



Peregrine Falcons

RESOURCE BRIEF

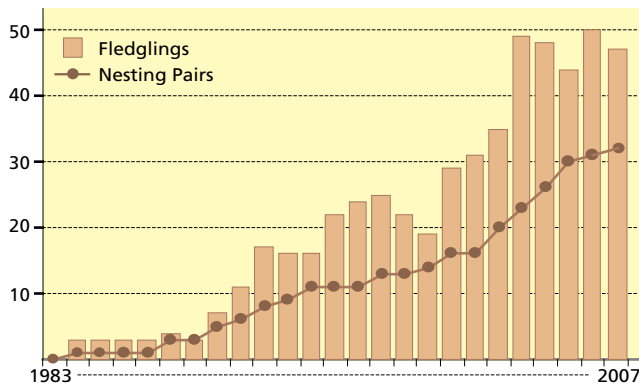
Importance

With a wingspan of about 40 inches, the peregrine falcon is among the world’s fastest birds, flying at 40 to 55 mph and diving at more than 200 mph when striking avian prey in mid-air. Peregrine populations began to decline rapidly in the late 1940s because of pesticide contamination. One of the three North American subspecies, the peregrine found in Greater Yellowstone (*Falco peregrinus anatum*) was considered extirpated by the 1960s. As part of a national reintroduction program, peregrines were released in Bighorn Canyon, Grand Teton, and Yellowstone national parks during the 1980s. They usually nest on cliff ledges and may reuse the same eyrie for many years. They typically reside in Greater Yellowstone from March through October, when their favored prey—songbirds and waterfowl—is most abundant. During winter they may migrate as far south as Mexico.



Trends

In Yellowstone, the number of nesting pairs has increased steadily since the peregrine falcon was reintroduced in the 1980s. A new eyrie found in 2007 brought the count of nesting pairs in the park to 32, the most ever recorded in Yellowstone; they produced 47 fledglings. In Grand Teton, the peregrine population is stable but very small, possibly due to the short breeding season, harsh spring weather, or other unknown factors. Up to three known eyries have been active during the last decade. Nesting pairs occupied all three eyries during 2005–07, producing three fledglings in 2005, none in 2006, and one in 2007. Since 1994, five eyries have been recorded in Bighorn Canyon; three were active in 2007 and produced eight fledglings.



Total counted peregrine falcon nesting pairs and fledglings in Yellowstone National Park, 1984–2007.

Discussion

The American peregrine falcon was removed from the federal endangered species list in 1999 following major population gains brought about by restrictions on DDT and other organochlorine pesticides in Canada and the United States, protection of habitat near nest sites, and the release of about 6,000 captive-bred falcons. Federally mandated monitoring is scheduled to occur at three-year intervals until 2015. Staff at Bighorn Canyon, Grand Teton, and Yellowstone monitor peregrine breeding areas annually to track local population trends.

While the organochlorines found in peregrine falcon eggshell fragments and feather samples have declined significantly, several studies indicate that certain flame retardant chemicals, particularly polybrominated diphenyl ethers, have become threats to peregrine falcons and other birds of prey. Developed in the 1970s, PBDEs are used in electronic equipment, textiles, paints, and many other products to minimize the risk of fire. These chemicals, which easily leach into the environment, have been found in concentrations in the tissues of birds of prey at levels that impair their reproductive biology. Although nest success rates and productivity of peregrines in Yellowstone remains relatively high, the park’s long monitoring record and protected area status would make it a good place to sample eggshell fragments and addled eggs for comparison purposes.

