

T11.4 BIRDS OF PREY

The birds of prey, collectively known as raptors, include the vultures, hawks, eagles, osprey and falcons (Falconiformes) and the owls (Strigiformes). All are carnivores or carrion feeders and are characterized by the possession of strong beaks and claws. The habits and often large size of these birds have generated considerable public interest, and there is a certain amount of folklore mixed with fact in popular knowledge about the group. All raptors are protected by law in Nova Scotia.¹

Birds of prey inhabit both forests and open lands. Habitat factors and relationships are discussed in T11.2 and T11.3.

FOOD SUPPLY

Hawks feed in the daytime (diurnal), mainly on small mammals but also on reptiles, amphibians, small birds and insects. Early experience with hawks attacking farm poultry gave rise to the popular names “hen hawk” and “chicken hawk” being applied to hawks in general, perpetuating the tradition that hawks are harmful and should be considered a nuisance. Goshawks will frequently, and Red-tailed Hawks less frequently, take domestic fowl if the opportunity arises, while a number of other hawks will take grouse or small birds. The Bald Eagle and Osprey feed mainly on fish, the latter being an active fishing species. Carrion-feeding Turkey Vultures are not known to breed here but are seen now and again in summer and fall.

Owls hunt either at night (nocturnal) or in the twilight (crepuscular), mainly for small mammals. The Snowy Owl, an occasional visitor to Nova Scotia in winter, is diurnal in habit. Some raptors, such as Red-tailed Hawk, Northern Harrier and Short-eared Owl, generally prefer to hunt over open ground and are commonly seen over fields. Others (Goshawk, Broad-winged Hawk, Sharp-shinned Hawk, Great Horned Owl, Saw-whet Owl, Barred Owl) more often hunt within the forest or along the forest edge. They consume large quantities of rodents and are thus considered to be of benefit to agriculture. The Barred Owl feeds on a wide variety of creatures, including snakes, eels, mice, rats, birds and insects.

BREEDING

Raptors generally prefer nesting sites in remote areas, to avoid disturbance, but nests are not unusual closer to human activities and habitation. The diurnal birds of prey commonly nest in high trees, often in old nests of crows (particularly the Broad-winged Hawk and the Merlin). Osprey and Bald Eagle make large, conspicuous nests, which are built up each year.

The Northern Harrier is an exception, as it builds its nest on the ground in wet grasslands or shrubs, close to the marshland feeding habitat. Peregrine Falcons nest on the ledges of cliffs in preference to trees. Hawks usually lay their eggs during May. The owls are largely tree-nesting species. The Saw-whet and Barred Owls use holes in trees, while the Great Horned Owl and Long-eared Owl use old nests of other birds or even dense growths of witches'-broom in spruce trees. Short-eared Owls nest on the ground.



Plate T11.4.1: Cold winters with deep snow can keep the Saw-whet Owl from finding its principal food (small mammals) and can result in high mortality. Photo: M. Elderkin

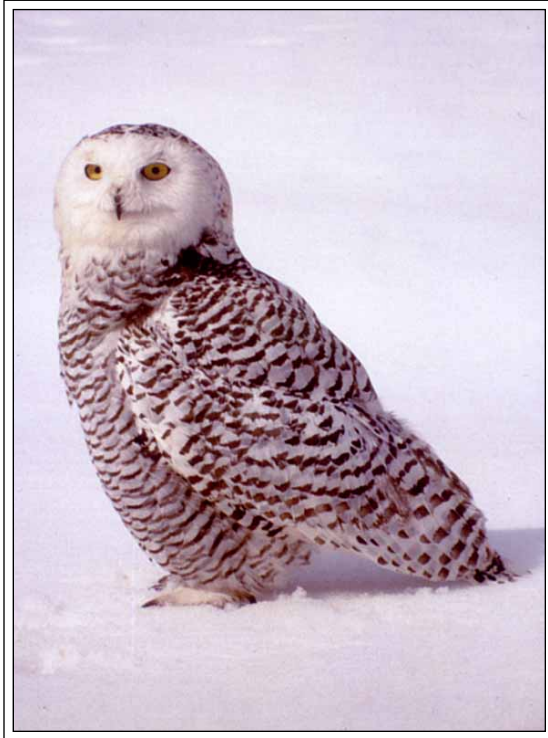


Plate T11.4.2: The Snowy Owl breeds in the tundra habitat of the Arctic. It is an irregular but sometimes frequent winter visitor to Nova Scotia. Photo: M. Elderkin

Eggs are laid between March and May, and the young are hatched between April and June, depending upon the species. For more information refer to the *Atlas of Breeding Birds of the Maritime Provinces*.²

SPECIES DIVERSITY

There are eleven species of hawks and eagles reported as breeding in Nova Scotia. Most are relatively common and have shown some increases in population since the 1960s. Cooper's Hawk was once recorded as breeding. In addition, there are seven other species that visit the province but do not breed. This group includes the Rough-legged Hawk, which may be common during winter, and some rare hawks, eagles and vultures.

There are species of owl that breed in Nova Scotia. The Great Horned Owl and Barred Owl are perhaps the most common. The Long-eared, Short-eared and Northern Saw-whet owls are also confirmed breeders, although not as common (see Plate T11.4.1). The Boreal Owl is believed to breed here.² Five other species are rare visitors: the Northern Hawk-Owl, the Great Grey Owl, Common Barn Owl, Eastern Screech Owl (two confirmed sightings) and the Snowy Owl (see Plate T11.4.2).

DISTRIBUTION

Most of the hawks and owls that breed in Nova Scotia appear to be generally distributed, but old remote forest stands provide the best nesting situations for many species. The Bald Eagle and Osprey occur close to their marine and freshwater feeding areas, particularly in northern Nova Scotia and along the Atlantic shore. The Northern Harrier is most abundant where there are extensive marshes, as in the Chignecto Isthmus (Unit 523) and the Wolfville, Grand Pré area (District 610). Eagle habitats have been documented as part of the mapping of significant wildlife habitats by the provincial Department of Natural Resources.³

CULTURAL FACTORS

The false images, created in the past, that hawks are pests led to the widespread and indiscriminate killing of these birds. However, this has largely, though not entirely, been remedied through education and legislation. The widespread use of insecticides and herbicides since the Second World War has led to declines in raptor populations. The insecticide DDT is well documented as being detrimental in this respect, through its effect on calcium metabolism and egg-shell thickness. Many species have shown recoveries since the withdrawal of DDT, but other widely used chemicals still pose a threat.

Loss of habitat and disturbances of nesting areas by forestry, recreation and other activities are also problems.⁴

The Peregrine Falcon, which has not bred in Nova Scotia since around 1960, has been reintroduced to suitable habitats near Cape d'Or and around the Minas Basin (District 710, sub-Unit 913a). Cooper's Hawk is considered by COSEWIC to be a vulnerable species in Nova Scotia.



Associated Topics

T11.1 Factors Influencing Birds, T11.2 Forest and Edge-habitat Birds, T11.3 Open-habitat Birds, T11.5 Freshwater Wetland Birds and Waterfowl, T11.11 Small Mammals

Associated Habitats

H2.5 Tidal Marsh, H4.4 Freshwater Marsh, H6.1-H6.3 Terrestrial Forested

References

- 1 Tufts, R.W. (1986) *The Birds of Nova Scotia*. N.S., 3rd ed. Nimbus Publish & Nova Scotia Museum, Halifax.
- 2 Erskine, A.J. (1992) *Atlas of Breeding Birds of the Maritime Provinces*. Nimbus Publishing & Nova Scotia Museum, Halifax.
- 3 N.S. Dept. of Natural Resources, Wildlife Division (1991) *Important Freshwater Wetlands Atlas*, rev. ed.
- 4 N.S. Dept. of Lands and Forests (undated) *Forest/Wildlife Guidelines and Standards*.

Additional Reading

- MacDonald, P.R.N. and P.J. Austin-Smith (1985) *Agricultural Carrion and Wintering Bald Eagles in Nova Scotia*. Dept. of Lands and Forests, Kentville, N.S.
- MacDonald, P.R.N. and P.J. Austin-Smith (1989) "Bald Eagle, *Haliaeetus leucocephalus*, nest distribution on Cape Breton Island, Nova Scotia." *Can. Field -Nat.* 103.