservation Plan* (Rich et al. 2004) and the *Nevada Wildlife Action Plan* (Nevada

# Introduction

Wildlife Action Plan Team 2006), along with updated landcover maps and other spatial data, have also become available. Further highlighting the need for an updated plan are the significant changes in Nevada's landscape that have occurred over the last decade as a result of widespread fires, weed invasions, energy development projects, water projects, and other factors.

For developing this plan, a planning team was formed that consisted of representatives from the Great Basin Bird Observatory (GBBO), Nevada Department of Wildlife (NDOW), and the entire Nevada PIF Working Group (see *Acknowledgements*). At an early stage in the plan revision process, the planning team decided to expand the plan's scope beyond its original focus on non-game landbirds. Thus, this plan is truly comprehensive in that it includes upland gamebirds, waterfowl, waterbirds, and shorebirds. In expanding the plan's scope, we drew upon many data sources and conservation initiatives that were not available in the original 1999 plan.

The first major objective of the planning team was to identify the priority bird species to be covered in the plan. This process, along with all other methods used in the preparation of this plan, is described in *Appendix 1: Methods*, and the outcome of the priority species assessment is shown in *Appendix 2*. A second major task for the planning team was to formally define the goals of the plan. These goals were as follows:

- a) Summarize, analyze, and integrate all relevant and reliable information about the conservation status, distribution, abundance, and habitat requirements of conservation priority birds in Nevada
- b) Assess important threats and conservation issues affecting these birds, emphasizing those that can be addressed through management practices
- c) Stress habitat management as the primary mechanism for bird conservation, recognizing that most threats to Nevada's birds are linked to habitat
- d) Make this information available to resource managers in a concise, organized, standardized, and user-friendly format
- e) Periodically update the plan as new information becomes available, and make updates readily available online



American Avocet. Photo by Larry Neel

The time period addressed by this plan is the ten years following its release (2011 – 2021). We recognize that effective short-term conservation strategies are not always identical to effective long-term strategies, which is why we envision this plan as a continually evolving product.

Habitat-based conservation strategies are heavily stressed in this plan, but we also present strategies involving research, monitoring, planning, public

## Introduction

outreach, and education. Habitat-based strategies are particularly important for bird conservation in Nevada, because overwhelming evidence indicates that most bird declines are linked to habitat change. We intentionally present only a moderate list of strategies that we believe will be the most effective for conservation of Nevada bird populations, rather than providing a long list of all activities that could be of possible benefit. Furthermore, we generally refrain from providing “best management practices” for habitats, and instead focus on the desired condition of a habitat type. For instance, we leave the particulars of grazing plans, fire management practices, riparian restoration practices, methods of weed control, and so forth, to our conservation partners, because they generally have the expertise required to create detailed and site-appropriate implementation plans. Instead, our recommendations provide guidance regarding the desired outcome of implementation efforts, such as “avoid removal of herbaceous understory”, “increase cover of riparian woodlands and floodplain wetlands”, “protect areas of tree recruitment”, etc., which leave the options of how to accomplish these outcomes open to the conservation practitioner. In addition, although conservation goals are often pursued through the mechanisms of political advocacy, such strategies are not included in this plan. Similarly, we do not make recommendations regarding agency structure, operations, coordination, or administration, as these are within the purview of the agencies’ planning processes.

Finally, we present birds not only as conservation targets in this plan, but also as tools to inform us about what constitutes “intact” habitat. In many cases, the presence or absence of conservation priority bird species alone is an effective way to evaluate habitat integrity. In other habitat types, carefully chosen “indicator” species can be used to gauge ecosystem health even when conservation priority species are absent. In general, birds are easier to monitor and survey than other wildlife groups, and many birds respond sensitively and quickly to habitat change. For these reasons, it is our premise that bird-focused conservation planning is one of the most practical and cost-effective ways of achieving general wildlife and habitat conservation goals.



Yellow Warbler, an Indicator species for healthy lowland riparian habitat. Photo by Martin Meyers.

# Introduction

## Using the Plan

The plan's main sections include:

- a) *Birds of Nevada*: An overview of Nevada's bird life
- b) *Conservation Concerns*: A discussion of the major issues that affect Nevada's birds and their habitats
- c) *Introduction to Habitat Accounts*, and *Habitat Accounts*: Habitat-based overviews and conservation strategies based on current knowledge of bird habitat requirements and threats. The introduction explains the content of the accounts, and should be consulted first
- d) *Introduction to Species Accounts*, and *Species Accounts*: Species-based overviews and conservation strategies. The introduction explains the content of the accounts and should be consulted first
- e) *Conclusions*: A summary and distillation of the most important bird conservation strategies
- f) *Appendices*: A series of appendices that provide details on all methods used in the preparation of this plan, along with a series of tables providing useful information to support the species accounts and habitat accounts

We encourage all users of the plan to consult the *Conclusions* section, which highlights recurring conservation themes and overall priorities for bird conservation in Nevada. Resource managers responsible for large landscapes that contain many habitat types may find the *Conclusions* and the *Habitat Accounts* most useful for informing their own planning efforts. The strategies outlined in these sections have the advantage of benefitting a large number of priority bird species (and non-priority species) without requiring the resource manager to sort through the particular habitat requirements and conservation issues of each species. However, bird species do vary in their distributions, population status, particular habitat needs, and susceptibility to various threats, so the *Species Accounts* allow resource managers to customize their management activities towards particular species that are likely to occur in their areas of responsibility.

## Relationship with other Planning Efforts

This plan was at first conceived with the goal of a revision of the earlier *Nevada Partners in Flight Bird Conservation Plan* (Neel 1999). Beyond this goal, the *Nevada Comprehensive Bird Conservation Plan* attempts to integrate, rather than duplicate, other bird conservation planning efforts in our region. However, there are circumstances in which resource managers should refer to other plans that cover additional perspectives, cover other wildlife taxa, or offer a more complete picture of agency-specific issues.

## Introduction



Peregrine Falcon. Photo by Bob Goodman

Nevada-specific plans that fall within this group include NDOW's *Nevada Wildlife Action Plan* (Nevada Wildlife Action Plan Team 2006), which presents a broad range of information and conservation strategies not only for birds, but also for other terrestrial vertebrates. The *Nevada Department of Wildlife Upland Game Species Management Plan* (NDOW 2008) provides a comprehensive source of distributional and management

information for the upland gamebirds. The Nevada Sage-Grouse Conservation Team (2004) published the *Greater Sage-Grouse Conservation Plan for Nevada and Eastern California* which provides much more detail than we can provide here on the distribution, local management issues, and conservation opportunities associated with this high-priority bird. The two largest land management agencies in Nevada, the U.S. Forest Service (USFS) and the U.S. Bureau of Land Management (BLM) also prepare and regularly update detailed management plans that for the lands they administer. The USFS is currently preparing the 20-year revision of the *Humboldt-Toiyabe Forest Health Plan* and has already published the *Sierra Nevada Strategy and Framework* (USFS 2001) which provides extensive information for the Sierra Nevada region.

Nevada resource managers may also draw upon regional and continental plans by multi-lateral bird conservation initiatives, including the *Partners in Flight Plan North American Landbird Conservation Plan* (Rich et al. 2004), the *Intermountain West Regional Shorebird Plan* (Oring et al. 2007), the *Intermountain West Waterbird Conservation Plan* (Ivey and Herziger 2006) and the *North American Waterfowl Management Plan* (USFWS 1986, 1998), along with the Pacific Flyway Council's species-specific management plans at <http://www.pacificflyway.gov>. These regional and national plans were consulted when selecting priority species for the Nevada region (*Appendices 1 and 2*).

## New Products and Future Updates

The *Nevada Comprehensive Bird Conservation Plan* incorporates a very wide array of bird data from Nevada, much of it gathered only in the last 10 – 15 years. This plan therefore presents a number of products that were not available in the original PIF plan (Neel 1999), including:

- a) Detailed distribution maps for all conservation priority birds, created by combining data sets from major monitoring and survey efforts, NDOW databases, and other sources (see *Appendix 1*)

## Introduction

- b) Statistical analyses of landbird-habitat relationships (*Appendix 3*), using data from the Nevada Bird Count (NBC) and GIS landcover maps (*Appendix 1*)
- c) Newly-calculated Nevada population size estimates for landbirds (*Appendices 1 and 4*), based on NBC data
- d) Newly-calculated density estimates by habitat type for landbirds, based on NBC data (*Appendix 1*)
- e) An improved GIS habitat map that draws from several different landcover products (*Appendix 1*)
- f) A formal habitat-based threats analysis (*Conservation Concerns* section and *Appendix 1*)

The wealth of information that has become available only in the last 15 years serves to highlight the fact that our understanding of bird ecology and conservation is constantly improving. Other new products, such as eBird ([www.ebird.org](http://www.ebird.org)), are also becoming more widely available, allowing conservation practitioners to better visualize and understand large volumes of data. For these reasons, it is our intention to maintain this plan as an electronic document that will be updated on a regular basis as new information becomes available. GBBO will maintain the platform for online access to this plan and its periodic revisions at

**[www.gbbo.org/bird\\_conservation\\_plan.html](http://www.gbbo.org/bird_conservation_plan.html)**

The online version of the plan will incorporate a log of changes that allows the user to see at a glance what information has recently been added or revised. Links to this webpage by resource management agencies and other stakeholders are encouraged. We will also provide a mechanism at this web site for managers, researchers, and birders to submit verified sightings and other data that can be used to update this plan.



Western Grebe. Photo by Larry Neel.