

Prairie Falcon

Falco mexicanus



Photo by Martin Meyers

Habitat Use Profile

Habitats Used in Nevada	
Cliff Sagebrush Mojave Scrub Salt Desert Scrub (Joshua Tree) (Wet Meadow) (Agriculture)	
Key Habitat Parameters •	
Plant Composition	Forage over saltbush, sagebrush, creosote bush, greasewood, agricultural crops, winterfat, native perennial grasses
Cliff Properties	Nesting cliff heights range from <25 m [80 ft] to >100 m [325 ft]; 60% of nests located on cliffs <30 m [100 ft] high ³
Mosaic	Cliffs near suitable prey habitat; avoids dense cheatgrass ^{4, 8}
Distance to Water	No known relationship
Response to Vegetation Removal	Probably negative to shrub loss, depending on prey population response ^{4, 9, E0}
Area Requirements •	
Minimum Patch Size	~ 7,500 ha [18,500 ac] ^{E0}
Recommended Patch Size	> 20,000 ha [50,000 ac] ^{E0}
Home Range	5,000 – 7,500 ha [12,400 – 18,500 ac] or more ⁸

Conservation Profile

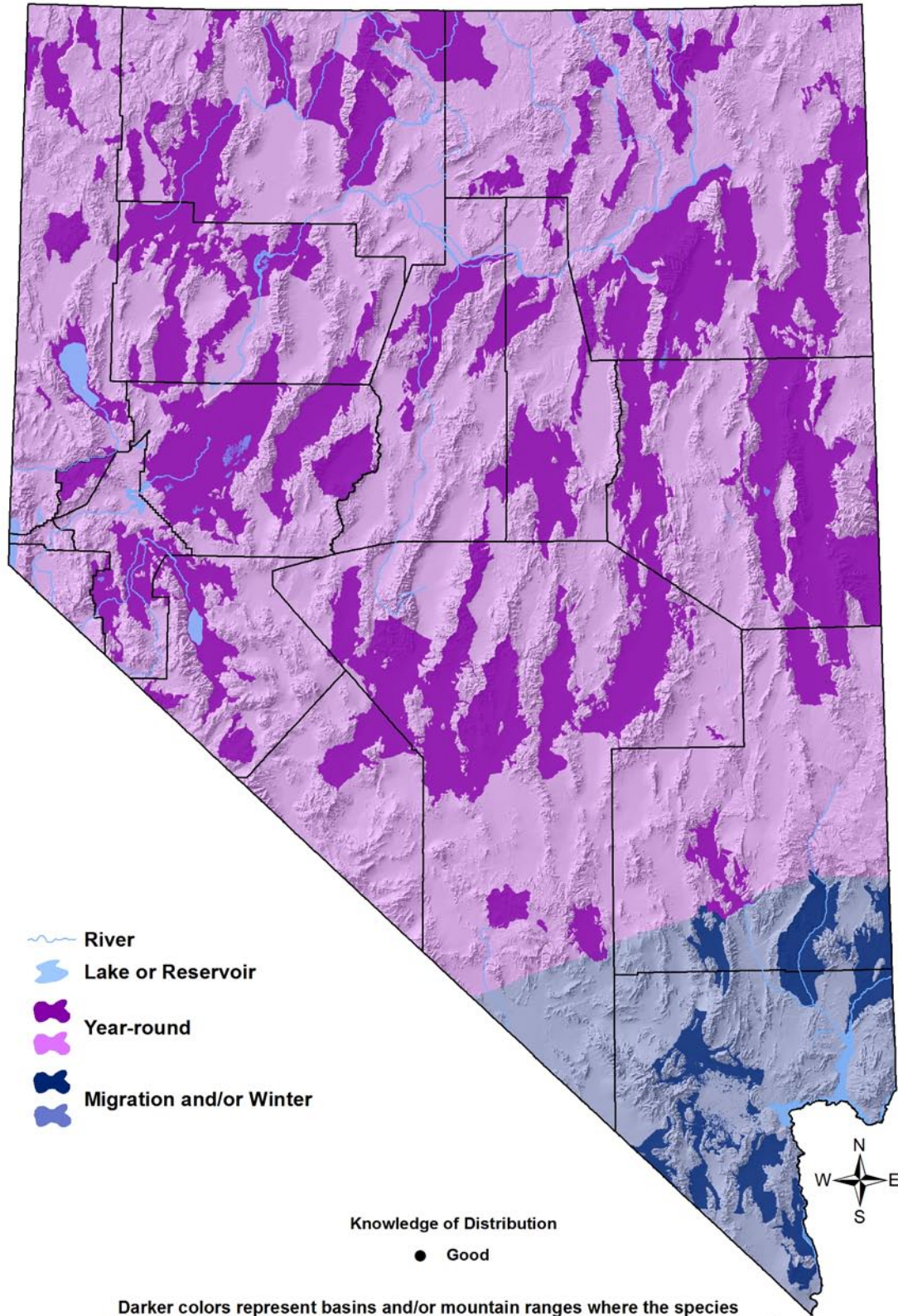
Priority Status	
Stewardship Species	
Species Concerns	
High stewardship responsibility Unknown population trend	
Other Rankings	
Continental PIF	None
Audubon Watchlist	None
NV Natural Heritage	S4
USFWS	Bird of Conservation Concern, Migratory Bird
BLM	Sensitive Species
USFS	None
NDOW	Stewardship
Trends	
Historical ◦	Unknown
Recent ◦	Trends in Nevada unknown, possibly stable ^{7, E0}
Population Size Estimates	
Nevada (NBC) •	11,500
Global •	36,000 ⁶ (other estimates lower ³)
Percent of Global	~ 30%
Population Objective	
Maintain ^{E0}	
Monitoring Coverage	
Source	Nevada Bird Count, NDOW raptor counts
Coverage in NV	Good
Key Conservation Areas	
Protection	Shrub and scrub lands near suitable nesting cliffs
Restoration	Same

Natural History Profile

Seasonal Presence in Nevada	
Year-round; Winter only in southern Nevada	
Known Breeding Dates in Nevada	
February – July ²	
Nest and Nesting Habits	
Nest Placement	On cliff ledge, usually on upper half of cliff, most often facing south or east ^{3, 5}
Site Fidelity	High for breeding sites ⁵
Food Habits	
Basic	Aerial predator
Primary Diet	Small mammals, especially Townsend's ground squirrel ^{1, 4, 5, 8}
Secondary Diet	Small birds (especially in winter), reptiles ⁸

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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

A significant proportion of the world's Prairie Falcons inhabit Nevada, where their preferred landscapes (cliffs adjacent to arid valleys with low vegetation) are abundant. Prairie Falcons are most often observed foraging over a variety of sagebrush, salt desert, and Mojave scrub shrublands throughout the year, and they also occur in agricultural lands, especially during the winter months. Although the range map shown above correctly suggests a valley-bottom orientation, Prairie Falcons have also been documented to nest at higher elevations in foothills and lower mountain ranges (Teri Slatuaski, *pers. comm.*). Density and home range sizes vary considerably over time and space, depending on prey abundance patterns and the availability of suitable cliffs for nesting. Apart from localized disturbances to nesting cliffs, no serious threats to the species have been identified. However, given our high stewardship responsibility, it is important to maintain an ongoing monitoring effort in order to better understand population trends, which are currently not clear. Because Prairie Falcons respond strongly to prey availability, management of habitat to maintain or restore healthy populations of ground squirrels and other small mammals is likely to be an effective conservation strategy.

Abundance and Occupancy by Habitat

- Nests may be spaced as closely as ~ 0.5 km [0.3 mi] in good habitat; more typically 1 – 10 km [0.6 – 6.0 mi]⁸
- Highest densities in Nevada reported to be “near mouth of narrow canyons, overlooking riparian vegetation and agricultural lands”³
- Herron et al.³ estimated Nevada's population at 2,500 birds in 1985, considerably lower than the NBC-generated estimate of 11,500 birds and the BBS-generated estimate of 8,500 birds⁶

Nevada-Specific Studies and Analyses

No information

Main Threats and Challenges

Habitat Threats

- Human disturbances near nest sites may cause nest abandonment, especially when disturbances take place on the cliff top, above the nest⁵
- Small mammal (prey) populations can be negatively impacted if livestock grazing in shrublands significantly reduces forb and grass cover

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- Heavy infestations of cheatgrass or other weeds may reduce small mammal (prey) density

Research, Planning, and Monitoring Challenges

- The possible impacts of illegal take for falconry are not known
- The manner in which various rangeland fire scenarios affect prey populations needs further study

Conservation Strategies

Habitat Strategies

- Cliff (p. Hab-4-1), Sagebrush (p. Hab-17-1), Salt Desert Scrub (p. Hab-18-1), and Mojave Scrub (p. Hab-12-1) habitat conservation strategies benefit this species
- If development or significant activity is occurring or planned near potentially suitable cliffs, survey for Prairie Falcon nests
- Where possible, maintain a 1 km [0.6 mi] disturbance-free buffer zone around nesting cliffs¹⁰
- To benefit prey populations, manage shrublands in the vicinity of cliffs to maintain or restore habitat-appropriate grass and forb cover, and to control invasive weeds

Research, Planning, and Monitoring Strategies

- Continue monitoring to better estimate ongoing population trend and population size
- Attempt to determine whether illegal take of Prairie Falcons negatively impacts population stability
- Further study how rangeland fires of varying size and intensity affect prey populations in the short and long term

Public Outreach Strategies

- None identified

References: ¹Dobkin and Sauder (2004); ²GBBO unpublished Atlas data; ³Herron et al. (1985); ⁴Marzluff et al. (1997); ⁵Paige and Ritter (1999); ⁶Rich et al. (2004); ⁷Sauer et al. (2008); ⁸Steenhof (1998); ⁹Steenhof et al. (1999); ¹⁰Suter and Jones (1981); ^{E0} Expert opinion