

# Black Rosy-Finch

*Leucosticte atrata*



Photo by Greg Scyphers

## Habitat Use Profile

Habitats Used in Nevada	
Alpine (Montane Shrubland (winter)) (Sagebrush (winter))	
Key Habitat Parameters •	
Plant Composition	<u>Summer</u> : treeless alpine tundra; <u>Winter</u> : sagebrush and montane shrubs
Plant Density	Unknown
Mosaic	<u>Summer</u> : alpine shrubs and herbaceous cover, interspersed with talus, cliffs and snowpockets; <u>Winter</u> : shrublands within 10 km [6 mi] of suitable roost sites <sup>1, 4</sup>
Other	Requires cave, mine entrances, or large rock fissures in sagebrush/pinyon-juniper zone in winter for roosting <sup>1, 4, EO</sup>
Response to Vegetation Removal	Unknown
Area Requirements ○	
Minimum Patch Size	Unknown
Recommended Patch Size	<u>Summer</u> : entire alpine patch; <u>Winter</u> : area of 10 km [6 mi] radius around roost site <sup>1, EO</sup>
Home Range / Territory Size	Unknown

## Conservation Profile

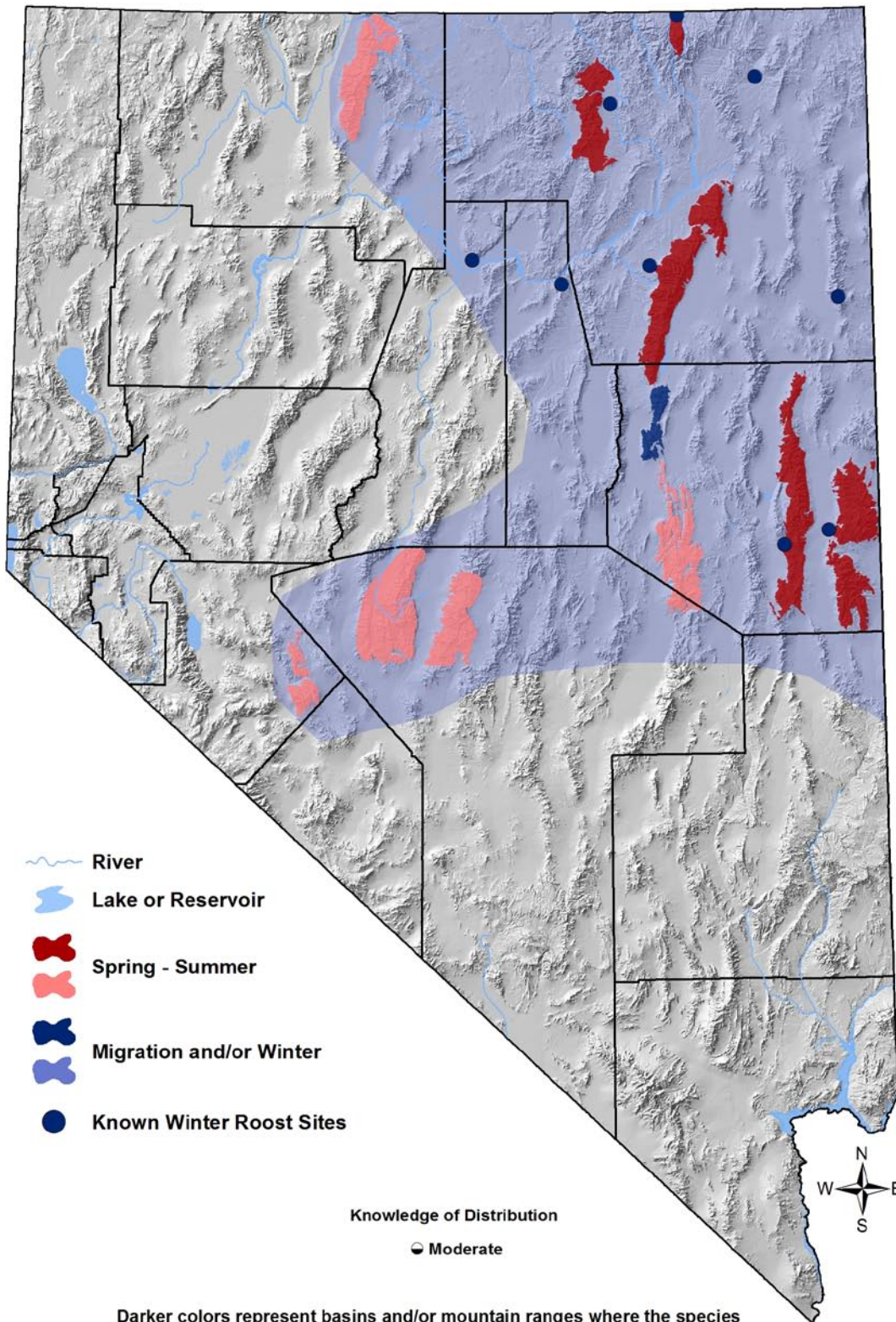
Priority Status	
Conservation Priority Species	
Species Concerns	
Unknown population trend Small population size Restricted habitat (summer and winter) Habitat threats	
Other Rankings	
Continental PIF	Watch List
Audubon Watchlist	Red
NV Natural Heritage	S3
USFWS	Bird of Conservation Concern, Migratory Bird
BLM	Sensitive Species
USFS	None
NDOW	Conservation Priority
Trends	
Historical ○	Unknown
Recent ○	Unknown
Population Size Estimates	
Nevada ○	Unknown
Global •	20,000 <sup>6</sup>
Percent of Global	Unknown
Population Objective	
Maintain / Increase <sup>EO</sup>	
Monitoring Coverage	
Source	Not systematically monitored
Coverage in NV	Poor
Key Conservation Areas	
Protection	Ruby, E. Humboldt, Schell Creek, Snake, and Jarbidge ranges; eastern Nevada valleys with concentrations of caves or mine shafts
Restoration	Degraded / sealed winter roost sites

## Natural History Profile

Seasonal Presence in Nevada	
Year-round (elevational migrant)	
Known Breeding Dates in Nevada	
Late June – July <sup>3, 4</sup>	
Nest and Nesting Habits	
Nest Placement	On ground in alpine meadow, talus or cracks of cliffs <sup>4</sup>
Site Fidelity	Unknown
Food Habits	
Basic	Ground forager
Primary Diet	Insects and seeds on snowbanks in summer <sup>4</sup>
Secondary Diet	Seeds in winter <sup>4</sup>

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Darker colors represent basins and/or mountain ranges where the species has been recorded within the past 12 years. Lighter colors represent the broader area within which the species is presumed to occur in appropriate habitat types.

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## Overview

Black Rosy-Finches breed in remote alpine habitats, where they are difficult to monitor and study. They are more easily observed after they descend to lower elevations for the winter, where they often join with Gray-crowned Rosy-Finches (*Leucosticte tephrocotis*) in mixed foraging and roosting flocks of 25 – 1,000 individuals.<sup>1</sup> In addition to the confirmed ranges shown in the map above, breeding may also occur in other high ranges (Toiyabe, Toquima, White Pine ranges).<sup>2, 4</sup> Nevada trends and population size are unknown, and breeding populations are small and discontinuous. The Black Rosy-Finch's high-elevation breeding areas are not subject to most of the habitat threats characteristic of more accessible areas, but the potential impact of climate change on Nevada's limited alpine habitat is a concern. Most of the conservation attention for this bird is focused on protecting communal winter roost sites (which are critical for survival) and winter foraging areas.

## Abundance and Occupancy by Habitat

No information

## Nevada-Specific Studies and Analyses

### NDOW Winter Telemetry Studies<sup>1</sup>

Winter telemetry studies in northeastern Nevada revealed that Black Rosy-Finches, which are often present with Gray-crowned Rosy-Finches in mixed flocks of 25 – 1,000 birds, depend heavily upon the shelter offered by below-ground communal roost sites, including abandoned mine shafts, caves, and deep fissures in metamorphic rock outcrops. The flocks return to these roost sites every evening after foraging in sagebrush or montane shrubland habitat up to 10 km [6 mi] away. Flocks may remain in the roosts for extended periods when the weather is inclement. Known roost sites were located at elevations ranging from 1,400 – 2,800 m [4,600 – 9,200 ft] within a matrix of sagebrush, montane shrubland, and pinyon-juniper habitats, and were typically higher in elevation than their associated foraging sites.

## Main Threats and Challenges

### Habitat Threats

- On the wintering grounds, threats include:
  - Mine entrance sealings (see photo, below), especially within 10 km [6 mi] of known winter foraging sites
  - Disturbance of winter roosting sites
  - Possible wind energy development on foraging sites
- Climate change is the main threat to alpine breeding habitat

### Research, Planning, and Monitoring Challenges

- Lack of information about population trends and size, and full breeding range

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## Conservation Strategies

### Habitat Strategies

- The Alpine (p. Hab-2-1) habitat conservation strategies benefit this species
- Encourage gating rather than sealing of mine entrances in wintering range
- Limit disturbances within 9 km [5.5 mi] of known winter roost sites

### Research, Planning, and Monitoring Strategies

- Attempt to better document population trends and full breeding range
- Perform full inventory of important winter roost sites (partially completed by NDOW Elko office) and protect from disturbance through cooperative roost conservation strategies<sup>5</sup>
- Conduct further study of wintering biology to determine any additional threats
- Model possible impacts of climate change and develop mitigation strategies if possible

### Public Outreach Strategies

- None identified

References: <sup>1</sup>Bradley and Voget (2005); <sup>2</sup>Floyd et al. (2007); <sup>3</sup>GBBO unpublished Atlas data; <sup>4</sup>Johnson (2002); <sup>5</sup>Nevada Wildlife Action Plan Team (2006); <sup>6</sup>Rich et al. (2004); <sup>EO</sup> Expert opinion



Sealing of a mine and former winter roost site, Ellen D. Mountain, Elko Co.  
Photo by Pete Bradley.