

Prairie Falcon

Falco mexicanus



Photo by Martin Meyers

Habitat Use Profile

Habitats Used in Nevada	
Cliffs Sagebrush Mojave Scrub Salt Desert	
Key Habitat Parameters ●	
Plant Composition (Foraging Habitat)	Saltbush, sagebrush spp., creosote bush, greasewood, agricultural crops, winterfat, native perennial grasses
Plant Density	Natural densities of shrub or scrub plants and understory, suitable for prey species ³
Mosaic	Cliffs near suitable prey habitat; avoids cheatgrass ^{3,7}
Distance to Water	No known relationship
Response to Vegetation Removal	Unknown; probably dependent on prey population response ^{EO}
Area Requirements ●	
Minimum Patch Size	Unknown
Recommended Patch Size	≥ 10,000 ha (22,000 ac) ^{EO}
Home Range	≥ 5,000 – 7,500 ha (11,000 – 16,500 ac) ³

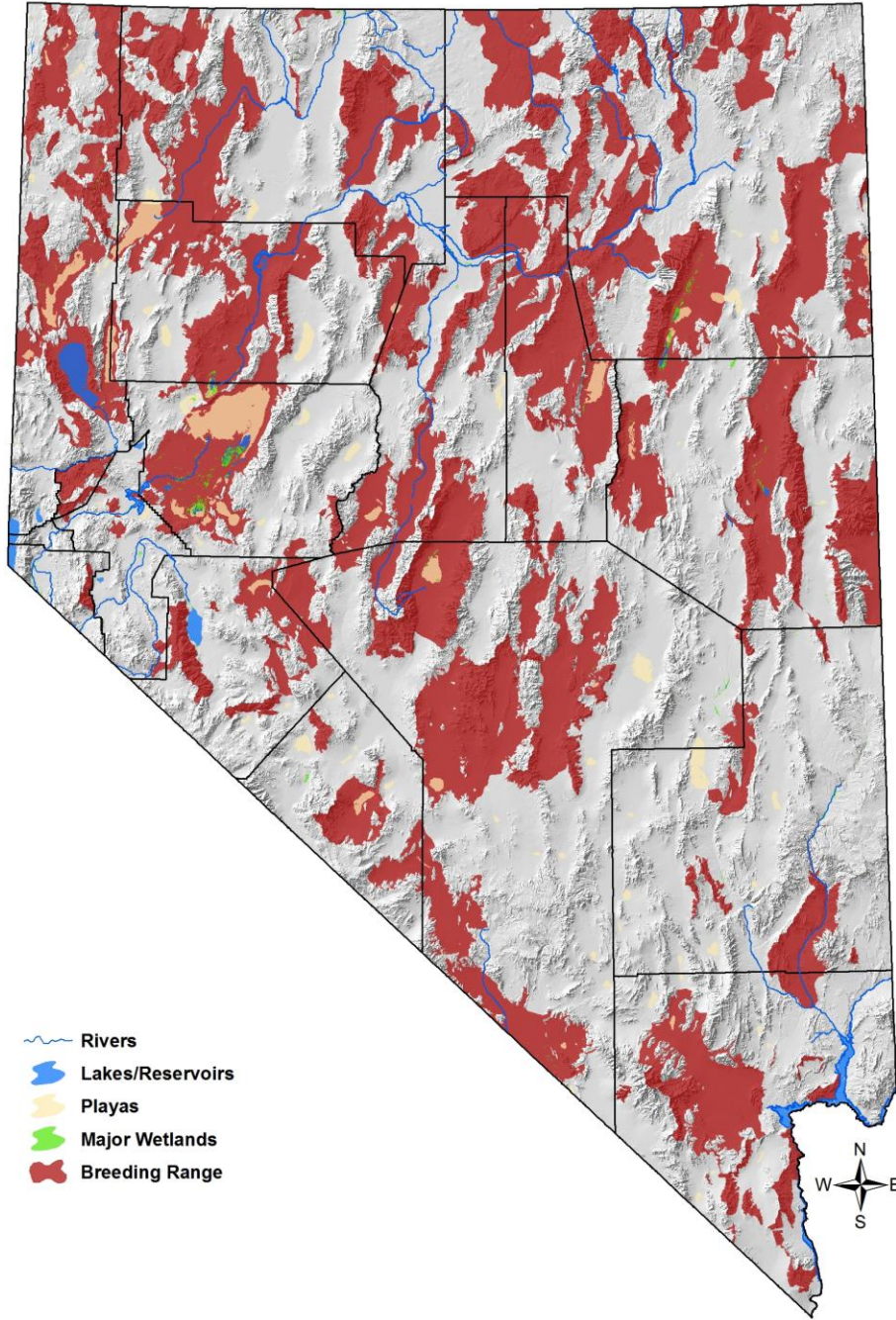
Conservation Profile

Priority Status	
Stewardship Species	
Species Concerns	
Possible declines High Nevada stewardship responsibility	
Other Rankings	
Continental PIF	None
Audubon Watchlist	None
NV Natural Heritage	S4
USFWS	Conservation Concern, Migratory Bird
BLM	Special Status: Sensitive
USFS	None
NDOW	Stewardship Species
Trends	
Historical	Unknown
Recent ●	Stable or increasing, patterns in Nevada unknown ¹
Population Size Estimates	
Nevada (PIF) ●	8,500; Herron et al. (1985): 2,500
Global ●	36,000 ² ; other estimates lower
Percent of Global ●	24%
Population Objective	
Maintain ^{EO}	
Monitoring Coverage	
Source	Nevada Bird Count, NDOW raptor counts
Coverage in NV ●	Good
Key Conservation Areas	
Protection	See Herron et al. (1985) for 33 high-density sites
Restoration	Sagebrush, Mojave scrub, and salt desert scrub areas throughout Nevada

Natural History Profile

Seasonal Presence in Nevada	
Year-round	
Known Breeding Dates in Nevada	
February – July ⁴	
Nest and Nesting Habits	
Nest Placement	On cliff ledge, often facing south or east ⁵
Site Fidelity	High for breeding sites ⁵
Food Habits	
Basic	Predatory; ambush and pursuit
Primary Prey	Small mammals, esp. Townsend's ground squirrel ^{3,5,6,7}
Secondary Prey	Small birds, reptiles ³

Prairie Falcon
Falco mexicanus



Prairie Falcon
Falco mexicanus

References: ¹ Sauer et al. (2008), ² Rich et al. (2004), ³ Steenhof (1998), ⁴ GBBO unpubl. atlas data, ⁵ Paige and Ritter (1999), ⁶ Dobkin and Sauder (2004), ⁷ Marzluff et al. (1997), ^{EO} expert opinion

Overview

Approximately one-fourth of the world’s Prairie Falcons inhabit Nevada, where their preferred landscapes (cliffs adjacent to arid valleys with low vegetation) are abundant. Prairie Falcons may forage over a wide variety of open habitat types throughout the year, including agricultural lands during the winter months, but desert uplands such as sagebrush, salt desert, and Mojave scrub during most of the year. Density and home range sizes vary considerably over time and space, depending on prey abundance patterns and the availability of suitable cliffs for nesting. Other than disturbances in close proximity to nesting cliffs, there appear to be few serious threats to Prairie Falcons in Nevada, but continued (and perhaps expanded) monitoring is needed to confirm population stability. The species appears to respond most strongly to prey availability in our region, so maintenance of habitat for ground squirrels and other scrub desert small mammals is likely the most effect conservation strategy for Prairie Falcon at this time.

Abundance and Occupancy by Habitat

- NBC transects (percent column actually refers to **proportion** of transects occupied)

	% Transects Occupied (Great Basin)	% Transects Occupied (Mojave)
Aspen	0.05 (1/18)	0
Lowland Riparian	0.03 (2/66)	0.03 (1/36)
Montane Riparian	0.02 (2/88)	0
Montane Shrublands	0.11 (1/9)	0
Pinyon-Juniper	0.07 (4/61)	0
Salt Desert	0.04 (1/23)	0

- In good habitat, nests may be spaced as closely as ~ 0.5 km; typically 1 – 10 km (Steenhof 1998)
- Over a variable landscape, density typically 1 pair for every 95 – 185 km²
- In canyons with linear cliff lines, density typically 0.1 – 0.34 pairs per kilometer of cliff line; may be as high as 4 pairs / km in some areas (Steenhof 1998)

Prairie Falcon
Falco mexicanus

Nevada-Specific Studies and Analyses

- TBD

Main Threats and Challenges

- Human disturbances near nest sites may cause abandonment, especially disturbances above the nest (Paige and Ritter 1999)
- Illegal persecution [reviewers: is this still a threat in Nevada? It refers to the shooting or baiting of birds due to perceived threats to domestic livestock or pets, or for recreation]

Species with Similar Conservation Strategies

- Swainson’s Hawk (foraging)
- Golden Eagle (cliff nesting)

Conservation Strategies

Habitat Strategies

1. Sagebrush, Cliffs, Salt Desert, and Mojave Scrub conservation strategies to address prey populations (see habitat accounts)
2. Manage rangelands specifically for healthy rodent populations

Public Outreach

1. Encourage landowners to maintain ground squirrel populations in key agricultural nesting areas through the breeding season, possibly through incentive programs

Research, Planning, and Monitoring

1. Continue and expand monitoring to better determine population size and trends in Nevada
2. If development of any sort is planned in the vicinity of cliffs, survey for presence of Prairie Falcon nests
3. Maintain 1 km (0.6 mi) disturbance-free buffer zones around nest cliffs (Suter and Jones 1981)
4. Maintain historical nesting cliffs within the home range of nesting Prairie Falcons, and if impacts cannot be avoided, explore options for providing alternate cliff habitat within the historic home range.