

Lewis's Woodpecker

Melanerpes lewis



Photo by Martin Meyers

Conservation Profile

Priority Status	Conservation Target
Reasons for Priority Status	Probable declines Threats Moderate stewardship responsibility
Other Rankings	Continental PIF: Watch List Audubon Watchlist: Red Natural Heritage: S3 USFWS: Bird of Conservation Concern (Great Basin and Sierra Nevada), Migratory Bird BLM: Sensitive Species NDOW: Conservation Priority
Trends	Historical: Substantial declines, and probable range contractions [p1] Recent: Likely declines, though data not definitive [p1, i1]
Population Size Estimates	Nevada (NBC): 13,000 Nevada (PIF): 10,000 Global: 130,000 [p5] Percent of Global: 8 – 10%
Population Objective	TBD
Monitoring Coverage	Source: Nevada Bird Count Coverage and Adequacy: Very Good
Key Conservation Areas	Ruby Mountains, Jarbidge Mountains, Carson Range

Habitat Use Profile

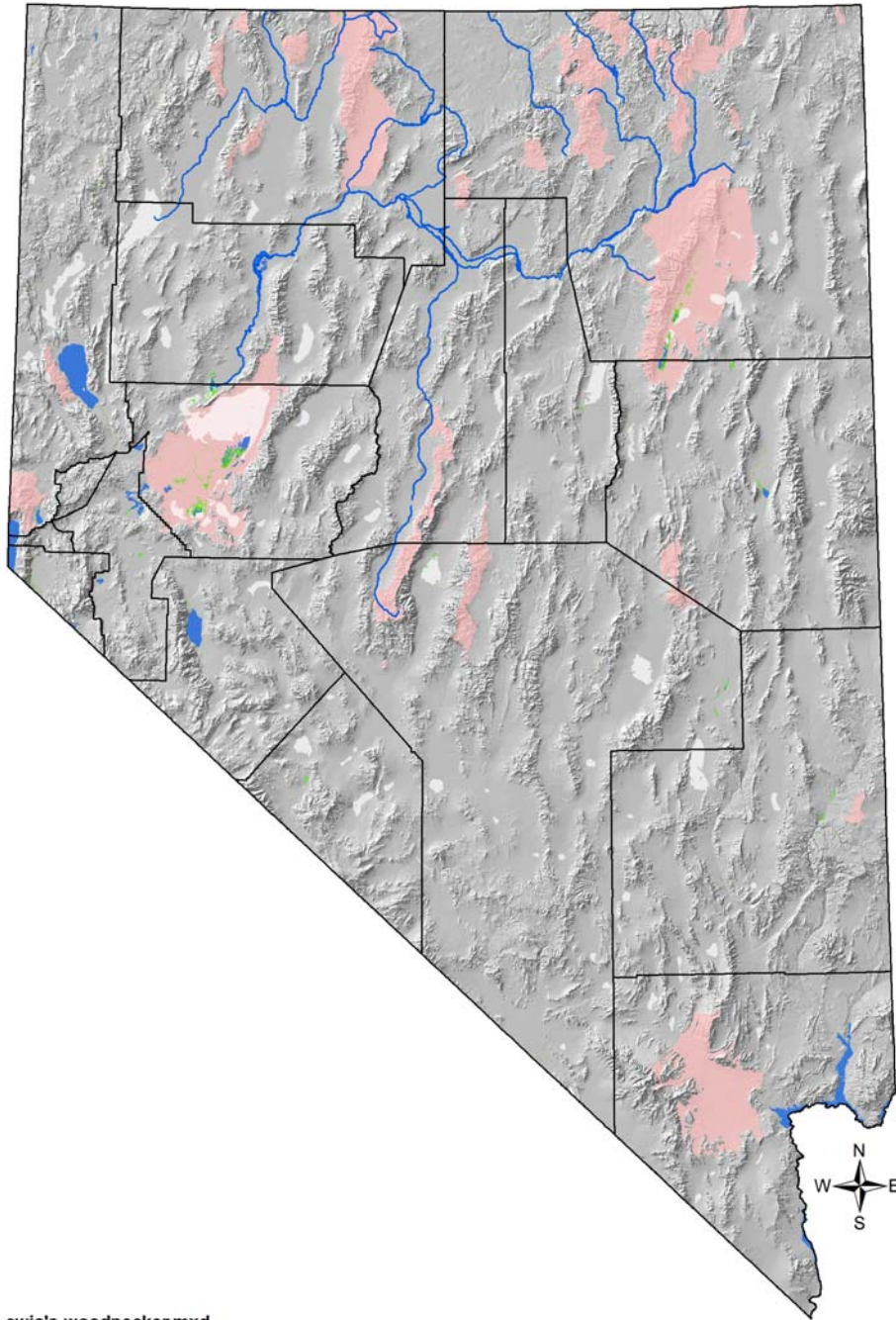
Main Habitats Used in Nevada	Montane Riparian Aspen
Key Habitat Use Parameters	Cottonwood or aspen usually required in Nevada; but may use ponderosa or Jeffrey pine [p1] Snags with minimum DBH of 31 cm required for nesting (1 / 0.4 ha); ant hills heavily used for foraging [p1] 30% canopy closure recommended [p1] 50% cover of shrub understory recommended [p1]
Minimum Patch Size	Territory size 1 – 6.1 ha, foraging area larger, often shared with other pairs [p1]

Natural History Profile

Seasonal Presence in Nevada	Spring – summer in northern Nevada Wintering may occur in Clark County [p1 p3, s]
Known Breeding Dates in Nevada	Mid-May – early September [s4]
Nesting Habits	Re-uses or excavates nest cavities in large decayed snags; may nest in burned areas [p1, EO] Nest tree: 15-26 m; usually taller than other trees; DBH 40-113 cm [p1], or > 18 cm [EO] Site fidelity low; high annual variation in numbers and site occupancy [p1]
Food Requirements	Ants, flying insects, nuts, and fruits [p1]

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File: Lewis's woodpecker.mxd

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Temporary Map Key

Pink: Breeding range

Hot pink / magenta: For some birds, breeding data was limited, and was supplemented by extrapolation to include likely breeding range. In these cases, hot pink represents known breeding range, and lighter pink the extrapolated breeding range.

Blue: Winter range

Yellow: Important migration stopover areas

Purple: Year-round range

Green: In some maps, wetlands mapped by SWReGAP are shown in green for interpretational purposes

Dot symbols: In cases where breeding records were isolated or very restricted in extent, they are represented by a pink dot symbol rather than a shaded area.

Arrows: Major migration routes. These are shown only for birds for which there are migration-associated conservation issues.

OVERVIEW

Although regarded as a specialist on burned pine forests in other parts of its range, in Nevada the Lewis's Woodpecker is most strongly associated with deciduous riparian woodlands dominated by aspen or cottonwood [NBC analysis, $p = 0.01$, i6]. Post-breeding nomadic movements, however, often extend its habitat use into Coniferous Forest. Key factors in habitat suitability are the presence large, partly-decayed snags, an open forest structure, and a well-developed shrub layer that promotes healthy populations of flying insects. Annual variation in numbers and a very patchy breeding distribution within the state make it hard to pinpoint current trends in Nevada, but the species is a conservation concern because of historic declines and Nevada's moderately high global stewardship responsibility.

ABUNDANCE AND OCCUPANCY BY HABITAT

- NBC data

Lewis's Woodpecker						
	Primary Habitat Type Present at Transect	No. Transects with Sightings	Nevada Bird Count Sightings per 40 ha			
			average	95% confidence interval**	% transects occupied	
Great Basin	Aspen	5	3.1	-0.2 - 6.4	0.33 (6/18)	
	Lowland Riparian	2	1.6	-10.5 - 13.7	0.02 (1/66)	
	Montane Riparian	7	1.4	0.7 - 2.0	0.07 (6/88)	
	Montane Sagebrush	1	2.5	n/a	0.09 (11/11)	
	Montane Shrub	2	1.9	-6.2 - 10.0	n/a	
	Mountain Mahogany	2	1.3	n/a	0.22 (2/9)	
Mojave	Aspen	n/a	n/a	n/a	0.14 (1/7)	
	Montane Riparian	n/a	n/a	n/a	0.22 (2/9)	

[Typo in Montane Sagebrush % occupied cell, 1/11, not 11/11]

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NEVADA-SPECIFIC STUDIES AND ANALYSES

- TBD

MAIN THREATS AND CHALLENGES

- Loss of aspen stands due to conifer invasion, livestock grazing pressure, and aspen decline due to pathogens and climate change
- Degradation of deciduous montane riparian habitat due to domestic and feral livestock grazing that reduces understory
- Role of fire in Nevada unclear; low intensity, patchy fire may be beneficial

CONSERVATION STRATEGIES

Habitat Strategies

- General Montane Riparian and Aspen conservation strategies, with emphasis on the following:
 - Restore aspen stands to healthy, regenerating condition with multi-age woodland structure and healthy understory layer
 - Manage grazing pressure in montane riparian habitats to protect integrity of understory vegetation and allow for aspen regeneration
 - Retention of large snags in montane riparian habitats

Research, Planning, and Monitoring

- Continue monitoring to better determine current Nevada population trend
- Fire management strategy that allows for patchy, lower-intensity “regenerative” fires in aspen

OTHER PRIORITY SPECIES WITH SIMILAR CONSERVATION STRATEGIES

- Calliope Hummingbird

FURTHER READING

- TBD

Temporary codes for standard references

[p1] Birds of N. America account for this species

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[p2] NV Bird Conservation Plan ver. 1 (Neel 1999)
[p3] NV Wildlife Action Plan
[p4] Nevada Breeding Bird Atlas
[p5] PIF N. American Landbird Conservation Plan (Rich et al 2004) (NOTE:
[p6] Intermountain West Regional Shorebird Plan (Oring et al 2003)
[p7] Pacific Flyway reports
[p8] Shrubsteppe Landscapes in Jeopardy (Dobkin and Sauder 2004)
[p9] Birds in a Sagebrush Sea (Paige and Ritter 1999)
[s1] NBC-based population size estimates
[s2, s3] NBC-based habitat relationship analysis
[s4] Breeding Bird Atlas breeding phenology data
[i1] BBS trends analysis (Sauer et al 2005)
[i2] NV Upland Game Management Plan (Espinosa et al in prep.)
[i3] Western Quail Management Plan (Zornes et al 2008)
[i4] NDOW Shorebird and Waterbird monitoring data (Neel)
[i5] Brad Andres IMJV Shorebird / Waterbird data set
[i6] GBBO Technical Report 08-01 (2008)
[EO] Expert opinion from NVPIF group members
[IWWCP] Intermountain West Waterbird Conservation Plan
[NAWCP] North American Waterbird Conservation Plan
[LBCUSACP] Long-billed Curlew Status Assessment and Conservation Plan
[USSCP] U.S. Shorebird Conservation Plan
[WHSRN] Western Hemispheric Shorebird Regional Network