Osprey—the magnificent fishhawk

by Jeff Hughes

Most Alaskans have never seen this bird, one of the most spectacular and specialized predators in the sky.

THE LARGE HAWK hovered briefly above the water, then plunged in feet first, its wings extended high and its tail spread like a fan. The bird disappeared for just a second, and then surfaced with a small flounder that had tarried too long in shallow water as tide receded. With its prey clutched firmly in its talons, it flew toward a stand of spruce not far from the water's edge.

Watching an osprey catch fish is a rare treat. Found throughout the world, fish-hawks, as they are also called, occasionally nest along Alaska's lakes, rivers, and shorelines south of the Brooks Range. Although these spectacular and specialized birds of prev are uncommon in Alaska, they can be seen in the Tetlin National Wildlife Refuge near Tok, and in the coastal forests of Southeast, where they regularly nest. During the summer months, a careful observer can see them soaring over the water on long, narrow wings as they search for fish.

The osprey is about the size of a small eagle, but its plumage distinguishes it from all other birds of prey. The adult is dark brown on top—including wings and back—with broad, dark streaks on the sides of its head. Contrasting white feathers cover the osprey's head, neck, and underparts, while the breast and crown are splotched with brown, particularly on the female. The light-colored tail has fine, dark bands and is edged with white.

The soles of an osprey's feet are covered with sharp spicules (much like studs in a snowtire) and it has a reversible outer toe that acts as a second thumb. Its feet, with their pincer-like grip, are evolution's answer to the problem of catching and holding slippery fish.

As it depends almost exclusively on fish for food, the osprey is invariably associated with water—either a lake, a river, or the seacoast. While hunting, the osprey flies over the water at 50 to 100 feet. On sighting a fish, the bird hovers briefly in flight with rapidly beating wings and legs trailing below, or, it may swoop on its prey from straight flight. The force of its dive depends on the depth of its intended prey. Usually a fish just below the surface is its target, but occasionally the prey is deep enough so that the osprey completely disappears below the surface.

Ospreys have little difficulty capturing fish, but several factors influence the time spent fishing: the abundance of prey, warm surface-water temperatures (which drive fish down to cooler depths), and visibility. In Southeast, ospreys forage often and most effectively during low tide over shallow estuaries. Starry flounder, ranging in size from six to ten inches, is a favorite food. The osprey is capable of capturing two fish on a single dive.

Adult birds in Alaska arrive at their nests beginning in late April and early May. Pairs apparently return from wintering grounds to the same nesting areas used in previous years. Ospreys are not common in Alaska, and probably fewer than 50 nests can be found here.

Male courtship rituals are highlighted by a series of spectacular upward climbs and dives at heights from 400 to 1,000 feet above the nest. He hovers briefly at the top of the climb, then dives with tail spread and wings





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At a cry from its parents, the young osprey will flatten itself on the floor of its nest and remain motionless.

closed; sometimes he carries a fish during this maneuver. The female watches.

Ospreys appear to use the same nest each year, but nests are sometimes destroyed by winter storms or heavy snow. Nest construction and maintenance continue through most of May. The ideal nesting site for an osprey family is the top of a tall snag or a live spruce with a dead or missing top. Ospreys will nest atop artificial structures, such as telephone poles, as long as they are near water and fish. For the past few years, a pair near Talkeetna has nested and successfully reared young on a microwave tower.

The osprey nest—made of sticks, seaweed, or other readily available material—becomes a huge structure. Some are five feet deep and five feet across. Both sexes build and repair it. Foraging for building material, ospreys often snap dead branches off trees, with a loud CRACK, as they fly past.

During May and sometimes into June, the female lays one to four eggs. A clutch of three eggs is usual, however. The female incubates the clutch, although in Southeast, the male takes on as much as 30 percent of the duty during the 32- to 35-day incubation period. The "changing of the guard" at the nest is often accompanied by presentation of a fish or additional nesting material by the male. The male feeds the female during incubation; he first feeds himself, then carries leftovers to the nest. The female seldom fishes during this time, but she may leave the nest to feed, collect nesting material, or preen.

Young ospreys hatch at intervals; thus, when hatching is completed, the oldest is quite larger than the youngest. Newly hatched ospreys are almost completely helpless and do little more than lie in the nest for the first two weeks until they are strong enough to sit up. Bullying of the smallest may occur, and, while the youngest is rarely killed outright, it may starve when food is scarce.

The male fishes for his new family while the female alternately feeds herself and the young, usually one at a time, with a rapid succession of small pieces of fish. After the young are six weeks old, the female joins the male in fishing. She continues to feed the young but less regularly, and may offer them food occasionally even after they have left the nest.

The female remains on the nest almost constantly for the first month after hatching. During periods of wind, rain, or intense sunlight, she shelters the young with her wings. By the time the young are seven weeks old, the adult ospreys have moved from the nest to nearby perches during daylight, but still brood the young at night.

If an intruder enters the nesting area, parent birds call a warning and circle the intruder while screaming loudly. Diving and swooping, adult ospreys may attack—or at least threaten enemies attempting to climb into the *Continued on page 35*.



Author Hughes peers into osprey nest.



Juvenile osprey

Ospreys







Continued from page 19.

nest. The young lie flat and very still on the floor of the nest with their wings and necks extended, sometimes for over an hour, until a parent sounds the all-clear.

Young ospreys begin flapping their wings when they are five to six weeks old and make their first flights at about eight weeks. In Alaska, fledging occurs in August.

Young birds continue to associate with their parents for four to six weeks after fledging. They return to the nest to roost for the first week, then use it less frequently thereafter as a feeding



platform.

Ospreys migrate from Alaska from mid-September through October. Wintering areas of Alaska's ospreys are not known, but we think they winter along the coasts of Baja and western Mexico, and possibly into Central America.

The oldest banded osprey on record was 21 years old, but few birds reach that ripe old age. Approximately 55 percent of young ospreys die in their first autumn, while fewer than one in three reaches sexual maturity, which generally occurs at the age of three.

Human harassment, including shooting and logging, appears to be the primary cause of nestling and adult fatalities in Alaska, even though these magnificent birds are protected by law. Certainly, ospreys can continue to exist in the Great Land if we take an active interest in their protection.

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