

# Osprey



*Nova Scotia adopted the osprey as its official bird by an Act of the House of Assembly in 1994.*

*Pandion haliaetus*

Class: Aves  
Order: Falconiformes  
Family: Pandionidae  
Genus: Pandion

## Distribution

It occurs on all continents except Antarctica. There are four sub-species separated geographically. Two are migratory and two are not. The North American sub-species is migratory.

## Habitat

Found in a range of habitats always near water.

## Food

Ospreys feed almost exclusively on live fish caught at or near the surface of the water. They typically catch slower moving species as they are less adept at grabbing fast moving fish.

## Reproduction

Monogamous pairs return to the same nesting site every year. They typically breed for the first time in their fourth year. During courtship, males provide food for their mates.



They arrive in April at their nesting sites and remain for the summer.

*Pandion haliaetus carolinensis* breeds in North America and the Caribbean, and frequently winters in Florida, the Caribbean, on the Gulf Coast, and in South America.

Their summer range is from northwest Alaska and northern Yukon to central Labrador and Newfoundland and south to Baja California, central Arizona, southern Texas, the Gulf Coast, and southern Florida. They are migratory throughout most of their range, wintering in Central and South America as far south as Argentina and Chile.

Populations in southern Florida, Baja California, and the Pacific coast of Mexico are year-round residents. In Nova Scotia they are migratory.

It frequents areas near open water that have a plentiful supply of fish. Examples of habitat would include areas along the shorelines of large lakes, rivers, marshes, mangroves, seashores, ocean coasts and on islands. It can be observed at altitudes ranging from sea level to 1,524 metres.

They are opportunistic and will feed on whatever species of fish are most accessible, abundant and appropriately sized. Prey is usually spotted from the air while flying slowly over the water. Once prey is spotted, ospreys will plunge into the water feet-first at up to 72 kph with legs and talons fully extended, then rest for a moment on the surface of the water and secure their grip on the fish before taking off. Interesting to note is that a fish is often carried with its head facing forward. They usually hunt during mid-morning and late afternoon.

Nesting sites are near water in areas with good visibility and limited access for predators. Often this will be on a cliff, rocky outcropping, a dead or relatively open live tree, a power pole or an artificial nesting platform. Two to four eggs are laid in a nest made of large sticks. The eggs are white to creamy white with reddish brown blotches and are incubated for between 34 to 40 days. They hatch sequentially, one to five days apart.



### Development

The female will brood the nestlings for ten days after hatching. Nestlings are able to feed themselves at about six weeks of age and fledge at around seven to eight weeks. They continue to roost at and around the nest for another month.

### Characteristics

Their wings have a distinctive bend at the wrist joint, giving them a resemblance to a gull when in flight.

### Adaptations

Flexible outer toes and small, spiky scales on the soles of their feet (known as spicules) help grasp slippery prey. Tarsi bones in the foot are short and thick to resist high speed impact with the water.

### Status/ Threats

Worldwide, osprey populations declined rapidly in the last century due to the use of DDT. This organochlorine pesticide compromised their reproductive success by causing thinning of their egg shells. Following the ban on its use in North America in 1972, their numbers began to recover.

### Sightings in Nova Scotia

Mainly coastal areas as they hunt for fish.

Young osprey will usually catch their first fish two to eight weeks after fledging. Where they are migratory, the female will often leave before the young are independent and the male will continue to provide for them after her departure. The young are usually dependant on the parents until the fall migration. Often juveniles remain on wintering grounds until their second or third spring. Those that return to the breeding range in their third year may build nests but not actually reproduce. They acquire their adult plumage at about 18 months. An osprey's lifespan is between 15 to 20 years.

These large raptors have a brown body, a white breast and a brown mask through the eye. Females are typically larger than males, weighing an average of 1.6kg compared to the male's 1.4kg. Average wingspan is 159cm for the male and 163cm for the female. Females often have darker speckling on their breasts than do males.

When waters freeze over and colder temperatures force fish into deeper water, migration becomes a necessity for those individuals living at higher latitudes. Migrant ospreys are faithful to specific wintering areas and migration routes, avoiding areas where non-migrants breed. Individuals migrate alone, readily crossing deserts and large bodies of water. They have oily, somewhat water-repellant feathers and long, unfeathered legs, which are helpful when plunging feet first into the water. Sometimes they will become completely submerged and can close off their nostrils while underwater.

Localized sources of contamination continue to exist in Central and South America and are still affecting some migrant birds. Because they feed on fish, they are sometimes viewed as threats by fishermen. During their migration, they are often shot at on fish farms in Latin and South America. In North America, Great Horned Owls, Golden Eagles, and Bald Eagles are the only major predators of Ospreys, capable of taking both nestlings and adults. However, kleptoparasitism by Bald Eagles, where the larger raptor steals the Osprey's catch, is more common than predation.



They are also sighted in urban areas bound by open waterways (Halifax).