

Raptors

Article and images by Sherry Meyer

They're fierce, powerful, and often elusive. Some are common, while others are quite rare. Some breed within New Jersey, while others are migratory transients or winter residents. They occur in a variety of shapes, sizes and plumage, but all have one thing in common—they're skilled, efficient, and well-adapted predators. They are *raptors*!

Located along the Atlantic flyway, New Jersey boasts some of the largest raptor concentrations in the United States. Cape May Point, which acts as a geographic funnel for many southbound migrants, holds record counts for many species, including osprey, northern harrier, sharp-shinned hawk, American kestrel, merlin, and peregrine falcon. Migrating raptors can also be seen at Sandy Hook and other coastal sites, as well as along inland ridges, such as the Kittatinny Mountains and the Watchung Range. The state's coastal marshes, grasslands, and forests also provide habitat for raptors and their prey—birds, small mammals, reptiles, amphibians, and insects.

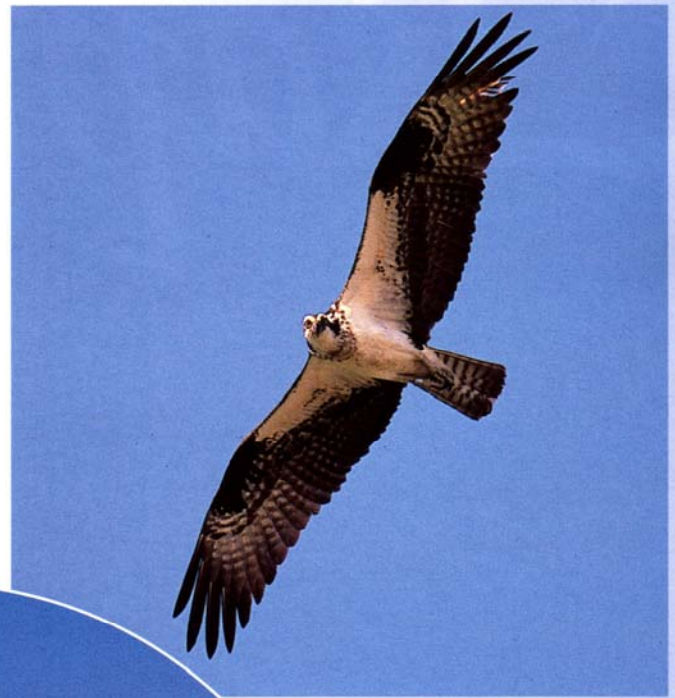


Adult female Northern harrier (*Circus cyaneus*)

Golden eagle (*Aquila chrysaetos*)



Osprey (*Pandion haliaetus*)



Eagles, Ospreys and Harriers

Two eagle species, the golden eagle (*Aquila chrysaetos*) and the bald eagle (*Haliaeetus leucocephalus*), are found in New Jersey. The golden eagle is a migrant and winter resident that occurs in small numbers. A year-round resident, the bald eagle's Garden State population had been reduced by pesticide contamination to only one pair of breeding eagles throughout much of the 1970s and 1980s. Thanks to intensive management and monitoring efforts by the Division of Fish and Wildlife's Endangered and Nongame Species Program (ENSP), the bald eagle population has soared to 25 pairs in 2000. New Jersey also experiences an influx of migrating and wintering bald eagles.



Northern goshawk (*Accipiter gentilis*)

In the early 1900s, the osprey (*Pandion haliaetus*), or fish hawk, was a common species that nested in dead trees along the Jersey Shore. As coastal development increased throughout the 20th century, the osprey's nesting trees gave way to summer cottages and resort towns. The pesticide DDT, which was widely used from the mid-1940s to the 1960s, further threatened the osprey. Birds that were contaminated with DDT laid abnormally thin-shelled eggs that subsequently cracked under the weight of the incubating adult. With the ban of DDT in the early 1970s, productivity gradually began to improve. Through the efforts of the ENSP and many dedicated volunteers, artificial nesting platforms were erected throughout the Atlantic and Delaware Bay

coasts. Ospreys readily took to the platforms and their breeding population in New Jersey, which numbered only 68 pairs in 1975, now exceeds 200 pairs.

The northern harrier (*Circus cyaneus*), or marsh hawk, nests on the ground in high portions of coastal marshes as well as at inland grasslands and fallow fields. Due to population declines resulting from habitat loss, the harrier is currently listed as an endangered species in the state. Although breeding harriers are uncommon, the species is a common migrant and winter resident.

Accipiters

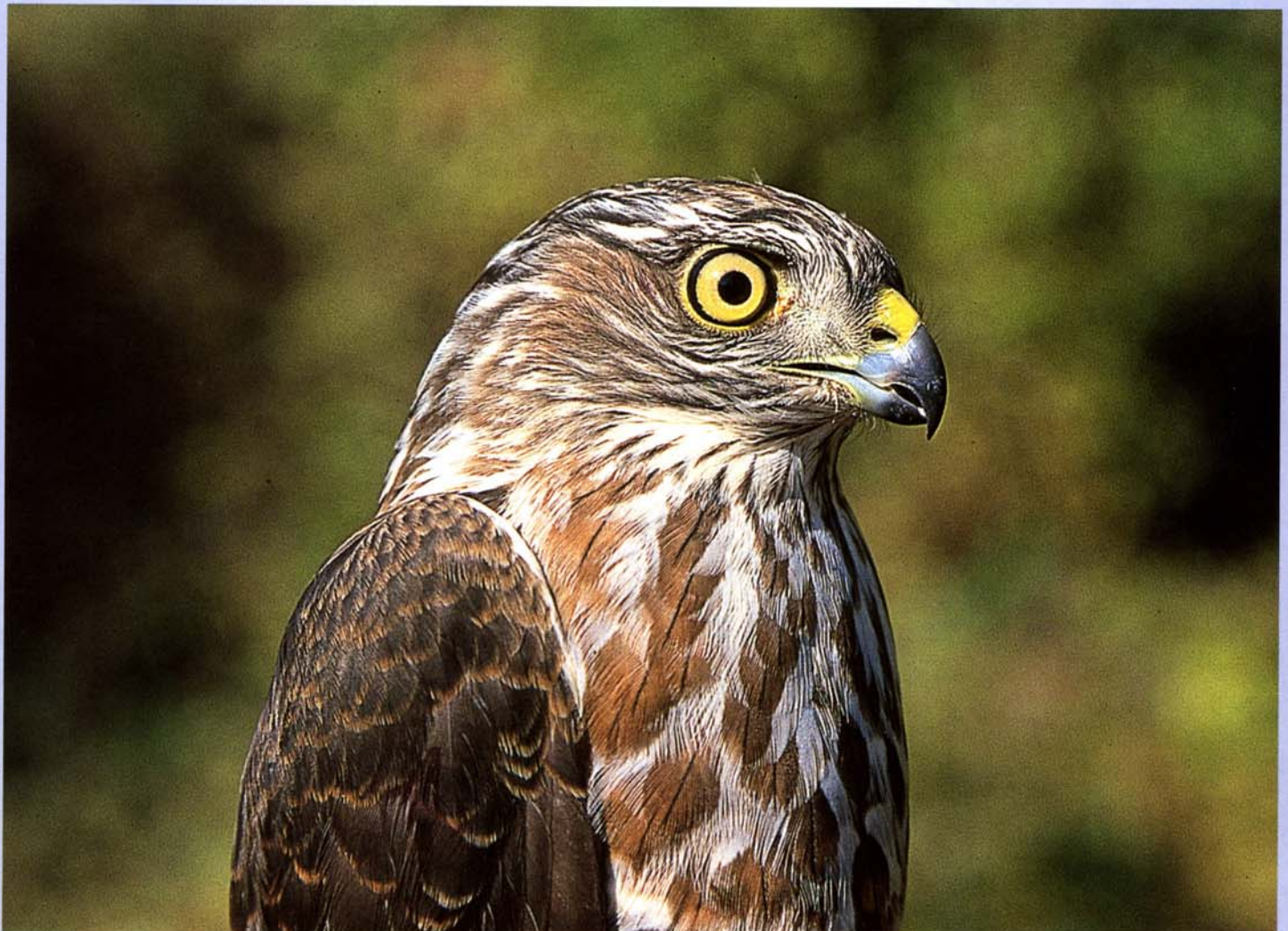
Three accipiter species occur in New Jersey: the sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*A. cooperii*), and northern goshawk (*A. gentilis*). Accipiters have short wings and long tails that enable them to maneuver through the trees in a forest. The sharp-shinned hawk is a rare breeder, yet a common migrant and winter resident. This species feeds predominately on small birds and often hunts at backyard feeders.

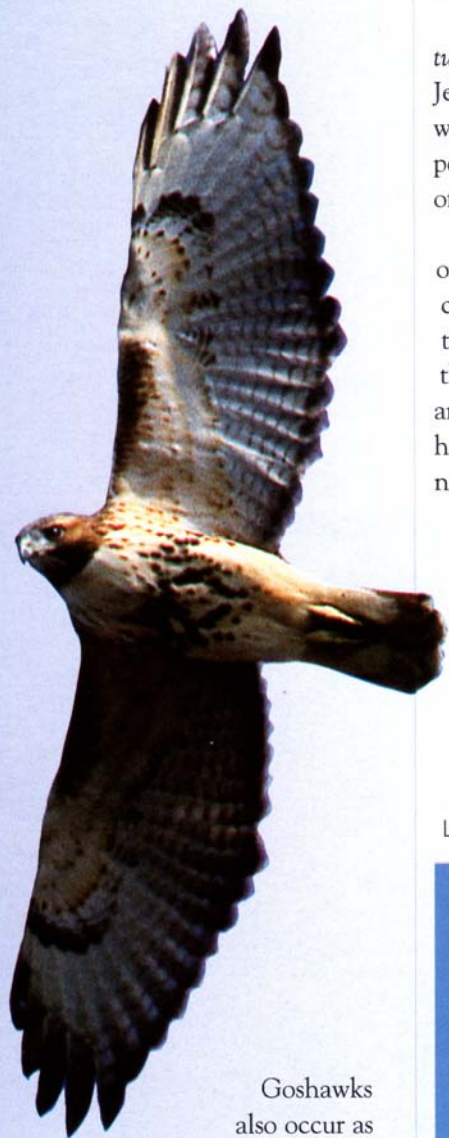
The Cooper's hawk is an uncom-

Sharp-shinned hawk (*Accipiter striatus*)

mon breeding species, yet a common migrant and winter resident. The status of the Cooper's hawk was recently upgraded from endangered to threatened in New Jersey, as recent surveys (including the New Jersey Breeding Bird Atlas conducted by New Jersey Audubon Society), have revealed additional nesting pairs. However, the loss and fragmentation of forests continues to threaten resident Cooper's hawks.

A secretive raptor, the endangered northern goshawk nests in vast, remote forests of northern New Jersey and, to a lesser extent, southern New Jersey.





Goshawks also occur as migrants and winter residents, particularly in years when food is scarce in New England and Canadian forests.

Buteos

New Jersey has several species of buteos, or soaring hawks, whose broad wings enable them to ride updrafts and thermals. The red-tailed hawk (*Buteo jamaicensis*), a common year-round resident, is often seen soaring over open

fields or perched alongside highways. It is an opportunistic predator and will pursue mammalian as well as avian prey.

The red-shouldered hawk (*B. lineatus*), an endangered species in New Jersey, nests in riparian forests and wooded swamps. This striking raptor's population has declined due to the loss of these swamps and surrounding forests.

The high-pitched two-note whistle of the broad-winged hawk (*B. platypterus*) can be heard from New Jersey's forests in the spring and summer months. Nesting throughout the eastern United States and southern Canada, broad-winged hawks pass through the state in large numbers en route to their South

American wintering grounds.

While the broad-winged hawk leaves New Jersey for the winter, the rough-legged hawk (*B. lagopus*), travels south from its Canadian breeding grounds to spend the winter in the

milder climates of the continental United States. Rough-legged hawks, which winter in small numbers, can be seen hovering over coastal marshes in search of small mammalian prey.

Falcons and Vultures

The narrow wings of New Jersey's falcon species facilitate swift flight and precipitous dives. A tiny falcon of open countryside, the American kestrel (*Falco sparverius*) hunts for insects, small mammals, and songbirds. Although it's a common migrant and winter resident here, the loss of fallow farm fields and nesting cavities has reduced the breeding population of this colorful falcon.

The merlin (*F. columbarius*), a small yet feisty falcon, will readily engage in aerial disputes with larger raptors. Its prey—shorebirds and songbirds—often equal it in size. Merlins breed in Alaska, Canada, and the western United States

Left: Red-tailed hawk (*Buteo jamaicensis*)

Below: Turkey vulture (*Cathartes aura*)



and travel through New Jersey on their way to wintering grounds in the southern United States, Central America, and northern South America.

The peregrine falcon (*F. peregrinus*), a state-listed endangered species, is quick and agile, capable of capturing prey such as waterfowl, shorebirds, jays, crows, and pigeons. Peregrines nest on ledges of tall city buildings and large bridges as well as atop manmade nesting structures erected in coastal marshes.

Although recent taxonomic studies show that vultures are more closely related to storks than birds of prey, they are included here because of their superficial similarity to raptors. Two vulture species occur in New Jersey: the turkey vulture (*Cathartes aura*) and the black vulture (*Coragyps atratus*). Although its diet may be unappealing, the vulture's preference for carrion makes it a fundamental component of any terrestrial ecosystem. Vultures are well adapted to feeding on dead prey—their stomachs contain strong acids that enable them to safely consume rotting carcasses and their heads are unfeathered to maintain cleanliness and prevent the attachment of ectoparasites. The turkey vulture is a common species here throughout the year. The less common black vulture is a southern species that nears its northern breeding limit in New Jersey.

As unique as each raptor species is, all are magnificent predators. Each is thrilling to watch, be it a kestrel hovering over an overgrown field, a harrier low over a marsh, a goshawk zipping through the trees, an aggressive merlin diving on an eagle, a red-tail in a stoop with its sights on a mouse, or a kettle of vultures soaring effortlessly against a blue sky.

Editor's Note: In addition to the diurnal raptors mentioned in the article, who call New Jersey home for all or part of the year, eight owl species breed and/or

winter here.

They are: the common barn owl (*Tyto alba*); eastern screech owl (*Otus asio*); great horned owl (*Bubo virginianus*); snowy owl (*Nyctea scandiaca*); barred owl (*Strix varia*); long-eared owl (*Asio otus*); short-eared owl (*Asio flammeus*); and northern saw-whet owl (*Aegolius acadicus*). (For more information, see **On the Prowl for Owls**, *New Jersey Outdoors*, Winter 1997.)

The American swallowtail kite (*Elanoides forficatus*) and Mississippi kite (*Ictinia mississippiensis*)—raptors that are strictly migrants and therefore not mentioned in the article—can be spotted as they fly over New Jersey.

Freelance photographer Sherry Meyer, whose work has appeared in previous issues of *New Jersey Outdoors*, works as a wildlife biologist for the Conserve Wildlife Foundation. She also has worked for the New Jersey Division of Fish and Wildlife's Endangered and Nongame Species Program.



Peregrine falcon (*Falco peregrinus*)

American kestrel (*Falco sparverius*)



