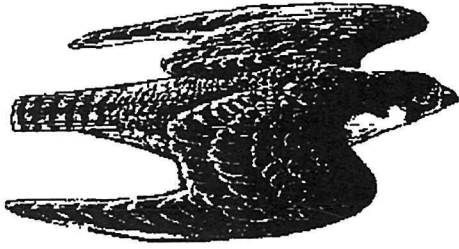


Peregrine falcons in Acadia



For centuries, peregrine falcons hunted the skies of the world, displaying their impressive, in-flight hunting tactics. Imagine this crow-sized raptor flying high above its quarry, then dropping into an attack dive with a speed that could reach 200 mph! Imagine the prey being struck

to the ground or even killed in flight by the tremendous impact from the peregrine's outstretched talons! Imagine witnessing a peregrine tail-chasing a pigeon between Dorr and Cadillac Mountains!

But peregrine falcons are endangered, a fact that is not a figment of imagination. By the mid-1960s, researchers determined peregrines were no longer a breeding species in the eastern United States.

What was responsible for the decline and eventual elimination of these inspi-

ration falcons? Nest robbing, trapping, and shooting first contributed to their downfall. Later, chemical pesticides and industrial pollutants finished the job.

Occupying a position high on the food chain, peregrines may still be exposed to increased levels of chemical residues if they migrate or eat migrant songbirds contaminated in countries using pesticides now banned in the United States. As in all birds of prey, ingested chemicals can cause reproductive failure, leading to the decline and even eventual extinction of the species.

When Congress passed the Endangered Species Act in 1973, mandating all federal agencies to protect endangered species and their habitats, Acadia National Park responded enthusiastically by participating in a cooperative management plan to restore a self-sustaining popula-

tion of peregrines to the eastern United States. The Eastern Peregrine Falcon Reintroduction Program's goal is to reduce the peregrine's national listing from endangered to threatened by carefully reintroducing hand-reared chicks into the wild. This process is termed "hacking." Acadia first participated in the

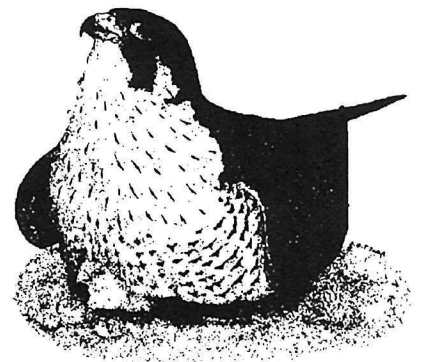
hacking program in 1984.

If successful, approximately 50 percent of the 350 peregrines estimated to have been present in the eastern United States during the 1940s will be restored. In 1992 there were 35 nesting pairs from the Adirondacks east through Maine.

Selected adult birds are bred in captivity; the eggs are incubated and hatched in the laboratory. Chicks three to four weeks old are transferred to artificial rearing nests called hack sites.

Hack sites are staffed round-the-clock by trained specialists who carefully monitor, tend, and feed the chicks for

approximately three weeks. Attendants observe only from a distance at this time. Food drops are made via a long, sloping tube, preventing the association of food with humans. When their wings are strong enough for flight, fledglings are released. The young falcons continue to eat at the hack site until they learn to hunt on their own.



Peregrines were first sighted on Mount Desert Island in 1936; the last known nesting pair was reported in 1956. From 1984 until 1986, 22 peregrine chicks were successfully hacked in Acadia National Park from a high cliff face overlooking Jordan Pond. Adult peregrines often return to areas near their original hack sites.

Acadia discontinued the hacking program in 1987 when adult peregrines

returned to the area. These adults were a hopeful sign of potential breeding and nesting. Yet they were also a reminder that peregrines hunt, even if the prey is a member of its own species—such as a fledgling from a nearby hack site.

In 1991 and 1992, an adult pair of peregrines raised three chicks on the cliffs of Champlain Mountain. 1991 marked the first successful nesting in Acadia in 35 years!

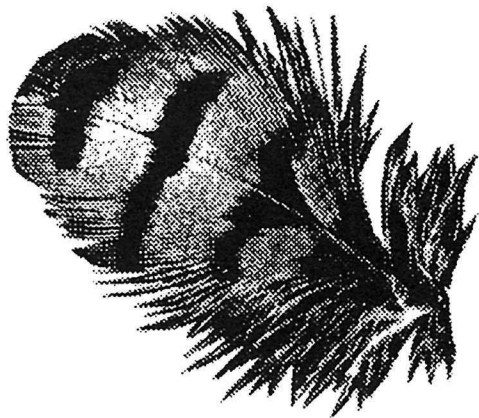
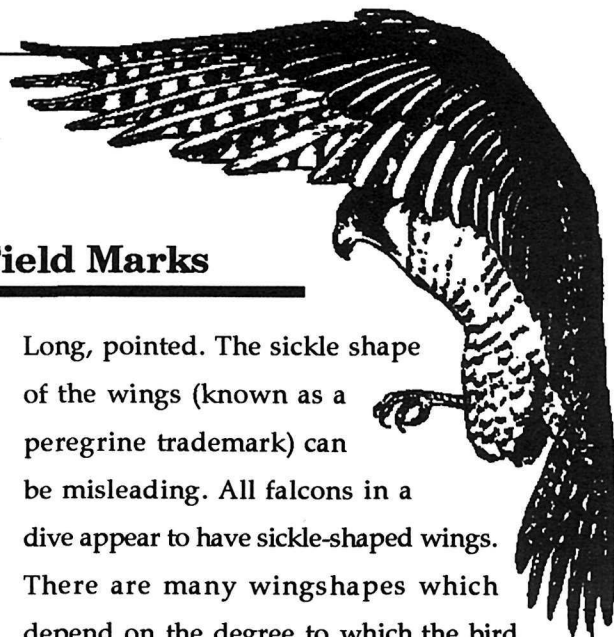
Each year, in early spring, park resource managers watch intently for signs of returning peregrines. If mating or nesting behavior is suspected, certain trails may be temporarily closed during this critical period. The falcons are protected from the sudden influx of hikers as the park roads reopen and are provided every opportunity to nest successfully. Hopefully this magnificent falcon is on its way to making a triumphant comeback.

Behavior

- Breeding vocalizations:** "Chup, chup, chup" or "Eeee chup, chup, chup, chup"
- Courtship rituals:** Pairs often display impressive acrobatics.
- Feeding:** Hunts most vigorously at dawn and dusk in open areas — shores, marshes, and valleys. Hunting is often accompanied by a series of sharp, aggressive, territorial calls: "Kee, kee, kee, kee, kee — Kee, kee, kee, kee, kee." Plucks feathers from the prey as it feeds.
- Strikes:** Usually in mid-air, knocking the quarry to the ground to finish the kill if it is not already dead. Less commonly, it will strike, then grab and fly away with the prey.
- Nesting:** Mostly on precipitous cliffs, but will nest in non-remote areas — under suspension bridges and atop tall city buildings. Does not make a traditional nest; eggs are laid on a sand - or gravel - covered ledge that has been scratched in preparation for the clutch.

Field Marks

- Wings:** Long, pointed. The sickle shape of the wings (known as a peregrine trademark) can be misleading. All falcons in a dive appear to have sickle-shaped wings. There are many wingshapes which depend on the degree to which the bird is soaring or diving. Be careful in making identifications.
- Head:** Small with dark "sideburns"
- Size:** Crow-sized, female larger than male
- Feet:** Large (hence the nickname "big-footed falcon"). Adult — Yellow. Immature — Light green.
- Plumage:** Adult — White breast, dark grey back. Immature — Streaked breast, brown back.



Three subspecies of peregrines inhabit North America. The eastern peregrine population, which included those native to Acadia National Park, was extirpated. The hacking program birds are from parents of several geographical populations.

Your awareness, understanding and assistance can help Acadia manage and support a successful Peregrine Reintroduction Program:

- 1) Learn characteristic field marks and behavior to make positive peregrine falcon identifications. An ideal time to practice raptor identification skills is mid-September to late October, when fall migration is heaviest.
- 2) Be particularly alert in March and

April when courtship rituals and mating calls are most likely seen and heard.

- 3) Report your sightings (exact location, number of birds, behavior, time of day) to any Acadia information station.
- 4) Keep well away from areas where peregrines are assumed to be nesting and report any person who fails to do the same. Avoid observing the

birds from locations higher than nest sites. Peregrines generally won't tolerate people above them. Adult peregrines may dive within a few feet of intruders, particularly if young have hatched.

- 5) Enjoy observing these magnificent raptors; help protect and promote the conservation of an endangered species.

