
Peregrine Falcon

Falco peregrinus

Aves — Falconiformes — Falconidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide:	Vulnerable subspecies (G4T3)
Statewide:	Imperiled breeding (S2B)
ESA:	No status
USFS:	Region 1: Sensitive; Region 4: Sensitive
BLM:	Regional/State imperiled (Type 3)
IDFG:	Threatened

BASIS FOR INCLUSION

State-listed as Threatened; regional threats.

TAXONOMY

Three subspecies of peregrine have been recognized in North America: the continental or American peregrine (*F. p. anatum*), the highly migratory Arctic peregrine (*F. p. tundrius*), and the Pacific maritime Peale's peregrine (White et al. 2002). While only *F. p. anatum* breeds and winters in Idaho, *F. p. tundrius* has been documented (observed or captured) during migration.

DISTRIBUTION AND ABUNDANCE

The peregrine (*Falco peregrinus*) is 1 of the most widely distributed bird species in the world, represented by 19 subspecies on every continent but Antarctica (White et al. 1994). Nesting occurs from sea level to 3950 m (12,959 ft) but peregrines are absent from many of the world's drier desert regions, tropical forests, and some oceanic islands (Cade 1982). Populations are generally migratory while certain temperate- and southern-latitude populations are sedentary. North American peregrines summer as far north as the Arctic and move as far south as central Argentina and Chile during winter (White et al. 2002). Although never dense, peregrine populations in the eastern U.S. were stable prior to the 1940s (Hickey 1969, Cade 1982). While peregrines can be found in dense populations on the Queen Charlotte Islands (Beebe 1960) and Aleutian Islands (White 1975), normal nesting densities vary from 1 pair/100 to 1000 km² (37–370 mi²). The current North American breeding population was estimated at 8000–10,000 pairs (White et al. 2002). Through the 1950s and '60s, nesting failures and the loss of adult falcons preceded the disappearance of breeding peregrines from traditional eyries (Cade 1982). Eventually, the cause was identified as DDT and dieldrin contamination (Ratcliffe 1967). By the 1970s, even Arctic populations had dwindled to half of their previous size (Cade 1982). The peregrine was 1 of the first species listed in 1972 under the Endangered Species Act and, later, removed from the list in 1999. Less than 28 historic peregrine nest sites were known from Idaho and peregrines were extirpated as a breeding species by 1974 (Bechard et al. 1987). In Idaho, peregrines eyries are now found at elevations between 225 m (696 ft) near Lewiston to nearly 2743 m (8486 ft) near Stanley. Most are thought to migrate south of Idaho during winter but

individuals remain near urban nest sites in Nampa and Boise year around (B. Haak, IDFG, pers. comm.).

POPULATION TREND

Through the reintroduction of 505 captive-bred young, peregrines were established in the Greater Yellowstone Ecosystem of Idaho, Wyoming and Montana (Levine 1995). By 1989, 3 Idaho territories were occupied and a single pair of peregrines had produced 3 young (Levine et al. 1991). Idaho currently has 33 known peregrine nesting territories of which 26 were occupied in 2004. A total of 18 pairs produced 42 young for an average of 1.6 fledged young per pair (Sallabanks 2004). In comparison, the average productivity of peregrines in the Rocky Mountain and southwest states between 1993 and 1998 was 1.3 young per attempt (USFWS 2000a).

HABITAT AND ECOLOGY

The peregrine is an adaptable, migratory raptor that inhabits various landscapes, including mountains, river corridors, marshes, lakes, coastlines, and cities. An aerial bird-hunting predator, this species employs still-hunting, soaring, direct pursuit, and shepherding of prey during attacks. The peregrine can be a diurnal, crepuscular or nocturnal hunter, known to feed on >400 species of North American birds (1500–2000 avian species worldwide), as well as bats, small mammals and fish. In a natural setting, peregrines breed on cliffs, cut banks, and in trees. They create a depression or “cup” in the substrate in which they lay their eggs. Peregrines do not build stick nests but will use the abandoned nests of hawks, eagles, and ravens. In recent times, peregrines have used man-made structures including: buildings, electric-transmission towers, rock quarries, bridges, silos, castles, and the top of an air conditioner (Cade 1982, Bird et al. 1996, White et al. 2002). In Idaho, peregrines are associated with mountains, major river corridors, reservoirs and lake basins. This species nests on cliffs, man-made towers, and in 2 urban settings (Sallabanks 2004). Migrants arrive in spring and depart by mid-October. Prey collected at 1 nest urban nest site included 16 species of birds (B. Haak, IDFG, pers. comm.)

ISSUES

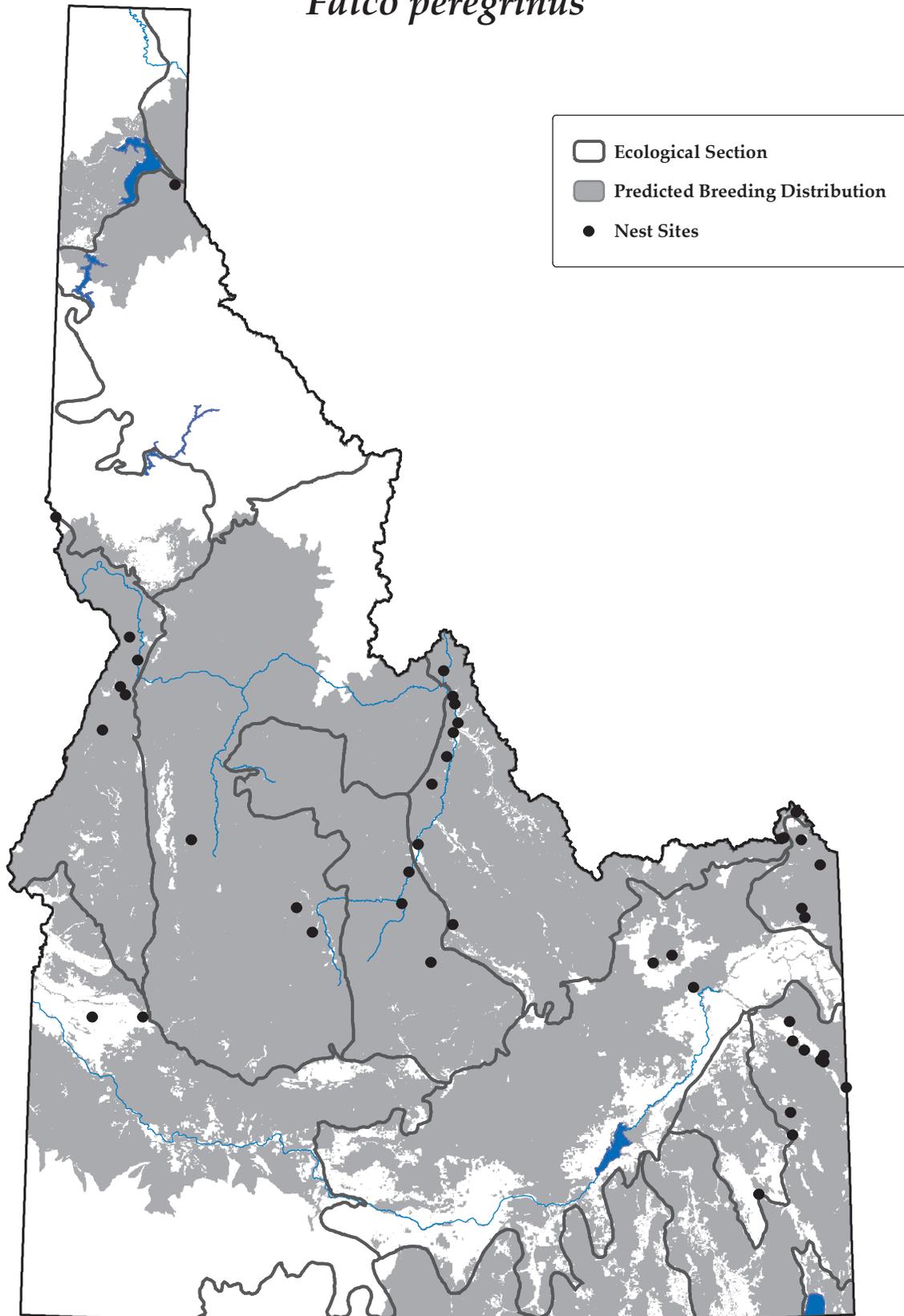
Loss of habitat (nest sites and wetlands) and human activities are the greatest threats to the peregrine population (White et al. 2002). Rock climbing, nest disturbance, and the sudden appearance of helicopters can cause breeding peregrines to abandon nest sites. The shooting of peregrines continues, as do random electrocutions (White et al. 2002). Especially in urban settings, peregrines are killed by collisions with window, wires, motor vehicles and aircraft. There is no evidence that a harvest of nestlings or trapped migrant peregrines for falconry has influenced populations. Environmental contaminants such as DDT, dieldrin, and aldrin in agriculture and forestry use can disrupt reproduction, and peregrines are known to die from eating avian prey that has been poisoned with strychnine (White et al. 2002). Although peregrines are not known to be sensitive to West Nile Virus, it poses a threat, as does avian influenza during summer months when mosquitoes are active (B. Haak, IDFG, pers. comm.).

RECOMMENDED ACTIONS

Surveys for nest sites should continue. Known nest sites, especially historically occupied cliffs, must be protected from disturbance and/or destruction. The avicides used at feedlots and dairies to control starlings and other nuisance birds must be monitored to ensure that peregrines are not victims of secondary poisonings. The eggshell thickness of resident breeders should be monitored to assess long-term environmental contamination. Efforts should be made to maintain the integrity of wetlands adjacent to known peregrine eyries and anyone illegally shooting a peregrines should be prosecuted. Idaho had a small number of breeding peregrines in 1999, when the species was federally delisted. Other western states had dramatic increases, including the adjacent State of Washington that documented over 72 occupied territories by 2001 (Hayes and Buchanan 2002). However, peregrine recovery remains relatively slow and limited to central and eastern Idaho, near the original core release area. Few pairs are found in large portions of the state, suggesting that peregrine populations would benefit from continued augmentation. Stocking several "hack" sites in southern and western Idaho with captive-bred young peregrines, young produced from urban pairs, or young produced on easily accessible towers, could improve the distribution of breeding peregrines throughout the state (B. Haak, IDFG, pers. comm.).

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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).

