

# The Osprey

by Joe Mosby



**I**t's happened to many Arkansans: A glimpse of a large bird during autumn leads to a comment of "I saw an eagle, but it had a lot of white on its body and wings."

Probably, they spotted an osprey.

Sometimes called fish eagles or fish hawks, ospreys (*Pandion haliaetus*) are fairly common migrants around Arkansas's streams and lakes in the spring and fall and are rare summer residents limited to local areas.

Their numbers were severely reduced by residual effects of now-prohibited pesticides like DDT. The chemicals were present in fish they consumed, and the accumulations in their bodies produced defects like eggs with too-thin shells.

## Description

Ospreys are related to hawks, falcons, vultures and eagles. Several of these raptors feed partly or primarily on fish; the bald eagle is one, but ospreys are the only raptor that routinely dives into the water to catch fish. Other birds of prey grab live fish near the surface or feed on floating dead fish.

Ospreys have powerful, unique feet adapted to catching fish. Their talons are large and equal in size, and their foot pads are covered on the inside with sharp points, called spicules, that help hold wet, slippery fish. The talons are also round, unlike other raptors that have convex talons with grooved undersides. Ospreys also have a reversible outer toe, like an owl's, which allows them to hold their prey

with two toes in the front and two in the back.

Ospreys are not quite as large as eagles. Their wingspans range from 4-1/2 to 6 feet, and their body length is 21 to 24-1/2 inches. On top, they are predominantly dark brown—nearly black—with a purplish hue that's sometimes evident in strong sunlight. On the under portions, though, white dominates, especially during flight. Their head is white and resembles that of a mature bald eagle, except ospreys have a broad, conspicuous black band through the eye and across the cheek. Male and female ospreys look alike, although females may be slightly larger in size.

### **Distribution**

Ospreys spend the warmer months, their breeding season, in the north and along the coasts. Breeding grounds range from Alaska, the Yukon and Northwest Territories down the coast to Mexico. Some breeding occurs near inland waters. In autumn, though, ospreys migrate south, like so many other birds of prey, to Arkansas and on to the Gulf Coast.

The birds frequent many parts of Arkansas, from Beaver Lake in the northwest to Union County in the south. Ospreys built nests on Big Lake National Wildlife Refuge in northeast Arkansas (Mississippi County) several years ago, but apparently no eggs hatched. Another nest at nearby Mallard Lake produced young birds in 1984 despite the presence of numerous fishermen nearby.

### **Reproduction**

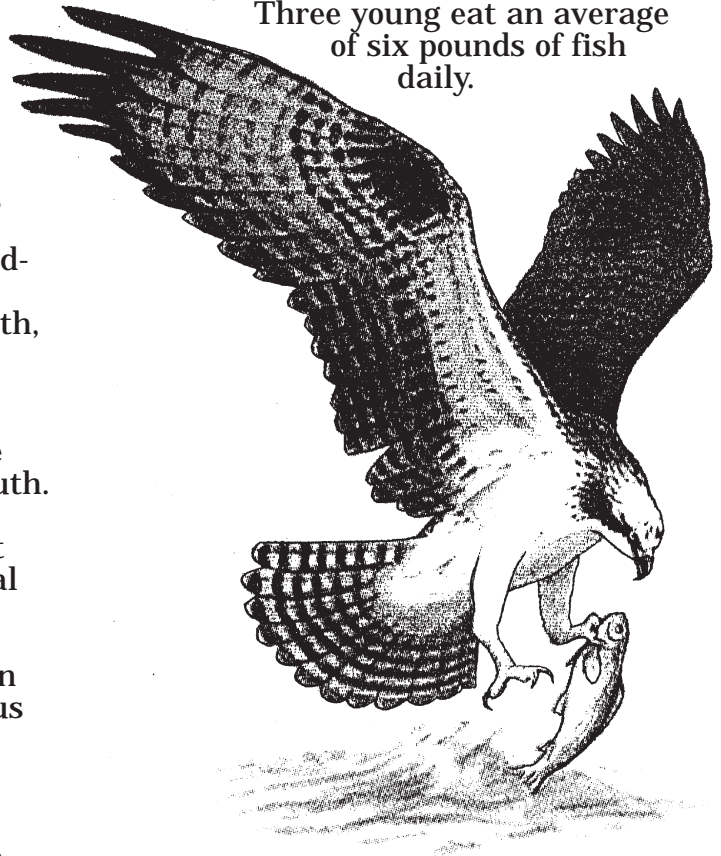
An osprey nest resembles an eagle nest. It's a large mass of sticks, some-

times with sod included. Most osprey nests are in dead trees 10 to 60 feet above ground. Some osprey nests become so heavy they break the tree limbs on which they're built. Osprey nests have also been found on rocky outcrops and on the ground.

Two to four eggs are laid, most commonly three. The eggs are a colorful pinkish-white overall but are heavily spotted with reddish brown and dark brown dots. Both sexes are known to incubate the eggs, but, generally, the female osprey stays on the nest and eats fish brought to her by the male.

Providing food is a demanding job, especially after the clutch hatches.

Three young eat an average of six pounds of fish daily.



Incubation takes 32-43 days, with the young taking their first flight within 48-59 days. Ospreys are fierce in their defense of the nest and may attack any intruder who threatens it.

### **Habits & Habitat**

Ospreys are often seen perched on dead tree snags overlooking water. When looking for fish, they often cruise around in the air 30 to 100 feet above the water's surface. They can hover in one spot by quickly beating their wings and can reach high speeds quickly with long, powerful wing strokes.

Ospreys dive feet-first to grab fish with their talons, and these dives frequently take the bird underwater. Then they rise from the water tightly grasping the fish, often pausing in mid-air to shake water from their feathers and to adjust the fish head-forward for lower air resistance during flight. Most fish are eaten at a favorite perch or returned to the nest to feed the young. Once adult birds bond, males take on the sole responsibility of providing food for the female through the egg-laying period.

The osprey's main diet, like most fish-eating birds, is made up of non-game fish like shad, suckers, herring and minnows. Occasionally they take bass or bream. The bald eagle often competes with ospreys for food, swooping down and forcing them to drop their fish. Then the eagle takes the fish.

### **Importance & Management**

The osprey's high standing as a predator in the food chain makes it an important species in indicating the health of the environment. This was evident when its numbers, like other birds of prey, were significantly reduced during the 1950s through the 1970s because of DDT exposure.

No specific osprey management is being done in Arkansas, but the bird is protected, and its numbers have rebounded well since the banning of DDT. The building of artificial nesting platforms provided critical nesting habitat for ospreys in their breeding grounds and continues to aid in the recovery of this magnificent bird.



### **Arkansas Game & Fish Commission**

2 Natural Resources Drive  
Little Rock, Arkansas 72205

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