
Merlin

Falco columbarius

Aves — Falconiformes — Falconidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide: Secure (G5)
Statewide: Imperiled breeding/Imperiled nonbreeding(S2B,S2N)
ESA: No status
USFS: Region 1: No status; Region 4: No status
BLM: No status
IDFG: Protected nongame

BASIS FOR INCLUSION

Lack of population trend information in Idaho; regional threats.

TAXONOMY

Ten subspecies of merlin are recognized, 3 of which occur in North America and all 3 of which have been documented in Idaho: the Taiga Merlin (*F. c. columbarius*), Richardson's or prairie merlin (*F. c. richardsonii*), and the black merlin (*F. c. suckleyi*) (Temple 1972, Sodhi et al. 1993).

DISTRIBUTION AND ABUNDANCE

The merlin breeds throughout most of Canada, Alaska, eastern Washington, in the Cascade Mountains of Oregon, locally in Idaho (see below), Montana, northern Colorado, and east to the central Dakotas (Sodhi et al. 1993). North American merlins winter from southern Canada to the southern United States (although are absent entirely in the Midwest), south to Panama, the West Indies, Central America, northern South America, Venezuela, Colombia, Ecuador, and northern Peru; the Caribbean Islands are the main wintering area of merlins that breed along the eastern seaboard (Sodhi et al. 1993). An analysis of sightings from Idaho confirms that the merlin is a common migrant and locally abundant winter resident, but a rare breeder (Craig and Craig 1989). Eight nests have been verified in Idaho, although other successful nesting attempts are suspected (Craig and Craig 1989). Craig and Renn (1977) documented 2 merlin nests, 1 in Blaine Co. in 1973 and the other in Butte Co. in 1975. While not specified, these records were probably of prairie falcon.

POPULATION TREND

Spring breeding bird surveys, autumn raptor migration monitoring, and mid-winter bird counts are inappropriate methods for assessing merlin numbers and so little information exists with which to analyze population trends for this species. Breeding Bird Survey (BBS) data, which are admittedly questionable for the merlin, reveal stable to slightly increasing population trends at the level of the U.S. (+3.6% per year) and in the western BBS region (+5% per year), and stable to slightly decreasing trends in Idaho (-2.9% per year) during the period 1966–2004 (Sauer et al. 2005); none of these trends is statistically significant.

HABITAT AND ECOLOGY

Merlins hunt in open country and feed on small- to medium-sized birds, rodents, insects and occasionally bats (Call 1978, Cade 1982, Craig and Craig 1989). Nesting habitat in Idaho has been shrub-steppe dominated by sagebrush and nests were placed in juniper trees. Typically, merlins use abandoned stick nests built by raptors, corvids or other birds (Cade 1982). In eastern Idaho, merlins used abandoned black-billed magpie nests (Craig and Renn 1977). During winter, merlins frequent cities, towns, feedlots and dairies where small-bird prey is abundant. A radio-tagged merlin established a winter territory, foraged in urban and rural areas, and routinely used conifer trees within a Nampa, Idaho neighborhood as night roosts (B. Haak, IDFG, unpublished data).

ISSUES

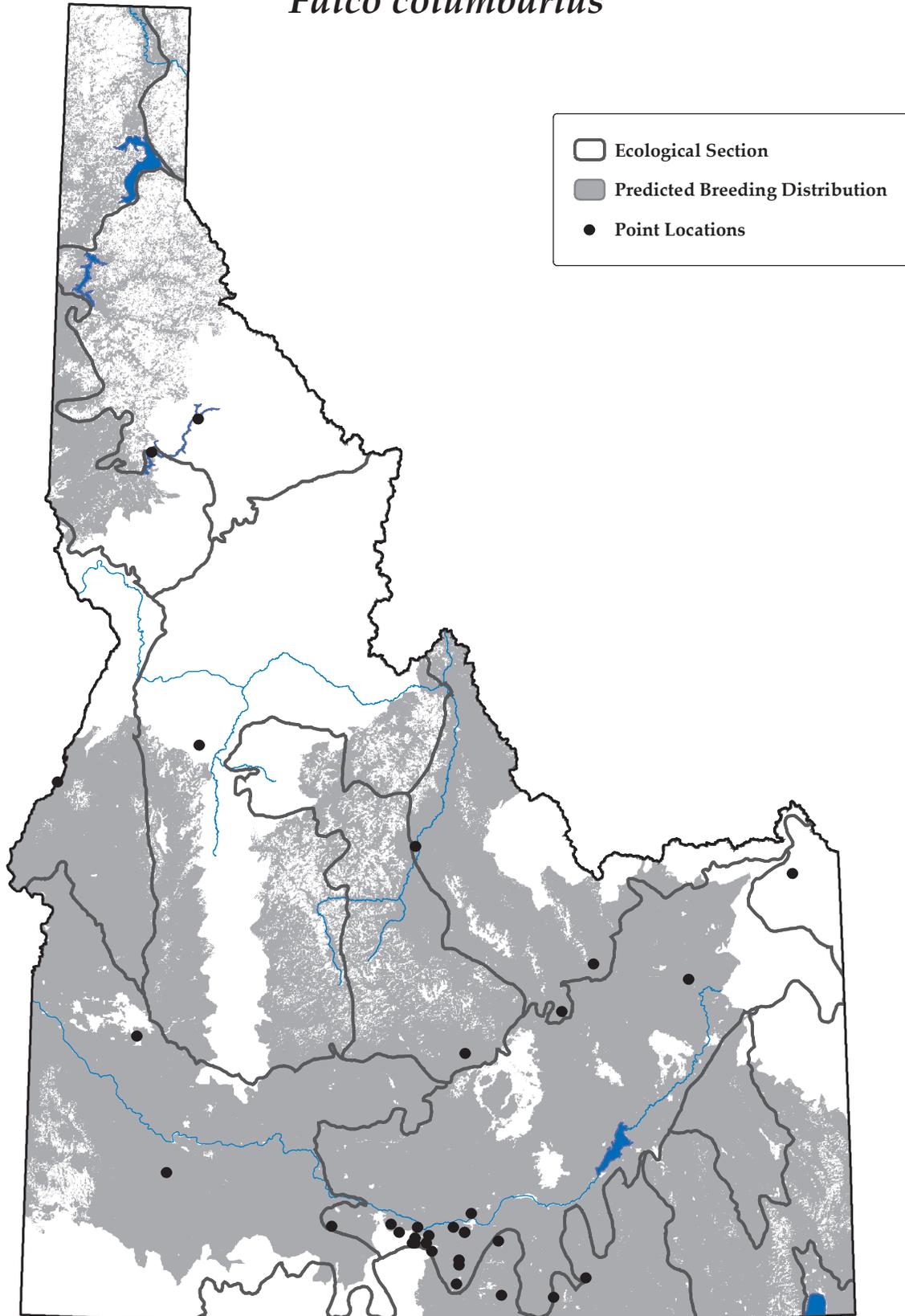
An increase in agricultural lands has caused losses of both nest sites and prey species for merlins (Trimble 1975). Because they are highly migratory and move between North and South America, merlins also may still suffer from effects of DDT and its metabolites (Fyfe et al. 1976, Oliphant and Thompson 1978, Becker and Sieg 1987). Currently, West Nile Virus and avian influenza pose threats during summer months when mosquito vectors are active. In addition, merlins may be poisoned by avicides used to control European starlings at feedlots during winter. However, the greatest threat to merlins in the future may be habitat modification by humans (Cade 1982).

RECOMMENDED ACTIONS

Continued vigilance (monitoring) of environmental contaminants in merlins is recommended since this is still cause for concern in some parts of their range (Sodhi et al. 1993). There are currently too few breeding merlins in Idaho to implement habitat management activities designed specifically to benefit this species; and wintering numbers are sufficiently stable to suggest that few local problems exist. Given that merlins can be successfully bred in captivity, introducing birds to suitable breeding habitat throughout the state might be 1 option for future consideration.

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Map created on September 22, 2005
and prepared by Idaho Conservation Data Center.
Sources: Point data are from Idaho Conservation Data Center,
Idaho Department of Fish and Game (2005). Predicted distribution
is from the Wildlife Habitat Relationships Models (WHR),
A Gap Analysis of Idaho: Final Report. Idaho Cooperative Fish
and Wildlife Research Unit, Moscow, ID (Scott et al. 2002).
Predicted distribution is approximate (for more information, go to
http://www.wildlife.uidaho.edu/idgap/idgap_report.asp).

