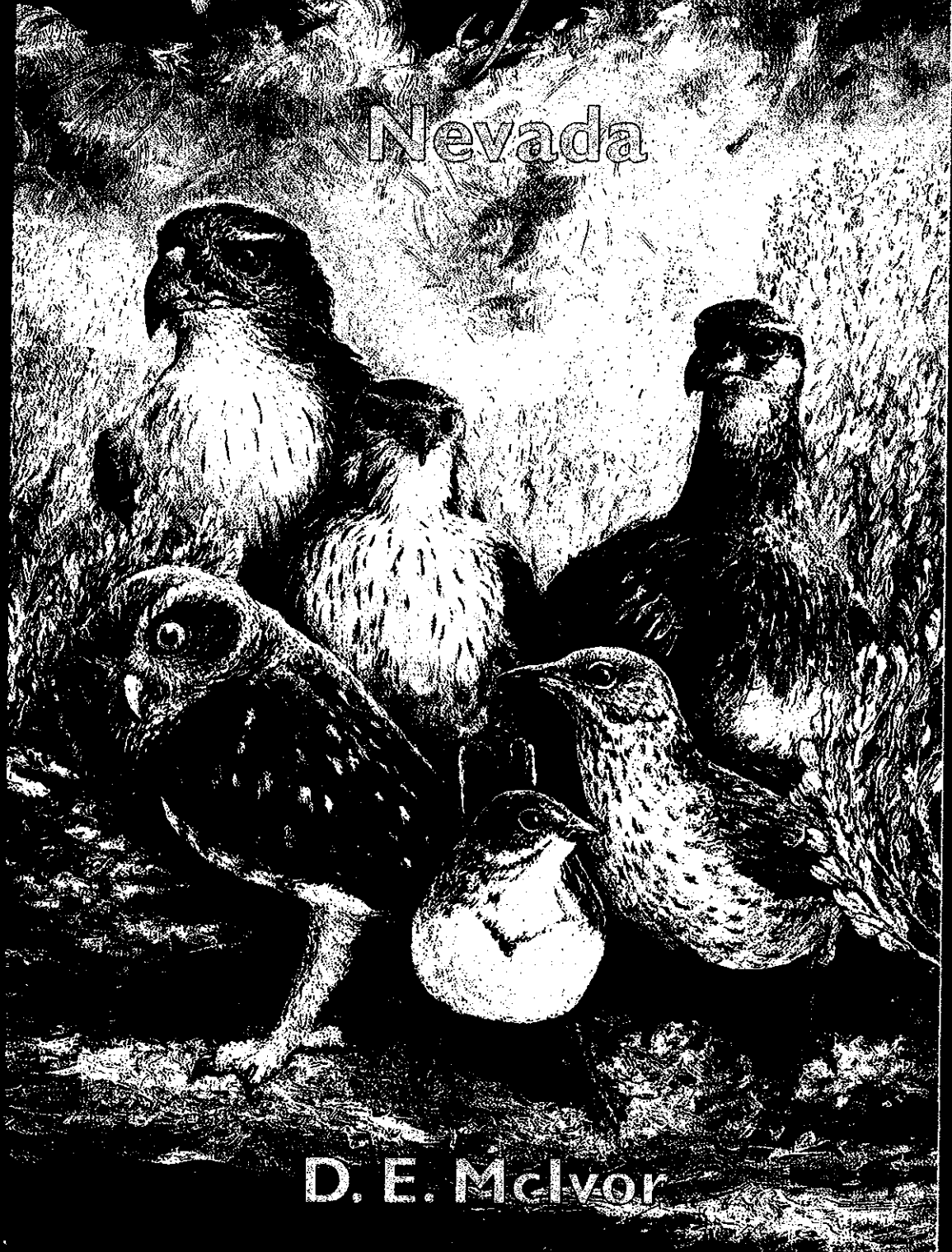


Important Bird Areas

Nevada



D. E. McIvor

Table of Contents

Acknowledgments	-i-
Introduction	1
History of the IBA Program	1
Context: The Nevada Landscape	4
Definition of a Nevada IBA	5
Coordination	9
Conservation and Management of IBAs	11
Conservation of Important Bird Areas	13
Water	14
Invasive or Noxious Plants	15
Fire	16
Grazing Management	17
Habitat Conversion and Development	17
Off-road Vehicle Use	18
Reading the IBA Accounts	19
Nevada's Important Bird Areas	21
Ash Meadows National Wildlife Refuge	23
Bilk Creek - Montana Mountains	27
Boyd Humboldt Valley Wetlands	29
Carson Range	32
Carson River Delta	35
Carson Valley	38
Catclaw Washes	41
David E. Moore Bird and Wildlife Sanctuary	44
Franklin Lake	46
Goshute Mountains	48
Great Basin National Park	51
Gridley Lake	54
High Rock Resource Area	56
Jarbidge Mountains	58
Lahontan Valley Wetlands	61
Lake Mead	65
Mary's River	68
Meadow Valley Wash	71
Moapa Valley	73
Monitor Valley	75
Mount Grant	77
North Ruby Valley	79
Northern Snake Range	82
Oasis Valley	85
Pahranagat Valley Complex	88

Pyramid Lake	90
Ruby Lake	93
Ruby Mountains	95
Sheldon National Wildlife Refuge	100
Spring Mountains	103
Swan Lake	105
Toiyabe Range	107
Virgin River	110
Walker Lake	112
Washoe Valley	115
Wee Thump Joshua Tree Forest	118
Wellington-Pine Grove Hills	120
References	122
Appendices	127
Appendix I – Other Sites Evaluated as IBAs	128
Appendix II – Nevada IBA Program Nomination Materials	137
Appendix III – Global and Continental Thresholds for U.S. IBAs	145
Appendix IV – Important <i>Birding</i> Areas? <i>Birding</i> Nevada's IBAs ..	147

significant responsibility for a suite of sagebrush and piñon-juniper dependent species such as Greater Sage-Grouse, Pinyon Jay, Brewer's Sparrow, Sage Thrasher, and Sage Sparrow. Nevada also has a few sites that concentrate birds in significant numbers, and one of these sites, Lahontan Valley, is part of the Western Hemispheric Shorebird Reserve Network (Manomet Center for Conservation Science 2004). But more often than not defining Important Bird Areas for Nevada's species of concern requires identifying large landscapes with good quality habitat, even if the overall densities of birds within the IBA do not match the hundreds of thousands of shorebirds that congregate at places like Utah's Great Salt Lake.

Definition of a Nevada IBA

IBA programs at both the national and state level are assisted by Technical Advisory Committees (TACs). In the case of state level TACs, regional experts are assembled to provide insight and guidance for the programs. One of the first tasks assigned to the Nevada IBA TAC was to devise the criteria that would make the IBA Program relevant to the Nevada landscape. To develop these criteria the TAC consulted two primary sources of information. As is the practice, the criteria established by BirdLife International were adopted but the global thresholds modified to permit the identification of state level IBAs. This generally meant lowering threshold numbers, for example as described above using the case of raptors. A rule of thumb used by at least some IBA Programs is that the goal is to capture the top 10 percent of the sites available to birds in the state. With this general guideline in mind and using the TAC's knowledge of bird populations in Nevada, we identified threshold numbers that we believed would define the top 10 percent of the state's landscapes for birds. Adapting BirdLife International's IBA criteria also meant bringing Nevada's specific habitats into the mix. For example, both aspen forests and alpine habitats are limited in extent in Nevada, making their importance to maintaining certain bird species disproportionate to their geographic extent.

As the Nevada IBA Program began, 36 other states already had programs under way. The committee also examined the criteria adopted by those states and considered their merit in Nevada. It was largely through evaluation of state level criteria that the Nevada IBA Program adopted two supplemental criteria: NV-4, sites supporting long-term avian research efforts; and NV-5, sites providing important, bird-specific educational opportunities. While some of the reviewed states had adopted these as stand-alone criteria, they were controversial as they encouraged a drift away from the original core goals of the international IBA program. The Nevada IBA TAC felt that these elements could be important and would consider these contributing elements to a site nomination which otherwise met one or more of the more rigorous bird abundance or habitat quality based criteria. The TAC also recognized that only one site in Nevada—the Goshute Mountains—had supported any activity that could be considered long-term research. HawkWatch International has been counting migrating raptors moving along the spine of the Goshutes for more than 20 years.



Least Bittern

One of the first challenges the Nevada IBA TAC faced was to determine which species of birds would form the basis of **Criterion NV-1** (sites important to species of concern in Nevada) and the program's focus. Many states maintain a list of species of concern that includes birds, but Nevada was not among those states. However, the *Nevada Partners in Flight Bird Conservation Plan* (Neel 1999) had been recently published when the TAC was evaluating in 2001 how to identify a suitable suite of birds. The bird conservation plan is based on a list of 51 species compiled after an exhaustive review process. To derive this list of species, the Nevada Partners in Flight Working Group evaluated each of the variables listed below for each candidate to the list (Neel 1999, pp. 18-19):

- **Colorado Bird Observatory Total Score.** A numeric index formulated by the observatory using ranking factors similar to those used by numerous state Natural Heritage programs.
- **Endangered Species Act.** Species which are listed or proposed for listing as federally Threatened or Endangered.
- **Habitat Threat.** Demonstrable evidence of historic, ongoing, or future threats to the nesting, migratory, or wintering habitat.
- **Importance of Area.** Based on an examination of the distribution of this species, Nevada provides a large percentage of the total nesting habitat, and therefore a high degree of stewardship responsibility for the well-being of the species.

- **Low Numbers or Is** Nevada's nesting pop
- **Population Decline** population trend in th
- **Uniquely Represen** they epitomized an o ability to respond po
- **Umbrella Species.** I address the needs of
- **Unknown.** The ecol species in this catego for conservation con

The Nevada IBA TAC cl Threatened species of bir species. In large part this Cuckoo and Southwester list. Other species attribu species list constituted ac basis for an IBA.

Criterion NV-2, "a site l unique or threatened nat BirdLife International th mentioned, Nevada's env what constitutes a unique specific. A particular type other states, but for the p of these same communiti under this criterion, a site making it unique) and the numbers of birds were n representative communit

Two habitat types recogn alpine zone and wetlands peaks in the state where areas thousands of miles exceptions, these areas d associates with the alpine one hypothesis is that th to sustain populations of

Another habitat type of g on the National Wetland present surface area is ve Natural Heritage Program Nevada's historic wetlan state's wetlands have bee

- **Low Numbers or Isolated Population.** Geographical isolation of Nevada's nesting population and/or a low nesting population in the state.
- **Population Decline.** The species has demonstrated an alarming downward population trend in the state.
- **Uniquely Representative of a Habitat Type.** Species selected because they epitomized an otherwise poorly represented habitat type, or for their ability to respond positively to habitat improvements.
- **Umbrella Species.** Management for a species in this category would address the needs of a larger community of species.
- **Unknown.** The ecological needs, population densities, or distributions of species in this category are intractable, and by their nature raise a red flag for conservation concerns.

The Nevada IBA TAC chose to add the list of federally Endangered or Threatened species of birds to this list of Nevada Partners in Flight (PIF) species. In large part this was a perfunctory gesture, as Western Yellow-billed Cuckoo and Southwestern Willow Flycatcher already occupied the Nevada PIF list. Other species attributed to Nevada from the Threatened and Endangered species list constituted accidental occurrences and would not alone form the basis for an IBA.

Criterion NV-2, "a site harboring an assemblage of species restricted to a unique or threatened natural community," was also a carry over criterion from BirdLife International that received some tailoring for Nevada. As previously mentioned, Nevada's environment is a uniquely challenging place to work, and what constitutes a unique or threatened natural community here is context specific. A particular type of habitat could be abundant and in good condition in other states, but for the purpose of sustaining our own bird populations some of these same communities warranted examination. To warrant recognition under this criterion, a site had to have both high quality habitat (that alone making it unique) *and* the appropriate bird community in residence. Shear numbers of birds were not necessarily required, merely a largely intact and representative community.

Two habitat types recognized as either unique or threatened in Nevada are the alpine zone and wetlands. Alpine habitat is restricted to the tops of the highest peaks in the state where elevation promotes a weather pattern more similar to areas thousands of miles to the north. However, with only a couple of minor exceptions, these areas do not have the attendant bird community one typically associates with the alpine community. Explanations remain unresearched, but one hypothesis is that these islands of habitat are too small and widely separated to sustain populations of these birds.

Another habitat type of great interest in Nevada is wetlands. An estimate based on the National Wetlands Inventory indicates about 1.5 percent of Nevada's present surface area is vegetated wetlands or open water (E. Skudlarek, Nevada Natural Heritage Program, pers. comm. 2004). This represents about half of Nevada's historic wetlands, as another estimate suggests about 52 percent of the state's wetlands have been lost since settlement (Dahl and Johnson 1991). What

makes these statistics so vital is that although extremely small in total area, riparian communities in this region are critical centers of biodiversity (Mac 1988). More than 75 percent of the species in the region are strongly associated with riparian vegetation (U.S. General Accounting Office 1993), including 80 percent of the birds (Dobkin 1998). Every drop of water in Nevada is precious to something.

Criterion NV-3 focuses on sites where significant congregations of birds occur. This, too, is a criterion easily recognized from BirdLife International's IBA approach. However, thresholds in this criterion have been lowered from global levels to be relevant at the state level. The criterion covers the species typically recognized as congregatory—waterfowl, shorebirds, gulls and terns, wading birds, and raptors (in migration). It also covers song birds in migration, which are not typically thought of as congregatory but may occur in significant concentrations where migration bottlenecks occur. This category also recognizes that birds may occur in unusually high numbers and that such areas may be identified on the basis of comparison to other known populations across the state. The detailed criteria adopted for Nevada are included in this volume as Appendix II.

While the Nevada IBA Program concerned itself with scaling criteria and identifying thresholds that would be relevant for the western Great Basin and northern Mojave Desert, the national and global IBA efforts honed criteria for larger geographic scales. The National Technical Committee took as one of its first tasks the identification of which birds and how many of these birds would be required to identify a globally- or continentally-significant aggregation of birds. The species relevant to Nevada's IBAs, and the thresholds identified, are listed in Appendix III.

Evaluating IBAs to determine whether they meet state, continental, or global thresholds is the duty of two separate entities. At the state level, the Nevada Technical Advisory Committee determines whether state thresholds are met. Higher level designations are determined by a National Technical Committee. This body is faced with a daunting task, given the thousands of IBAs they must review. At the time this book is being prepared, a higher level review has not been performed for any of the Nevada IBAs. It is worth noting that the threshold numbers provided by the National Technical Committee have not been used in Nevada to fuel the search for IBAs. There is excellent overlap in the species listed in the National Technical Committee's table and the list of species identified by the Nevada IBA TAC; it is really the global and continental threshold numbers that constitute new information. This information was received as this manuscript was in preparation, so one of the future tasks of the Nevada IBA Program may be to take another pass at identifying critical landscapes and nominating new IBAs based on their potential to hold critical populations of these species.

Coor
Collabor
Program
the IBA
few of th
these pr

Great E

At the t
Observ
for the
locating
breedin

To assi
collecte
nomina
reporte
pairs/k

The N

The N
plannin
and the
to help
efforts
priorit
disting
IBA p
appro
valuat
nomir

Gover

The U
the G
Specie
listing
effort
grass

The I
2001
of the
Calif

This
bega

for the benefit of the birds that define the landscapes. Recognition of a landscape as an IBA does not confer any kind of regulatory status. Rather, the Important Bird Areas Program looks to balance the needs and goals of landowners and land managers with the needs of the birds at the site. Ideally, the needs of all the stakeholders can be met without serious compromise and with beneficial outcomes for all involved.

The model for successful conservation of IBAs is based on partnerships among stakeholders willing to come to the table and work collaboratively. In Nevada the IBA Program has already worked with the Natural Resources Conservation Service, USFWS, Bureau of Land Management (BLM), Bureau of Reclamation, Nevada Division of State Parks, and the Nevada Department of Wildlife Management to bring positive change to critical landscapes. Near-term challenges faced by the Nevada IBA Program include identifying stakeholders for each of the IBAs, identifying appropriate projects for enhancement or restoration, and building successful partnerships to accomplish those tasks.

Another task at hand is monitoring. Monitoring has been a critical element of the Important Bird Areas Program nearly from the start. In the United States, considerable discussion swirls around exactly what form this effort should take. The purposes of monitoring, to step back a bit from that previous question, are many. One goal is to build a coalition of citizen-scientists who will adopt these landscapes and begin to develop a sense of propriety for their well being. Another need is to track long-term trends in bird populations at each site. And a spin-off of this last element, simply having someone on the site at least on an occasional basis, will allow a broad assessment of site condition and what management actions are needed.

Each IBA nomination form included a space for recording information regarding threats to the site. The threats to IBAs in Nevada are many and omnipresent, and although there are commonalities in the types of threats, they certainly vary in severity from site to site. Some of the more pressing and widespread issues are discussed below.

Water

Nevada is the driest state in the Nation, and during the course of the Nevada IBA Program a 500-year drought was declared (Webb 2004). A drought puts a strain on all water users, and while wildlife in the state is first in need for water, it is last— where it is counted at all— in water rights, often receiving none. Many demands are placed on this scarce resource and depending on the watershed may include residential and commercial needs, agricultural demands, and natural elements of the hydrological cycle including groundwater recharge and evaporation. This latter variable can be quite high in Nevada, where summer daytime temperature can break a 100°F (115°F in southern Nevada) and hot, dry winds are an almost daily occurrence.

At the root of our worst conservation crises is the lack of water. Walker Lake (IBA) is on the brink of ecological collapse because the Walker River is over-allocated by 140 percent and has been for more than 100 years. Upstream water

es. Recognition of a
gulatory status. Rather, the
needs and goals of
e birds at the site. Ideally,
t serious compromise and

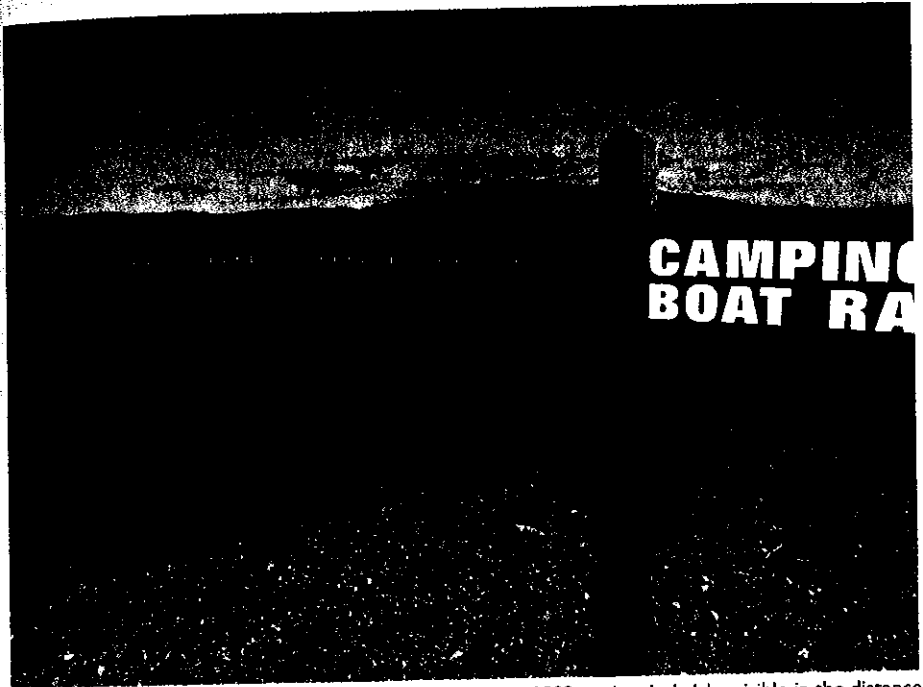
ased on partnerships among
collaboratively. In Nevada
ral Resources Conservation
M), Bureau of Reclamation,
partment of Wildlife
scapes. Near-term
e identifying stakeholders
s for enhancement or
ccomplish those tasks.

een a critical element of
art. In the United States,
rm this effort should take.
that previous question, are
tists who will adopt these
for their well being.
ulations at each site. And a
n the site at least on an
condition and what

ding information
evada are many and
the types of threats, they
more pressing and

course of the Nevada
2004). A drought puts a
s first in need for water,
n receiving none. Many
ing on the watershed
ral demands, and natural
er recharge and
vada, where summer
ern Nevada) and hot,

of water. Walker Lake
Walker River is over-
) years. Upstream water



Walker Lake shoreline level in 1882, and today's lake visible in the distance

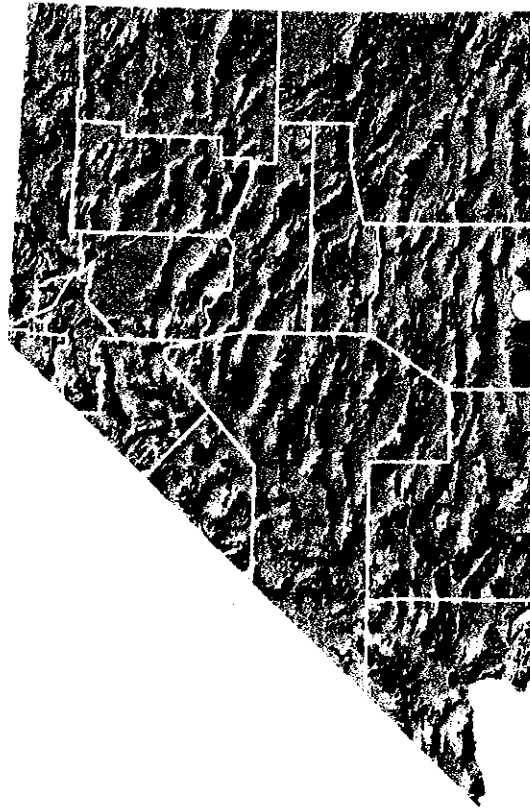
users represented by the Walker River Irrigation District have shown no interest in reaching a solution to this situation that would benefit the lake. In southern Nevada, commercial interests are pressing to mine groundwater and pipe the water to Las Vegas, a city that is the fastest growing metropolitan area in the country and also boasts the highest per capita water use of any city in the West (Soussan 2003). This groundwater pumping in a setting that is little studied and poorly understood could lead to the disappearance of seeps and springs critical to at least six IBAs.

Invasive or Noxious Plants

Probably every state and the federal government has regulatory language in place that tries to parse the distinctions between *invasive* and *noxious* plants. Invasive plants tend to be defined as those that are non-native to the ecosystem under consideration and that are capable of out-competing and crowding out other plants. This competition can be so lopsided that the result is a monoculture of the invading plant. Noxious weeds tend to be those that are harmful, and often this is defined in an economic and agricultural context. An argument could easily be put forward, however, that even those plants that do not cause immediate harm do create indirect but nonetheless measurable harm.

In spite or perhaps because of its harsh climate, Nevada is susceptible to invasion by many weeds. Tall whitetop (or perennial pepperweed) has invaded riparian systems in western Nevada and has formed extensive monocultures that are of little value to any species of bird, all at the cost of native habitat. Tamarisk (or salt cedar) and to a lesser degree, Russian olive are aggressive invaders in

David E. Moore Bird and Wildlife Sanctuary



Area: 259 ha
UTM Easting: 744331
UTM Northing: 4321872

Description

The sanctuary lies in a transition zone where the piñon-juniper forests of the Great Basin foothills meet the desert shrub community. Two perennial streams converge on the site, providing wet meadows and permanent surface water where livestock was once confined. The sanctuary is on the site of the historic Circle M Ranch, and the land is recovering from decades of grazing and other domestic uses. The site lies along the entrance road to Great Basin National Park IBA and as such provides a valuable outreach opportunity. True to its name,

the site is set aside specifically for nature conservation.

Birds

As an ecotone, the site provides a rich, mixed bird community characteristic of transitional zones. Most noteworthy is a population of Long-billed Curlews. The Greater Sage-Grouse was once common here, but the local population dwindled and now appears to have disappeared all together (D. Moore, pers. comm.). Pinyon Jays are a common sight at this IBA, though their occurrence here is transitory as they move about the larger landscape.

Conservation Issues

Because the Moore Sanctuary was established to protect wildlife, the future of the area is largely secured for birds. However, active management will be required to protect the area from extrinsic factors like invasive plants, and to manage visitors. A recently initiated project with many contributing partners has been kicked off in an effort to restore and enhance habitat quality at the site, with the ultimate goal of restoring Greater Sage-Grouse to the sanctuary.

uary

1: 259 ha
sting: 744331
thing: 4321872

y lies in a
e where the
: forests of the
oothills meet the
community. Two
ams converge on
iding wet
l permanent
where livestock
fined. The
n the site of the
e M Ranch, and
covering from
azing and other
s. The site lies
ance road to
National Park
uch provides a
each
True to its name,

haracteristic of
led Curlews. The
ulation dwindled
rs. comm.).
e here is

, the future of
nt will be
lants, and to
ing partners has
ty at the site,
anctuary.

Species used to identify the D.E. Moore Sanctuary IBA and the criteria met by the site.
Criteria codes are discussed in Appendix II.

Species	Year	Season	Min	Max	Units	Confirmed
Pinyon Jay	2001	all	0	500	individuals	NV1
Long-billed Curlew	2003	breeding	4	12	individuals	NV1

Visiting the Site

Visitors are welcome to stroll around the Moore Sanctuary. A pullout and parking area is located on the south side of NV 488 between Baker and the entrance to Great Basin National Park. Look for the Moore Sanctuary signs as well as IBA signs posted along the fence line.



Wet meadows at the D. E. Moore IBA

Great Basin National Park

Area: 31,173 ha
UTM Easting: 737712
UTM Northing: 4314196

Description

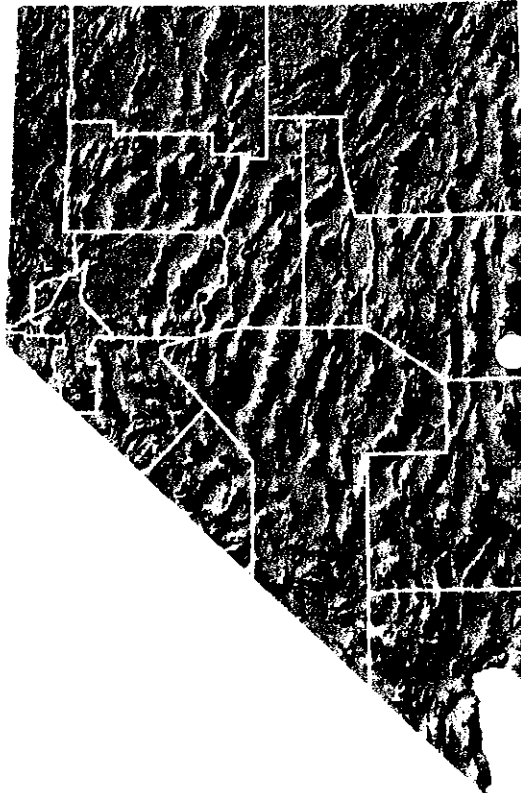
Great Basin National Park encompasses the southern end of the Snake Range in east-central Nevada. It is bordered by broad valleys, on the east by Snake Valley and on the west by Spring Valley. The most prominent feature is Wheeler Peak at 13,063 ft., the second highest point in Nevada. Influenced by the broad elevation range and topographic relief, vegetation zones from salt desert scrub to an alpine zone create a diversity of habitats, including five of the seven Merriam's life zones described for North America. Nine perennial streams flow from the park and support

over 30 miles of riparian habitat from subalpine meadows to aspen, cottonwood, and dense shrub thickets. Land uses in this IBA include conservation, research, fishing, hiking, camping, auto touring, caving, wildlife viewing, and designated wilderness.

Birds

Numerous avid birders have surveyed Nevada's high country for bird species endemic to alpine and subalpine habitats. Although the habitats can be found on the summit of several of the state's 314 ranges, the characteristic birds are for the most part absent. In contrast, this IBA has both the alpine and sub-alpine habitats and the bird species associated with them.

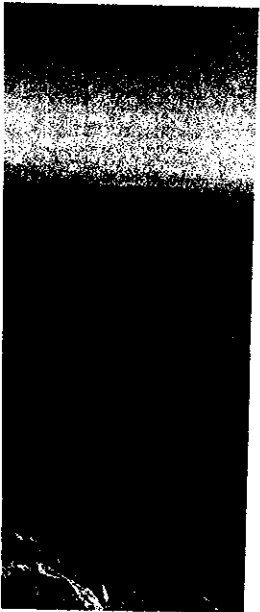
Of the 51 birds listed in the Nevada Partners in Flight priority list, 28 have ranges that encompass Great Basin National Park. Another five species have range distributions that are adjacent to Great Basin National Park. Several Nevada Partners in Flight priority species are found in significant densities here. These species include Black-throated Gray Warbler, Red-naped Sapsucker, MacGillivray's Warbler, Wilson's Warbler, Pinyon Jay, and Yellow-breasted Chat.



f the value of this site
s to preserve the values
ncern expressed about
ing, though threats from
seems particularly
fires. This is always a
ed and quickly
nted.

ience. The best time to
rs in the fall (August 15
to interpret the count
on of raptors.

Wendover on US Alt
past the station and
trailhead. From here,
ing plenty of water and
ch has supplies on
on are available at
atch.org.



Most of the sensitive birds documented for Great Basin National Park are Neotropical migrants and tend to use riparian areas for breeding. Point count data in riparian areas have detected numerous Black-throated Gray Warblers, MacGillivray's Warbler, Wilson's Warbler, Yellow-breasted Chat, and Red-naped Sapsucker.

Medin (1982) found the greatest diversity of birds in mountain big sagebrush, mountain big sagebrush-steppe, and mixed conifer habitats. Priority species found in this habitat type include Greater Sage-Grouse, Sage Sparrow, Sage Thrasher, Vesper Sparrow, Virginia's Warbler, Orange-crowned Warbler, MacGillivray's Warbler, Olive-sided Flycatcher, and Calliope Hummingbird.

The high elevation alpine, subalpine, and spruce forests within Great Basin National Park are relatively intact habitats despite some historic logging and grazing activities. The history of wildfires in these habitats indicates that they are within the natural range of variation. Birds from the Nevada Partners in Flight priority list include Black Rosy-Finch, Three-toed Woodpecker, Olive-sided Flycatcher, Calliope Hummingbird, Prairie Falcon, and Northern Goshawk.

Quantitative surveys for raptors have not occurred at Great Basin National Park. However, all raptors listed in the Nevada Partners in Flight priority list have been documented in and around Great Basin National Park. It is possible that the southern Snake Range provides a corridor for migratory raptors but this has not been confirmed. The high elevation and nearly continuous winds provide optimal conditions for soaring and elevation gain. Cliff faces and late successional conifer stands and deciduous riparian habitats with large trees and snags provide widespread raptor nesting habitat.

Species used to identify the Great Basin National Park IBA and the criteria met by the site. Proposed Criteria are pending the availability of additional data on species' abundance in Nevada. Criteria codes are discussed in Appendix II.

Species	Year	Season	Min	Max	Units	Proposed	Confirmed
Northern Goshawk	1982	breeding	19	117	individuals		NV1, NV2
Calliope Hummingbird	1982	breeding	200	625	individuals	NV3g	NV1
Olive-sided Flycatcher	1996	breeding	150	312	individuals	NV3g	NV1, NV2
Sage Sparrow	1982	breeding	687	2,030	individuals		NV1
Virginia's Warbler	1997	breeding	0	937	individuals	NV3g	NV1
Black-throated Gray Warbler	1998	breeding	0	1,249	individuals		NV1
MacGillivray's Warbler	1999	breeding	625	1,874	individuals	NV3g	NV1
Black Rosy-Finch	1982	breeding	20	195	individuals		NV1, NV2, NV3g
Pinyon Jay	1996	breeding	1,749	6,997	individuals	NV3g	NV1

Conservation Issues

Great Basin National Park is a site that is certain to maintain, restore, and perpetuate Great Basin habitats required by over half of the Nevada Partners in Flight priority birds. National Park status ensures protection of these habitats and increased promotion of conservation within and adjacent to the park.

There are two primary conservation issues. One is the expansion of the piñon-juniper and mountain mahogany types with subsequent closure of the canopy in

savannah and groundwater

Long-term live juniper and mountain grazing over time across the landscape between fires. Expansion by exacerbated fire. The result is a steppe that may foster high steppe.

Though some Great Basin National Park juniper and mountain sagebrush-steppe projects to return. The project intensity even

The second Water Authority Whittemore. 7 rights in the v



rk are
int count
Warblers,
d Red-

agebrush,
species
w, Sage
bler,
ingbird.

: Basin
ing and
hat they are
s in Flight
e-sided
shawk.

itional
rity list
s possible
ors but this
inds
and late
trees and

site.
in Nevada.

Confirmed

NV1, NV2
NV1
NV1, NV2
NV1
NV1
NV1

NV1
, NV2, NV3g
NV1

nd
artners in
habitats
ark.

e piñon-
canopy in

savannah and shrub-steppe habitats. The second concern is the effect of groundwater pumping on springs and stream discharge.

Long-term livestock grazing and fire suppression have encouraged piñon-juniper and mountain mahogany expansion and canopy closure. Livestock grazing over the past 100 years removed fine fuels that allowed slow, cool burns across the landscape, limiting tree canopy closure and expansion. Time intervals between fires have increased and facilitated increasing tree density and expansion beyond historic distributions. Modern human fire suppression exacerbated this effect by further lengthening the time interval between fires. The result is significant loss of shrub-steppe habitats and altered fire cycles that may foster higher intensity fires that will impede recovery of the sites to shrub-steppe.

Though some 20,000 acres of sagebrush-steppe and savannah still exist within Great Basin National Park, over 12,000 acres have succeeded to dense piñon-juniper and mahogany woodlands, resulting in smaller fragmented patches of sagebrush-steppe. Great Basin National Park has initiated mechanical thinning projects to reduce canopy cover and to encourage shrub-steppe vegetation to return. The park will be able to reintroduce fire without fear of large-scale, high-intensity events.

The second concern of groundwater pumping involves the Southern Nevada Water Authority, Lincoln County, and lobbyist and developer Harvey Whittemore. These three parties have applied for and own extensive water rights in the vicinity of Great Basin National Park. The concern is that the use

of these rights via groundwater pumping could eliminate springs and reduce stream flows in the park, subsequently reducing riparian habitats. The park is pursuing research and monitoring to determine what impacts could occur with groundwater pumping.

Visiting the Site

Great Basin National Park welcomes visitors and provides numerous opportunities for wildlife viewing and bird watching. The park entrance is located just west of Baker on NV 488. The visitors' center at the Park offers a bird checklist and information about birding opportunities. Some of the highlights include the Bristlecone Pine Trail and Snake Creek. Some of the park campgrounds are great places for casual birding.



Mount Wheeler (© Bob Goodman)