

Merlin - *Falco columbarius*

Abundance: Uncommon

Status: NSSU

NatureServe: G5 S4

Population Status: population status and trends are unknown; this species is extremely difficult to monitor and current monitoring techniques are not adequate

Limiting Factor: Habitat (and Human Activity): limiting factors are moderate; habitat is vulnerable but not currently restricted, although an increase in habitat loss is likely; sensitive to human disturbance during nesting

Comment: change is attributed to unknown population status and trends; moved from NSS3 to NSSU

Introduction

The Merlin inhabits Eurasia and North America, from the northern tree limit south in North America to Washington, Oregon, Montana, Idaho, Wyoming, and the western borders of North and South Dakota. The North American population winters from British Columbia and western and southern United States south to Venezuela and Peru. It is a year-round resident in Wyoming and is found scattered throughout the state. The Merlin is considered an uncommon resident in Wyoming.

Habitat

The Merlin occurs in most habitats below 2600 m (8500 ft), primarily open woodlands, savannah, grasslands, and shrub-steppe. In recent decades some individuals have expanded into cities and towns. It nests in large trees (most commonly in ponderosa pines), usually in old domed magpie nests, in open woodlands within a short distance of open sagebrush-grassland for foraging. It tends to select nesting sites that combine the attributes of easy access, a good view of the surrounding area, and maximum concealment of the nest.

Problems

- h This species is difficult to inventory and its population status and trends are poorly known in Wyoming.
- h Legal harvest of Merlins by licensed falconers is allowed in Wyoming, but population data are needed to justify harvest quotas.
- h Impacted by conversion of native prairie to cropland or other uses, urbanization, industrialization, loss of vegetative cover, poisoning, human disturbance near the nest site, and reduced prey availability.
- h Populations were impacted by organochlorine pesticides in the 1950s and 1960s. Pesticide contamination continues to be a concern in this region, as some individuals may still be impacted, although at present it does not appear to be a major factor controlling population size.

Conservation Actions

- h Conduct an intensive survey effort to locate nesting Merlins in Wyoming and determine a reliable statewide population estimate.
- h In areas where Merlins occur, maintain open stands of mature low elevation conifer and cottonwood in a matrix with open sagebrush and grasslands.
- h Avoid or minimize pesticide use in habitats where this species nests to ensure a food source is maintained. If possible, all pesticide use should be postponed until this species has completed its breeding cycle.

Monitoring/Research

Annual nest monitoring has been conducted in the past; however, it is difficult and labor intensive because Merlin's exhibit weak nest site fidelity.

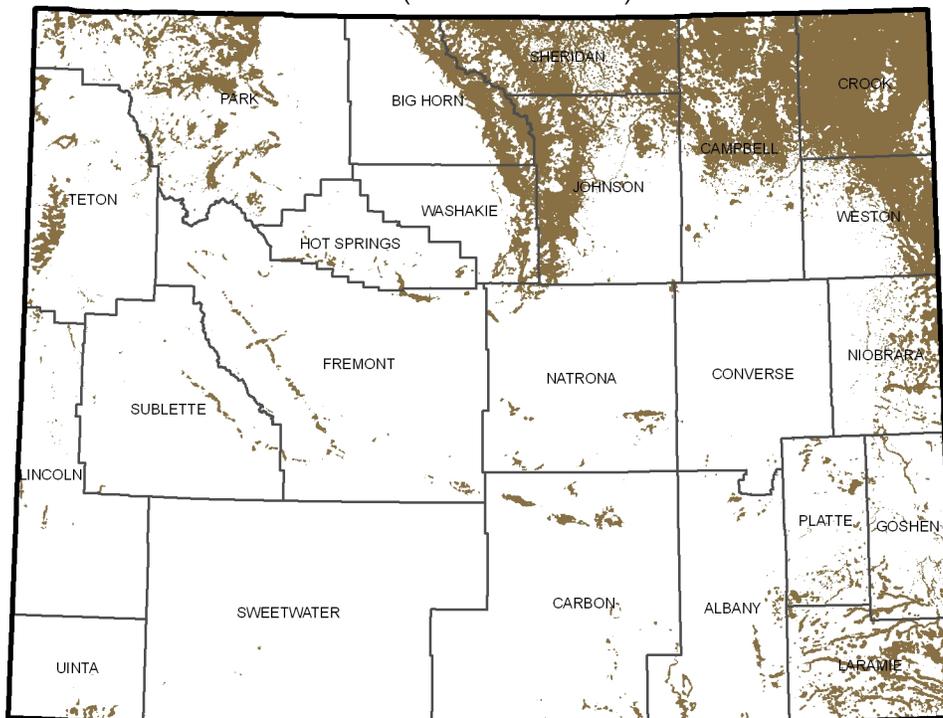
Recent Developments

None.

References

- Clark TW, Harvey AH, Dorn RD, Genter DL, Groves C, eds. 1989. Rare, sensitive, and threatened species of the Greater Yellowstone Ecosystem. Northern Rockies Conservation Cooperative, Montana Natural Heritage Program, The Nature Conservancy, and Mountain West Environmental Services. 153 p.
- Paige C, Koenen M, Kwan D, Mehlman DW. 1999. Brewer's Sparrow (*Spizella breweri*): species management abstract. The Nature Conservancy. Online: www.conserveonline.org.
- Leukering T, Carter MF, Panjabi A, Faulkner D, Levad R. 2003. Monitoring Wyoming's birds: the plan for count-based monitoring. In: Nicholoff SH, compiler. Wyoming bird conservation plan. Version 2.0. Wyoming Partners In Flight. Lander: Wyoming Game and Fish Department. p 575-601. Online: www.blm.gov/wildlife/plan/WY/menu.htm.
- Nicholoff SH, compiler. 2003. Wyoming bird conservation plan Version 2.0. Wyoming Partners In Flight. Lander: Wyoming Game and Fish Department. 668 p. Online: www.blm.gov/wildlife/plan/WY/menu.htm.
- Sieg CH, Becker DM. 1990. Nest-site habitat selected by Merlins in southeastern Montana. *Condor* 92(3):688-94.
- Sodhi NS, Oliphant LW, James PC, Warkentin IG. 1993. Merlin (*Falco columbarius*). In: Poole A, Gill F, eds. The birds of North America. Nr 44. Philadelphia: Academy of Natural Sciences; Washington: American Ornithologists' Union.
- Stephens RM, Anderson SH. 2002. Conservation assessment for the Merlin in the Black Hills National Forest, South Dakota and Wyoming. Custer (SD): USDA Forest Service, Black Hills National Forest. 25 p. Online: <http://www.fs.fed.us/r2/blackhills/projects/planning/assessments/merlin.pdf>.

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SOURCE: Digital maps of ranges and predicted distributions for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Natural Diversity Database. University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution of the species; heavy black lines indicate outermost boundaries of possible occurrence.