American Woodcock

Scientific Name: *Scolopax minor*

New York Status: Not Listed

Federal Status: Not Listed

Description

The American woodcock is one of New York's most unusual upland birds. Approximately the size of a mourning dove, an adult woodcock weighs 8-12 ounces, is 10-12 inches in length (including bill), and has a wingspan of 17-19 inches. It has a bill that looks too long for its body, and ears that are placed forward on the face, between the eyes and the bill. To help guard against predation from above, its eyes are set high on the back of the head. Its large eyes have nearly 360-degree vision - a distinct advantage when foraging in the soil. The woodcock's long bill has a flexible tip specially adapted for probing into moist soil in search of earthworms. It can eat its weight in worms each day. They also eat other invertebrates, and have been known to eat ants from ant hills during times of drought.

The woodcock's mottled brown to black body enables this bird to blend in with the forest floor. As such, they are difficult to spot and will often startle you if you walk by them. When flushed from the ground, these birds flutter up through the thick canopy, level off over the top, and then fly away. Wind moving through their wings makes a whistling sound as they go. Although they sometimes fly considerable distances, they usually only fly short distances of 10 to 20 yards at flight speeds of up to 30 mph. Their odd appearance and behavior has inspired many local names like timberdoodle, bog sucker, mud bat, mud snipe, and Labrador twister.

Life History

Each spring, male woodcock perform an unusual courtship ritual in an attempt to attract mates. At dusk, a male will sit on the ground in an opening or small field and repeatedly utter a low, nasal, almost insect-like 'peent.' He then takes off low and spirals upward on whistling wings to heights of 100-200 feet before spiraling back down and landing near where he took off. He makes a chirping sound during this downward spiral. Males repeat this act again and again until well after dark.

Nesting occurs from mid-March into June. Females lay their eggs-one per day-in shallow depressions on the ground among dead leaves. Most nests have four eggs, and incubation takes approximately 21 days. The chicks are precocial (highly developed), meaning they can move around and follow the hen soon after hatching. Chicks grow very rapidly on a diet of earthworms and insects. By the time they are four weeks old, it is difficult to distinguish the chicks from adults. Male woodcock are not involved in nesting or brood rearing.

Distribution and Habitat

Migratory birds, woodcock spend each spring and fall traveling between their breeding grounds in northern North America and their wintering grounds in the southern United States. They fly only at night, typically migrating at low altitudes of 50-100 feet. They may fly alone or in loose flocks called flights. If you are walking near moist thickets during these migration times, you might see signs of the woodcock: silver-dollar-shaped white splashes on the ground-the droppings or 'chalk' of these birds. Woodcock are most active at dawn and dusk, usually searching for a meal.

The woodcock requires a diverse mix of habitats to thrive, including riparian shrublands and forests (land along riverbanks), as well as upland shrublands, early successional forests and forest thickets. Within these areas, second growth hardwoods provide important nesting habitat, while areas with thick cover and moist fertile soil with abundant worms are used as feeding grounds. In addition, the woodcock uses new clear-cuts, large fields or pastures for night roosting, and males need small openings in the forest to sing over.

Status

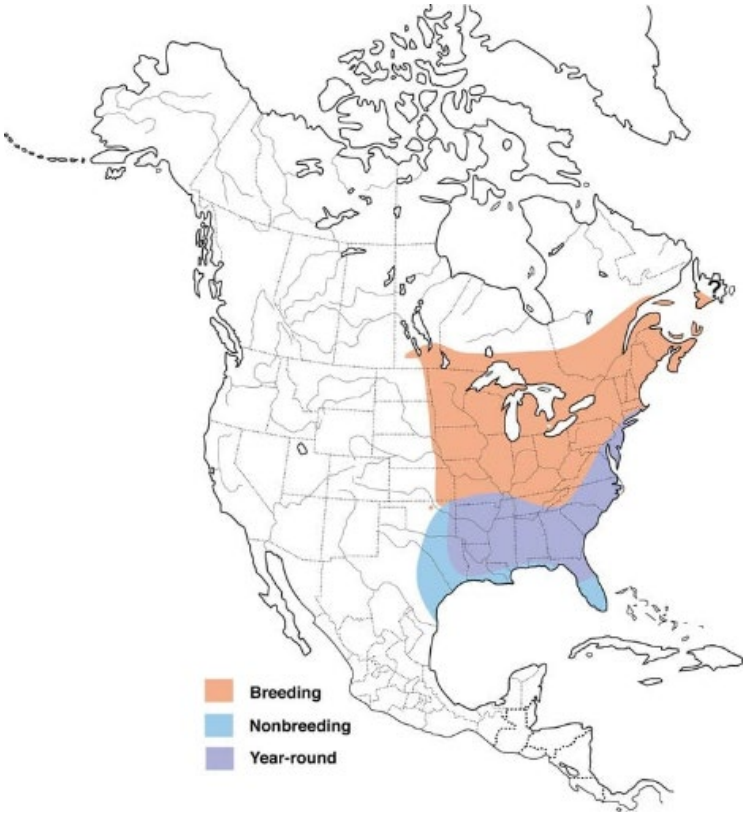
Woodcock populations have been declining in the eastern United States for several decades. Annual spring surveys of their breeding grounds show that woodcock numbers in the eastern flyway and in New York have been falling by about 2 percent since the 1960s-a loss of over 55 percent in the last 40 years. As a result, national and international bird conservation organizations consider the American woodcock a species of continental concern, and protecting the woodcock is a high priority in its habitat ranges.

Management and Research Needs

The woodcock's decline is attributed to loss of upland and wetland habitat due to development, succession, and forest maturation. In addition, the reduction in forestry practices, especially in riparian areas which are critical for breeding and migrating woodcock, also contributes to the loss in woodcock numbers. Woodcock depend on trees and shrubs that require full sunlight and open canopies. This only comes from disturbance to forests, which has been dramatically reduced by fire suppression and the reluctance to fell trees.

This reluctance is based on the misconception that cutting trees is bad for birds and wildlife. While cutting trees can negatively impact some wildlife species, proper forest management actually increases the abundance and diversity of some birds and forest wildlife in an area. Ironically, the bird and wildlife species of mature forests, often touted as threatened, are actually doing well overall; it is the early successional species that need more help and habitat.

DEC's Young Forest Initiative, which started in 2015, aims to dramatically increase early successional and young forest habitats for a variety of species, including American Woodcock, on Wildlife Management Areas. Fortunately, woodcock populations, as well as other early-successional-forest species, can often be readily restored through proper harvest management of forested lands. Cutting small 5-10 acre patches or strips through the forest in rotation creates a mosaic of different age forests with diverse structures. These areas provide everything the woodcock needs to survive and prosper-good cover, abundant food, and openings for singing males.



American Kestrel

Scientific Name: *Falco sparverius*

New York Status: Not Listed
Federal Status: Not Listed

Description

The American Kestrel is the smallest and most widespread member of the falcon family. Adults have a body length of 5-12 inches and a wingspan of 20-24 inches (about the size of a Blue Jay). As with other raptors, the female is somewhat larger than the male; males typically weigh in at 2.8-3.7 ounces, whereas females can weigh up to 4.2 ounces.

The adult male has a reddish-brown back, slate blue or gray wings, a reddish-brown breast and a white belly. The female differs with mostly brown-streaked wings and a brown-streaked white or pale buff breast. Both sexes possess the dual vertical facial "sideburns" and ocelli markings (false eyes) on the back of the head and neck. Ocelli markings may be used to confuse predators. Kestrels have amazing vision and can detect an insect up to 100 feet away. They are often seen perched on roadside utility lines or hovering above fields in search of insects or small rodents. Frequently, they can be heard uttering their "killy-killy-killy" warning and territorial call.

Life History

In New York, American Kestrels begin pairing up in late March to early April. Males arrive in breeding grounds first and perform elaborate diving displays to declare their territory and attract mates. Once a pair bond is formed, the male searches for appropriate tree cavities for nesting and presents them to the female, who inspects them and makes the final selection. American Kestrels appear to favor woodpecker-excavated cavities in isolated dead trees located in the middle of large grasslands; however, they will also nest in the edges of woods, natural or man-made crevices, and nest boxes.

Females typically lay four or five pale, rounded eggs but as many as seven have been recorded. The nest is but a shallow scrape within the selected cavity. Eggs are laid at 2-3 day intervals, incubated mostly by the female, and hatch in about 30 days. During this time, the male brings food to his mate, an activity that continues after the eggs hatch. The young are born blind with scant white down covering pale pink skin and unable to feed themselves. Nestlings grow quickly, becoming downier. The eyes open by the second or third day. After about 20 days, they begin to feed themselves and after about 30 days, their wings are fully developed and they can fledge out of the nest. Family groups can be seen hunting together for the first weeks.

Distribution and Habitat

American Kestrels have a very widespread distribution. They breed throughout majority of North America, primarily south of the Arctic Circle, down into Central America and the Caribbean, as well as parts of South America. They specifically target zones where appropriate cavities are available for nesting. Seventeen subspecies are currently recognized. They breed throughout New York State, aside from the Adirondacks, Tug Hill, and parts of the Catskill and Allegheny mountains.

Kestrels prefer open habitats such as pastures, fallow fields, and grasslands, where they can find abundant insect or other arthropod prey. New York birds migrate south in the fall. Wintering grounds resemble breeding grounds. When insects are not available, they prey on rodents, frogs, reptiles, and even smaller birds (hence the name Sparrowhawk, as they were once known).

Status

Despite their distribution and relative abundance throughout the eastern United States, kestrel numbers have significantly and steadily declined in the past fifty years, particularly in the Northeast. Regions surrounding the Adirondack, Allegheny, and Catskills mountains, as well as suburban areas of the lower Hudson Valley and Long Island have experienced the greatest declines.

The Second Atlas of Breeding Birds in New York State (2008) reported an overall decline of 14% in the number of atlas blocks where American Kestrels were detected breeding. This decline is consistent with that of other birds requiring open grassland habitat. These essential habitats are disappearing and becoming fragmented due to development, intensive agriculture, and plant succession.

Human causes of mortality account for 43% of reported deaths. A significant number of reported deaths, nearly 12%, occur from collisions with vehicles. This number can be expected to rise with increased miles of roads and highways and increased travel speeds. Shooting, trapping, and direct killing account for nearly 9% of deaths reported. Also, bioaccumulation of pesticides and other contaminants may be affecting reproduction. Competition for nests by European Starlings and other aggressive birds limits available nesting sites. Natural sources of mortality include parasitism, predation, and severe weather during migrations.

Management and Research Needs

As a species that relies on grasslands and other open habitats, the fate of the American Kestrel is tied to that of other grassland birds. Since the majority of this habitat, well over 95%, occurs on private lands, conservation and management of farmland and former agricultural land is vital to their long-term survival. State and Federal agencies and Non-Governmental Organizations (NGOs), and private landowners are participating on several initiatives to conserve and manage grassland habitat.

The Peregrine Fund's American Kestrel Partnership has been actively studying the breeding ecology and factors influencing the decline of the species. NYSDEC and private landowners participate in this partnership by installing and monitoring nest boxes.

Bald Eagle

Scientific Name: *Haliaeetus leucocephalus*

New York Status: **Threatened**
Federal Status: Not Listed

Description

The bald eagle was adopted as the symbol of the United States because of its independence and strength. One of the largest birds of prey (raptors) found in North America, bald eagles stand about 30 inches high, have a wingspan of 72-84 inches, and weigh between 8 and 14 pounds.

This majestic bird is easily identified in adult plumage by its unmistakable brown body set off by a white head and tail and bright yellow bill (male and female eagles look identical, except that the female is usually about one third larger and heavier than the male, as is typical in birds of prey). Sexual maturity and the characteristic white head and tail are achieved at five years of age. The word *bald* in the eagle's name comes from a word in Old English that means white headed.

Immature bald eagles lack the white head and tail. They are mostly chocolate brown with varying amounts of white over the body, tail, and underwings. Juvenile bald eagles are often mistaken for immature golden eagles, which are much rarer in New York.

Despite their fierce image, bald eagles are actually quite timid and opportunistic. Since their primary prey is fish, bald eagles are sometimes called sea eagles, though they will take some mammals, waterfowl, seabirds, and carrion, especially during winter.

Life History

The bald eagle is a long-lived bird, with a life span in the wild of more than 30 years. Bald eagles mate for life, returning to nest in the general area (within 250 miles) from which they fledged. Once a pair selects a nesting territory, they use it for the rest of their lives.

Bald eagles' aerial courtship is an amazing display of avian abilities. The pair soars high in the sky, begins a dive, and interlocks talons while descending in a series of somersaults. Bald eagles produce only one or two offspring per year, rarely three. In New York, the young fledge by mid to late summer at about 12 weeks of age. By 20 weeks they are largely independent.

Their nest is usually placed in a large, prominent tree, often the biggest tree around (e.g., White Pine and Sycamore trees). Nest trees are usually alive and sturdy, capable of supporting their enormous nests. Nests are often placed in a major fork of the tree near the trunk. Nests are on average 1.5–1.8 m in diameter and 0.7–1.2 m tall, with older nests that have been reused for many years being larger (see banner photo). Both adults gather large sticks they collect off the ground or break off from nearby trees which are used to weave the main nest structure. The nest bole is lined with finer materials and downy feathers from the breasts of the adults. They may have multiple nests in their territory that they can use variably from year-to-year or if the first nest attempt fails.

Distribution and Habitat

Bald eagles are wholly North American, and currently are found in every state except Hawaii, as well as throughout Canada. Eagles prefer undisturbed areas near large lakes and reservoirs, marshes and swamps, or stretches along rivers where they can find open water and their primary food, fish.

Historically, bald eagles nested in forests along the shorelines of oceans, lakes or rivers throughout most of North America, often moving south in winter to areas where water remained open. Prior to the 1900s, they used as many as 80 nest sites in New York, primarily in the northern and western parts of the state.

Wintering grounds are from southern Canada south, along major river systems, in intermountain regions, and in the Great Plains. Many hydroelectric plants, including some in New York, provide suitable wintering habitat for bald eagles.

Status

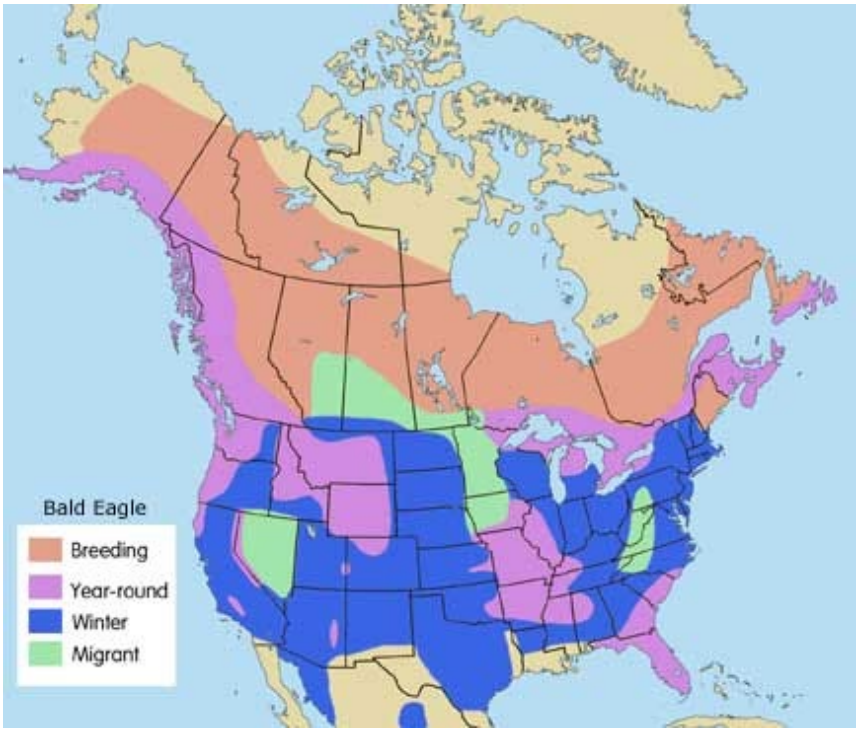
Bald eagles have always been seen as competitors with humans for important wild food sources and as threats to farm animals-at one time, bounties were even offered for killing them.

In the last century, reproductive impairment from pesticides (especially DDT) and heavy metals caused virtual extirpation of the few remaining bald eagles in New York and many other areas. Persistent and toxic compounds in fish from contaminated waters built up to high levels in the eagles' bodies, interfering with the deposition of calcium in their eggshells and making many of the eggs infertile.

Since the 1972 ban on DDT, eagles and other birds of prey are once again producing young. However, there has been no reduction in the human activity most damaging to eagle populations - destruction of habitat by logging and development along watercourses. Even recently, extensive human activity within preferred eagle habitats has disturbed important nest areas, resulting in reproductive failure and nest abandonment.

Management and Research Needs

The New York State Bald Eagle Restoration Project began in 1976 in an attempt to reestablish a breeding population through *hacking* (hand rearing to independence). Over a 13 year period, 198 nestling bald eagles were collected (most from Alaska), transported and released in New York.



The hacking project ended in 1989, when it accomplished its goal of establishing ten breeding pairs. The bald eagle program's focus has now shifted to finding and protecting nesting pairs in New York, and monitoring their productivity. Bald eagles continue to do well; In 2017, there were 426 active breeding pairs and a total of 209 young fledged in the state (NYS DEC 2017). In addition, there are many immatures and non-breeding adults that reside in New York during the spring and summer months. It is not certain how stable the Bald Eagle population is in New York at this time. The trends are mostly dependent on how much Bald Eagles will be affected by habitat loss and alterations due to development.

Black Tern

Scientific Name: *Chlidonias niger*

New York Status: **Endangered**
Federal Status: Not listed

Description

The black tern is a small member of the Laridae family at approximately 10 inches in length and 1.75-2 ounces in weight. It is identifiable in the breeding season by its jet black feathers on the head and body, the back fading to gray on the rump. The bill is nearly as long as the head and is bluish with a trace of dark red at the gape; the feet are also dark red. The upper wings and tail are uniformly gray, aside from white lesser wing coverts which form a small white shoulder when the bird is at rest. During the winter, black feathers fade to gray on the back and turn white on the underparts. Juvenile black terns are similar to the adult in winter plumage, but have barred wing coverts and are generally scalloped brown overall. The call of this bird is a shrill, metallic "krik."

Life History

In early May, black terns return to New York from the wintering range and begin their courtship displays at communal feeding and resting areas. Mating pairs are established by mid to late May when they disperse to nesting areas in typically large (≥ 49 acres) "hemi-marshes" (50/50 ratio of open water to emergent vegetation). Nest-site selection and building is rapid. In approximately four days, black terns build shallow, cup-like nests upon floating substrates of matted, dead marsh vegetation, old muskrat houses, cattail rootstalks, emergent vegetation mats of algae, or fallen logs.

The single brood consists of 2-4 eggs. Both parents attend the nest and continually add nesting materials during the incubation period of 21 days. The chicks are able to swim, walk and run within two days of hatching and they fledge in 21-24 days.

Distribution and Habitat

The black tern is a semi-colonial waterbird that nests on inland marsh complexes, ponds, mouths of rivers and shores of large lakes. In North America, the breeding range extends from Central British Columbia, east across the prairie provinces to Central Ontario and Southern Quebec, and south to Central California, Utah, Wyoming, Kansas, Iowa, Illinois, Indiana, Ohio, Northern New York, and Northern New England. The black tern winters in marine and coastal areas of Central America and Northern South America.

In New York, black tern breeding colonies once occurred at 56 sites along the southern and eastern shores of Lake Ontario from Niagara Falls to Watertown, in marshes along the St. Lawrence River and inland marshes of Western, Central and Northwestern New York. Today, approximately 200 nesting pairs occur at less than 20 of the historic breeding sites.

Status

Beginning in the 1960s, the black tern population declined across its range. In the 1960s, a series of dams in the St. Lawrence River were erected to generate hydropower, stabilize Lake Ontario water levels for commercial shipping, and protect shoreline real estate from flooding. These dams limited the annual fluctuation of water levels that promoted the hemi-marsh conditions favored by nesting black terns, and resulted in a loss of breeding habitat.

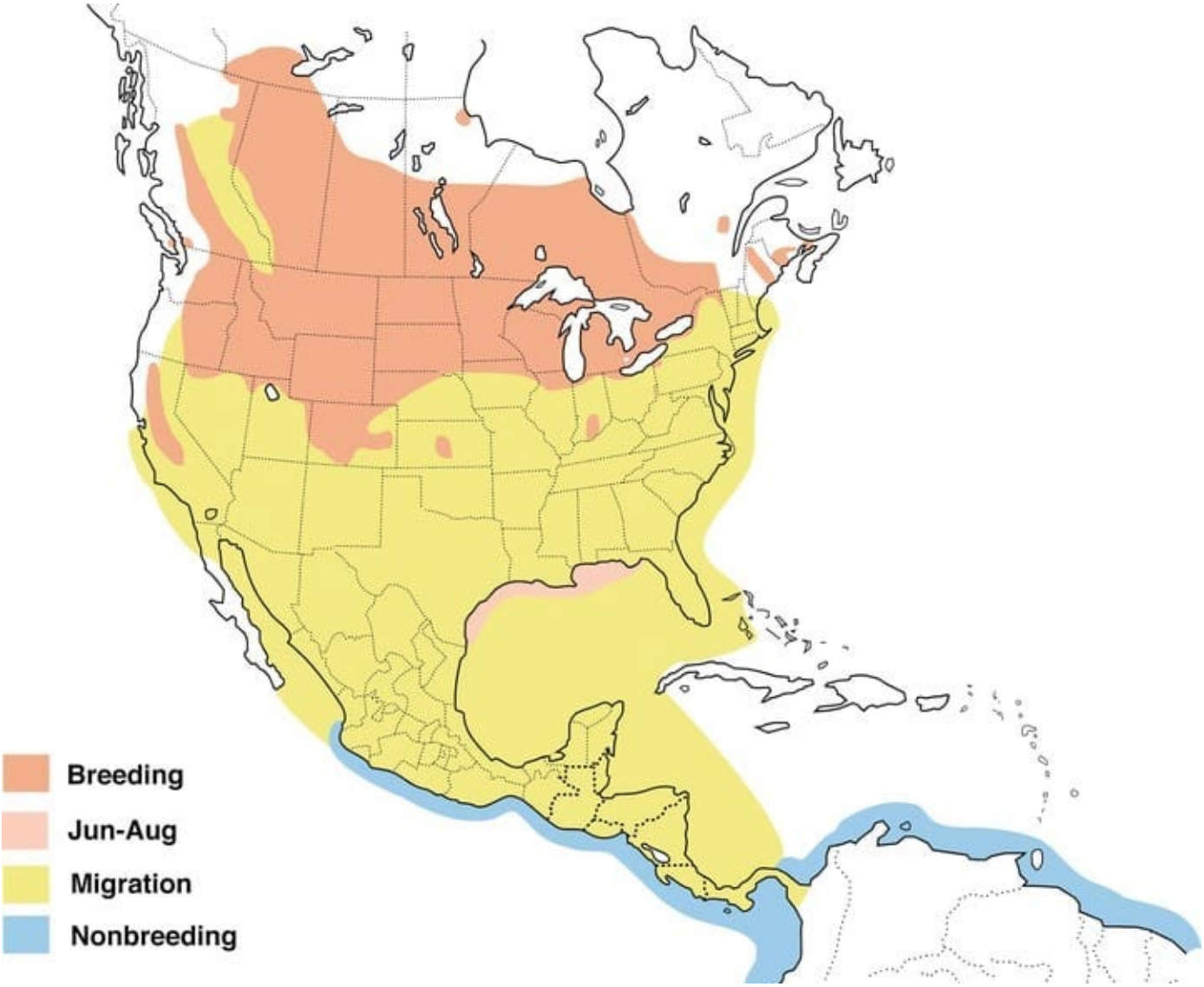
Regular monitoring revealed that the number of colonial nesting sites in New York State decreased between 1989 and

2004 by 57%. This is primarily attributed to habitat degradation. The 2000-2005 NYS Breeding Bird Atlas data showed 40% fewer black tern-occupied blocks than the 1980-1985 Breeding Bird Atlas. Black tern nesting habitat may be further compromised by agricultural run-off, pollution, invasive species, reduced invertebrate prey biomass, residential and commercial development, and recreational watercraft disturbance.

Management and Research Needs

Black tern surveys are conducted every three to four years by New York State Department of Environmental Conservation staff and volunteers at historical and current nesting sites. These surveys are a critical component to monitoring the status of this declining species, and are necessary to identify factors that will improve conservation efforts and restoration of nesting sites.

Currently, invasive species control and water level manipulations are the most effective strategies of black tern habitat management; however, both can be costly and time and labor intensive. In New York, the impact of agricultural run-off and pesticide contamination has been suggested as a compounding factor to habitat loss. Additional research focused on habitat quality, water quality, and prey populations is needed to determine the impact of habitat degradation on black tern diet and nutrition, which may be limiting successful breeding.



Bobolink

Scientific Name: *Dolichonyx oryzivorus*

New York Status: Not Listed

Federal Status: Not Listed

Description

Breeding males of this grassland bird species have both a unique appearance and song. Their underside is completely black and they have a buff-colored "cap" of feathers on their head, while females, juveniles and non-breeding males are yellow/buff underneath with brown wings and tails. The male's song, which is given in flight, is cheerful or "jangling" and can contain anywhere from 25-50 notes. Bobolinks are medium-sized songbirds with a short, conical bill. Their total body length is 6-8 inches long; males weigh between 1-2 oz. and females weigh 1-1.75 oz.

Life History

Their diet consists of insects, seeds and grains. Bobolinks build their nests on the ground in small depressions out of dead grasses and weeds, and lay a clutch of 1-7 eggs per nest. They may re-nest if their first attempt was unsuccessful. Male bobolinks are polygamous, and may nest with more than one female at once within his territory. Bobolinks begin breeding around 2 years of age and may breed every year. They are territorial during the breeding season; however, they form large flocks during migration, remaining in flocks over the winter. They often return to the same breeding grounds each year.

Distribution and Habitat

Bobolinks breed across their range in North America, from British Columbia east to Newfoundland, and as far south as West Virginia. A few small isolated pockets remain as far south as Arizona. It is believed that they originally occupied only the mid-west, but expanded both west and eastward as forests were cleared.

Bobolinks begin nesting around mid-May in New York in large, open grasslands or former hayfields containing a mixture of medium-tall grasses and forbs with few shrubs or trees. They prefer fields with roughly 1 inch of thatch on the ground. The minimum field size needed for successful breeding is 5-10 acres, but larger fields are preferred and can support more breeding pairs. They overwinter in the pampas region of South America, in Argentina and Brazil. This 12,000-mile round-trip migration is one of the longest made by a songbird in the Western Hemisphere.

Status

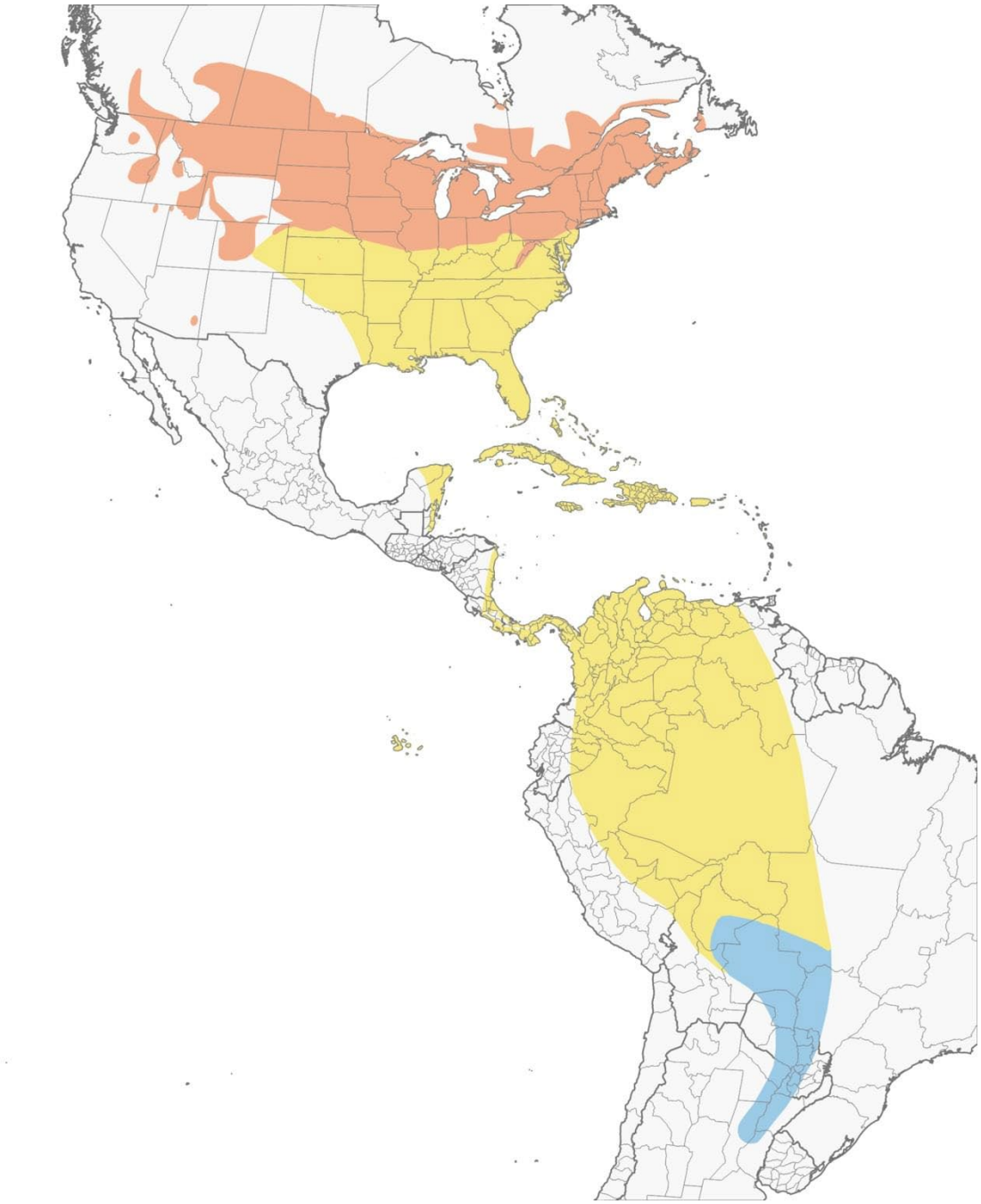
Although still fairly common across the US, bobolink numbers have decreased by 2% per year across North America since 1966. Declines can be attributed to farm abandonment and modern hay practices of more frequent and early cutting. In New York, the main cause of nest failure is cutting for hay during the nesting season. Additionally, bobolinks are persecuted as agricultural pests in their wintering range.

Management and Research Needs

Several actions may be taken to help prevent a further decline in their numbers. To maintain grasslands, fields should be cut every few years to avoid vegetative succession towards trees and shrubs that will cause the habitat to become unsuitable for bobolinks. Delayed cutting of hayfields until after the chicks have

fledged (after August 1st) is best. If this is not an option then mowing from inside out may provide an escape route for adult birds and older fledglings.

Little is known about their migratory patterns and behaviors. Future research should concentrate on their migration and on their wintering grounds in South America. Over-persecution may be causing population declines, along with habitat destruction.



NEW YORK STATE | Department of Environmental Conservation

Golden-winged Warbler

Scientific name: ***Vermivora chrysoptera***

New York Status: **Special Concern**
Federal Status: Not Listed

©Jeff Nadler Photography

Description

This neotropical migrant is a small songbird (4.25 to 5.25 inches) of eastern shrub lands. The golden-winged song is a high and buzzy "zee zee zee zee." Adult males are gray above and white below with bright yellow fore crown and wing coverts (set of feathers that cover feathers beneath it). It has a black eye mask and throat patch suggestive of the black-capped chickadee (*Poecile atricapilla*). Females appear similar to males with smaller yellow wing patch and no black eye mask or throat patch. Likewise, juveniles are similar to adults.

Life History

Males arrive on breeding territory 2 to 7 days before females. Pairs form as soon as females arrive and nest building begins almost immediately after bond formation. Nest construction and incubation is done entirely by female. The nest is often an open cup of grasses with leaves forming the base and is typically located on the ground in a shrubby or forested edge. Females will desert nests during the construction phase if disturbed, but will tolerate a high level of disturbance while incubating. Nesting occurs between mid-May and late June with incubation beginning when the second to last egg is laid. Clutch size is 3 to 6 eggs. Re-nesting is known to occur after the loss of a clutch. After 10 to 11 days, the completely altricial (helpless) young will hatch. Both parents share in feeding the young which remain in the nest for 8 to 9 days. Diet consists mainly of insects and spiders gleaned from the peripheral branches of tree tops.

Distribution and Habitat

The golden-winged warbler breeds throughout the north central and northeastern United States into Ontario, Canada. Although its range is expanding westward, it is disappearing from much of its former range in the northeastern states. This pattern coincides with the loss of early successional habitat in the northeast, as well as, the expansion of the blue-winged warbler (*Vermivora pinus*) into the golden-winged warbler's range. The golden-winged warbler is a habitat specialist and prefers to nest in early successional fields with a combination of shrubby and open areas within the territory, with scattered overstory trees. In New York, this type of habitat is found in abandoned farmlands in the early stages of succession and in scrub/shrub wetlands.

Status

This species is becoming increasingly localized and uncommon throughout the state. Breeding Bird Atlas results for 2000 to 2005 showed a significant population decline across the state with the only remaining stronghold in the St. Lawrence Valley of northwestern New York.

Threats to golden-winged warbler populations in New York State include:

- habitat loss
- competition
- hybridization with blue-winged warblers (*Vermivora pinus*)

Loggerhead Shrike

Scientific Name: *Lanius ludovicianus*

New York Status: **Endangered**
Federal Status: Not Listed

Description

The loggerhead shrike is 8 to 10 inches long with a wing spread of 12.5 to 13 inches. Its coloration is similar to a mockingbird with gray above and white below. The shrike is distinguished by a characteristic black facial mask that meets over the base of the bill, a heavy hooked bill, black wings with white wing patches, and a slim black tail with white outer tail feathers. The other North American shrike species, the Northern shrike, is slightly larger, has a longer bill, and the mask does not meet over the base of the bill. When perching, the shrike holds its tail nearly horizontal, whereas most other birds hold their tails pointing downward. The loggerhead shrike perches alone, usually in tree tops or on telephone wires in open country. Its flight pattern is low and undulating with very fast wing beats.

Life History

The loggerhead shrike is known for its unique behavior of impaling its prey on thorns, barbed wire fences, and similar projections, hence its preference for nesting near areas containing such objects. Though the reason for this behavior is not totally understood, it is supposed that it serves as a means of storing food, and also to assist in tearing apart the prey since the loggerhead does not possess very strong claws. Maligned because it occasionally feeds on small birds, the shrike feeds mainly on beetles, grasshoppers, and small rodents. The loggerhead has extraordinary eyesight and can focus on a grasshopper in a field 50 to 70 yards away.

The loggerhead begins nesting in late April or early May. The well-made nest is constructed of thick twigs woven together, lined with fibers, and padded with feathers, hair, or cotton. The shrike lays four to six eggs and may raise two broods in the southern portion of its range.

Distribution and Habitat

The loggerhead shrike ranges throughout most of North America from southern Canada to southern Mexico. This species former range was from Maine through New England, south to Virginia, Pennsylvania, and West Virginia. It winters from Virginia to Florida. With an uneven and local distribution, the loggerhead was never considered to be a common breeding bird in the northeast.

Historically, however, it was reported as being a fairly common breeder in western and central New York. Its breeding habitat consists of agricultural areas that contain hedgerows, hayfields, pastures and scattered trees and shrubs, especially hawthorn.

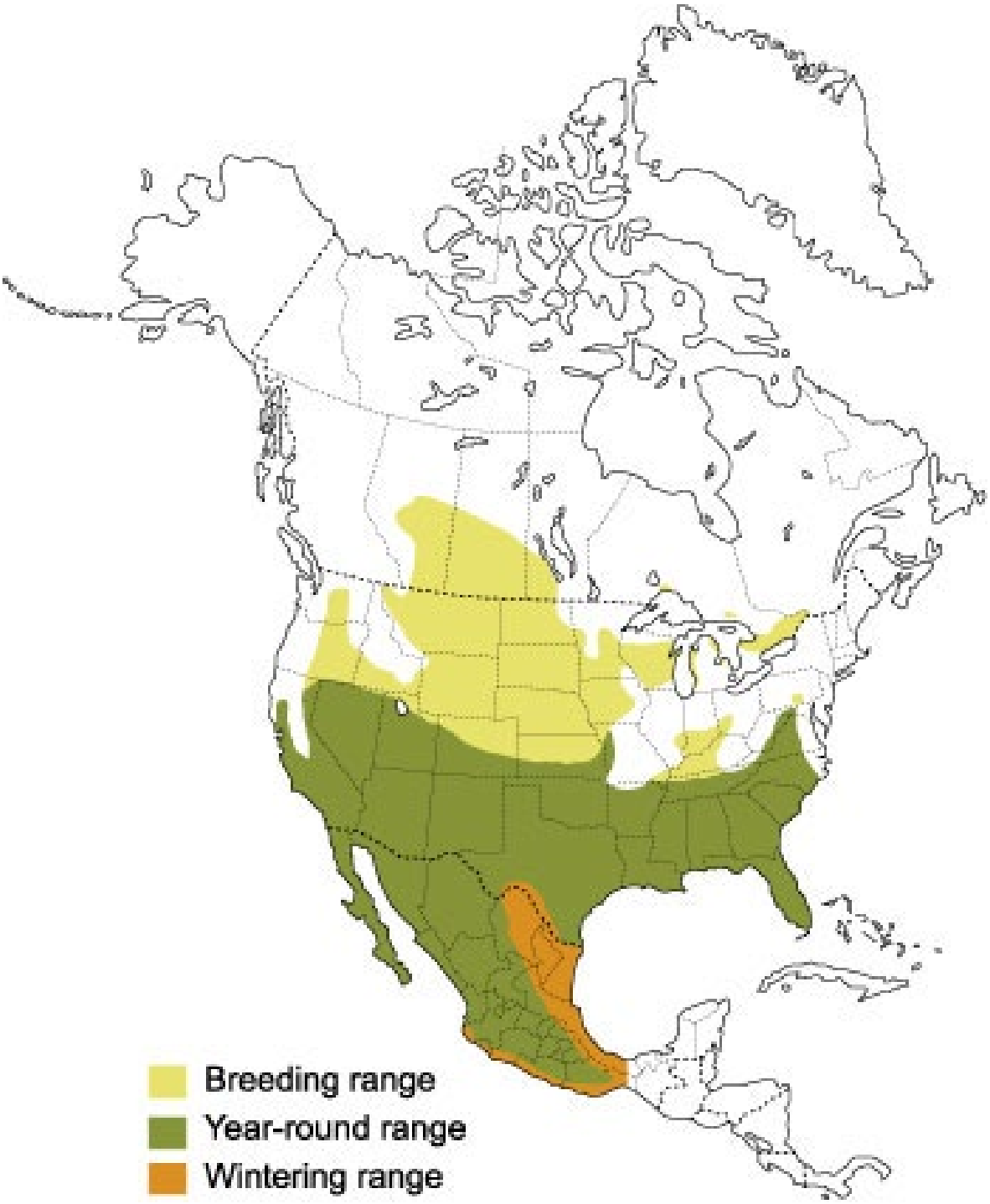
Status

Loggerhead shrike populations are extremely low, and no nests have been located in New York in recent years. The reasons for the loggerhead's steady decline are not clear at this point. One hypothesis suggests that the abandonment of many

farms and orchards, overgrown from neglect, have created unfavorable nesting habitat. Roadkills and pesticide contamination may also be factors. Further research is necessary before a conclusion can be reached as to the loggerhead's plight.

Management and Research Needs

Management efforts for the loggerhead shrike in New York have included a status survey and the establishment of a system for reporting sightings of this rare species. Research on habitat requirements in New York and Virginia suggest that this shrike prefers areas with extensive, active pastureland. Continued research on productivity, habitat loss, and other aspects of the species' ecology should provide a better understanding its decline and suggest possible measures for reversing this trend.



Peregrine Falcon

Species Type: Bird
Scientific Name: Falco peregrinus
Conservation Status: Endangered

Scientific Name: ***Falco peregrinus***

New York Status: **Endangered**
Federal Status: Not Listed

Description

This crow-sized falcon is admired for its incredible speeds which are seldom exceeded by any other bird. Plunging from tremendous heights, the peregrine falcon can reach up to 180 mph in pursuit of prey. It feeds primarily on birds, which it takes on the wing.

Adult peregrines are slate-grey above and pale below, with fine dark bars and spots on their underparts. Both adults and immatures have a wide, dark "moustache" mark below the eye. The tail is narrow and the wings long and pointed. Juveniles are brown overall, with dark streaking below. Airborne, this falcon can be recognized by characteristic rapid wingbeats mixed with long glides.

Life History

Peregrine falcons generally return to the same nesting territory annually and mate for life. The courtship flight is a spectacular sight. The pair climbs high in the air and performs a precise acrobatic act of whirling spirals and steep rapid dives, often touching in midair. The average clutch consists of three to four eggs which hatch after an incubation period of 29-32 days. The single brood fledges after 35-42 days. Both parents participate in incubation and brooding activities, but the female remains at the nest for the majority of the time while the male hunts and brings food to her and the young.

Young falcons may stay in the area for about six weeks after they fledge, developing their flying and hunting skills. Sexual maturity is generally reached at two years of age, but one-year-olds have been known to produce young. Individuals may live as long as 20 years.

Distribution and Habitat

The worldwide range of peregrine falcons is more extensive than any other bird. In addition to North America, they are found in southern South America, Eurasia, Africa and Australia. Natives of this continent formerly bred from Alaska and Greenland south to Georgia and Baja California. That range has been greatly reduced. Wintering occurs as far north as British Columbia and Massachusetts, as far south as Central America and the West Indies.

Within its range, this falcon prefers open country from tundra, savannah and seacoasts, to high mountains, as well as open forests and tall buildings. Nests are built on high ledges, 50 to 200 feet off the ground. The nest itself is a well-rounded scrape and is occasionally lined with grass.

Status

Like many other birds of prey, peregrine falcons have suffered from the use of pesticides. Exposure to DDT and other chemical contaminants has caused population declines since the 1940s. These pesticides cause eggshell thinning which drastically lowers breeding success.

At one time, there were approximately 350 breeding pairs in the eastern U. S., including 40-50 historic eyries (nest sites) in New York. By 1965, all were gone and populations in other parts of the country showed similar declines. Release programs initiated by the Peregrine Fund in the mid-1970s have resulted in peregrine falcons breeding in New York once again. In 1998, 38 pairs were present in New York, 36 bred, 31 were successful and 69 young fledged. New urban nests have been reported upstate for the first time in Albany. Gradual increases in the breeding population have been recorded throughout the east.

Management and Research Needs

Laws banning the use of DDT were passed by New York State in 1971 and by the federal government in 1972. Although DDT contamination has been reduced in this country, it continues to affect the peregrine and its prey outside our borders. Peregrine carcasses and unhatched eggs continue to be analyzed for DDT and other contaminants.

Hacking has proven to be a successful means of reestablishing a breeding population in the wild. Young raptors are placed at an artificial nest site and cared for until they are able to fly and hunt on their own. Through hacking, over 2,000 peregrines have been released in the U. S. and Canada. The number of breeding pairs in New York has grown steadily since 1983, when the first peregrines in decades returned to nest on bridges in New York City. This success has eliminated the need for hacking in most eastern states, including New York. Management has now shifted to locating, monitoring and protecting breeding pairs.

Watchable Wildlife

What to Listen for

Wailing call: a long-drawn-out scream Cacking call: cack-cack-cack

Peregrine's nesting boxes exist on most Hudson River bridges from Albany to New York City.

Peregrine Falcons also nest on Adirondack cliffs.

Red-headed Woodpecker

Scientific Name: *Melanerpes erythrocephalus*

New York Status: **Special Concern**
Federal Status: Not Listed

Description

Unique and unmistakable among the woodpeckers, the red-headed woodpecker has a bright red hood covering its head, neck, throat, and upper breast. A medium-sized woodpecker, it measures 7 to 10 inches in length with a long, chisel-like bill. Sexes are similar with white under parts contrasting the back, tail, and wings which are black with a blue or greenish sheen. Distinctive white secondaries are visible in flight and at rest. The red-headed woodpecker juvenile has a brown neck and head in place of the red hood, and brown streaking on the rest of the body.

The red-headed woodpecker is noted for their clear, distinct call and boisterous demeanor in the field. Actively foraging, hopping from branch to branch, they are the most omnivorous of all North American woodpeckers and has a diverse diet of seeds, nuts, fruit, insects and animals such as nestlings and mice. Red-headed woodpeckers are noted for their unique food storage technique. They are one of only a few species of woodpeckers known to cache, or store, food in the winter and the only one to cover its food stores with bark.

Life History

The red-headed woodpecker is both sedentary and migratory within its breeding range. It nests in the cavities of dead trees up to 80 feet above the ground. The male selects the cavity site and both sexes share in building the nest and incubating the eggs. Clutch size is 4 to 8 eggs and parents will raise 1 or 2 broods per season. Incubation lasts 12 to 14 days and nestlings hatch completely naked and helpless. Young fledge at 27 to 30 days and will remain near the nest site until they are driven away by parents raising a second brood.

Distribution and Habitat

This species range extends from southern Canada to the Gulf coast through the eastern and central United States east of the Rocky Mountains and west of the New England states. Winters in the southern parts of its breeding range. Its breeding habitat is characterized by the presence of dead trees for nest sites, snags for roosting, and open ground for foraging. Prefers river bottoms, wooded swamps, and open grasslands with scattered trees.

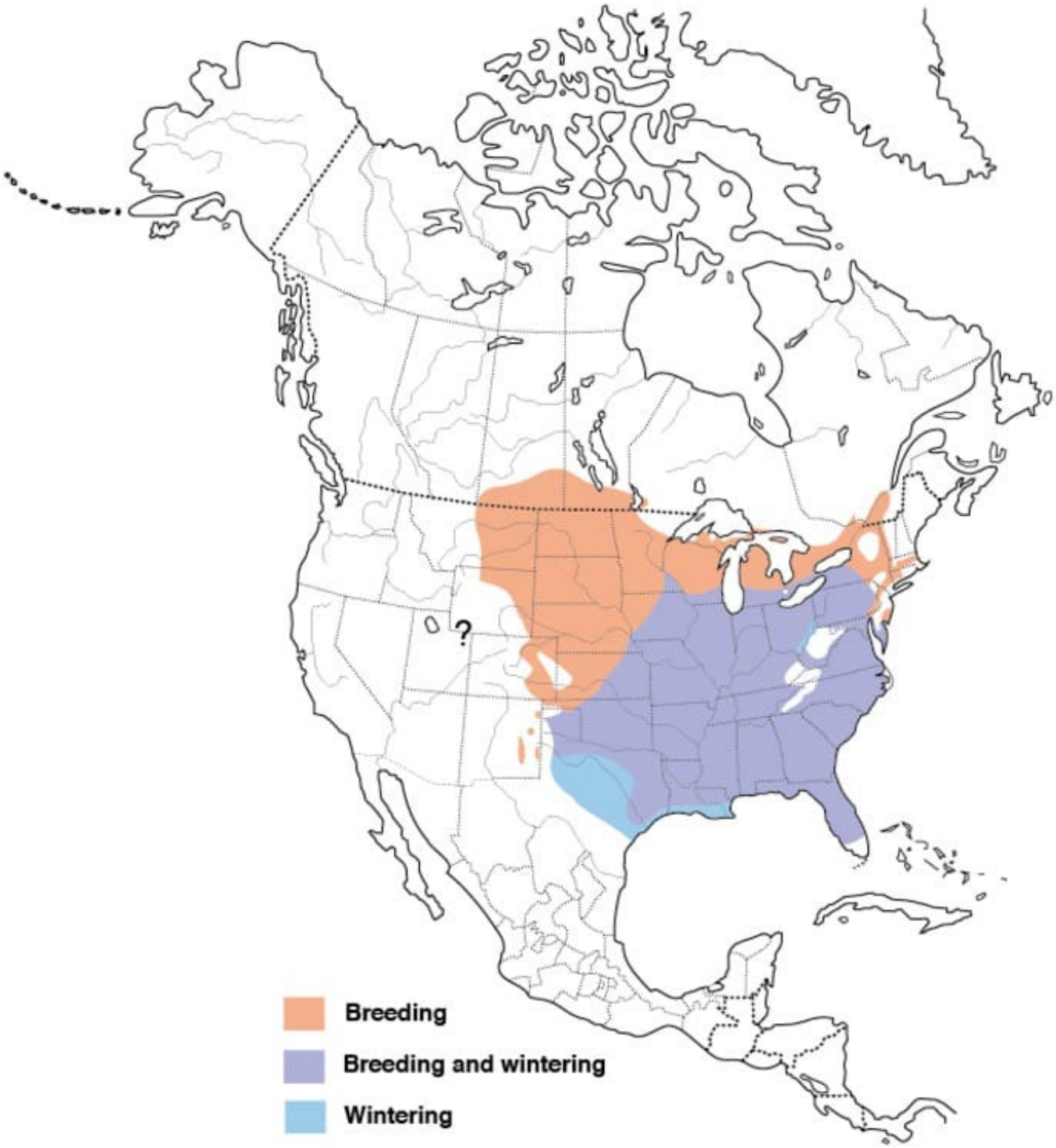
Status

Historically the bright plumage of the red-headed woodpecker made it a popular target for hunters. Today it is a locally common breeder in the lowland areas of New York State. It was formerly more abundant but has suffered population declines throughout much of its breeding range. Breeding Bird Atlas results for New York illustrate this trend with red-headed woodpeckers being detected in significantly fewer blocks during the second atlas than in the first.

Management and Research Needs

Population declines of red-headed woodpeckers are thought to be due primarily to competition with European starlings (*Sturnus vulgaris*) for nesting cavities and collision with vehicles while foraging for insects along roadsides. Agricultural

pesticide use can also inhibit red-headed populations. Habitat loss resulting from forest regeneration, fire suppression, and agricultural development is also a concern.



Roseate Tern

Scientific Name: *Sterna dougallii*

New York Status: **Endangered**
Federal Status: **Endangered**

Description

The roseate tern is a graceful bird, 14 to 17 inches long, with a wingspan of about 30 inches. It resembles the common tern. Its back and upper wings are a light pearly-grey, while its underparts are white. The tip of the white tail extends well beyond its wing tips when the bird is at rest. In the summer it has a black cap, nape and bill. Juveniles have prominent, dark "V"s on the feathers of the back. The flight of this bird is distinctive, with rapid, shallow wingbeats of equal emphasis on the upstroke and downstroke. Its call is a rasping "z-aa-p" or a soft, two-syllabled "chivy." Roseate terns feed primarily on American sand lance, a small marine fish.

Life History

Roseate terns arrive on the breeding grounds in late April or early May and begin nesting one month later. In New York, roseate terns are always found nesting with common terns. The nest may be only a depression in sand, shell, or gravel, and may be lined with bits of grass and other debris. It is usually placed in dense grass clumps, or even under boulders or rip-rap. Both adults incubate the eggs for about 23 days, and the young fledge in 22-29 days. One brood per season is typical, although two broods are sometimes produced. Migration begins in late summer. One banded individual from Great Gull Island, New York was 9 years old when recovered.

Distribution and Habitat

A marine coastal species, the roseate tern breeds along the coasts of the Atlantic, Pacific, and Indian oceans on salt marsh islands and beaches with sparse vegetation. In eastern North America, it breeds from the Canadian Maritime Provinces south to Long Island, although formerly the breeding range extended to Virginia.

In New York, this species breeds only at a few Long Island colonies. The largest colony, more than 1,000 pairs, is located at Great Gull Island off eastern Long Island.

Status

During the 1870s and 1880s, the roseate tern was in serious danger of extirpation from its range in the northeastern US. due to hunting for the millinery trade. Protection since 1918 under the Migratory Bird Treaty Act allowed this tern to recover in the 1920s and 1930s.

Threats to roseate tern populations include vegetational changes on the breeding areas, competition with gulls for suitable nesting areas, and predation. The increased presence of humans has contributed to higher predation rates. Predators such as raccoons find tern nests when they are attracted to the garbage left behind by careless beach users.

The roseate tern population is estimated to have fallen by 75% since the 1930s. Recent survey data indicates that 87% of the birds in New York nest in only one colony at Great Gull Island.

Management and Research Needs

Status and distribution of roseate tern populations is monitored annually by the DEC in cooperation with the American Museum of Natural History, The Nature Conservancy, and other researchers. A critical research need is to better understand the species' wintering habits and survival. One of the highest priorities in the recovery plan prepared by the U.S. Fish and Wildlife Service is to extend the species range by restoring some of the historic breeding areas. One success story in New York was the nesting of roseate terns and 60 pairs of common terns on Gardiners Point Island in 1995. This site supported no terns when habitat management began in 1990.

NEW YORK STATE | Department of Environmental Conservation

Ruffed Grouse

Scientific name: *Bonasa umbellus*

New York Status: Not Listed

Federal Status: Not Listed

Photo by John Major

Description

Round, plump birds a little larger than pigeons, ruffed grouse are a favorite of birders and hunters alike. Also known as "partridge", they are year-round residents of New York State. Though these birds go unseen by many, the familiar drumming performed by males, especially in spring, keys people into their presence.

Ruffed grouse come in two basic color phases. Gray phase birds tend to occur in colder northern areas, while brown phase birds occur in warmer southern areas. Some birds, however, exhibit a combination of both colors. Grouse feathers are mottled with white and black which helps them blend into the forest floor and hide from predators. Grouse have broad, flat, fan-shaped tails with a dark band near the tip. Similar in appearance, male grouse are slightly larger than females (hens) possessing long, shiny, black neck feathers. Males will puff up these feathers and fan out their tails to attract females or warn off other males.

Young grouse chicks eat insects and small invertebrates, gradually switching over to adult diets. Adult grouse eat a wide variety of fruits, seeds, leaves, buds, and insects. During winter when snow covers the ground, grouse rely on eating the buds and catkins (slender flower cluster) of trees and shrubs such as aspen, cherry, birch, ironwood, and apple.

Painting by Jean Gawalt

Quick fact about ruffed grouse:

- They spend most of their time on the ground.
- They seldom fly more than a couple hundred yards, but can hover and make complete turns in the air when flying through thick brush.
- Grouse do not migrate and spend their entire lives within a few acres.
- In fall, they grow fleshy bristles (called pectinations) along the sides of their toes which act like snowshoes to help them travel over snow. Pectinations are shed in spring.
- Males make drumming sounds with their wings to attract females and warn off males.

Life History

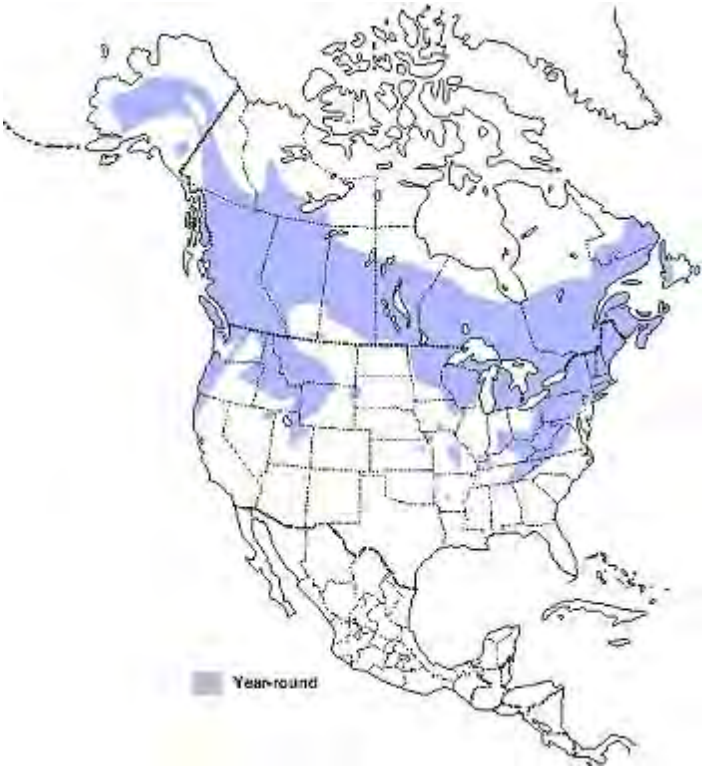
Each spring, male grouse ruffle their neck feathers, fan their tails and drum in an attempt to lure hens to their territory. Male grouse are aggressively territorial throughout their adult lives, defending a 5-20 acre patch of forest. Males claim their territory by standing on a log, rock, or mound and beating their wings against the air.

Called drumming, it sounds like a distant lawn mower engine slowly starting up and then increasing to a rapid beat. Drumming is most frequently heard during the spring mating season, but it can occur throughout the year. Generally solitary birds, ruffed grouse do not develop pair bonds, and one male may breed with several hens.

Following mating, hens construct nests and lay 8 to 14 cream-colored eggs. If the nest is destroyed, hens will often attempt to re-nest. Nests are shallow depressions in the leaf litter, often at the base of a tree, stump or bush, and normally located in second growth hardwoods. Eggs are incubated by the hens and hatch in 24-26 days. Chicks are precocial (highly independent from birth), and leave the nest soon after they hatch to follow the hen and start feeding. Hens stay with their broods until they are grown. During autumn, juvenile birds can disperse from natal habitats up to two miles or more.

Distribution and Habitat

Ruffed grouse spend most of their time on the ground and will often run and hide to avoid detection. When closely threatened, they explode from their hiding place in a powerful burst of flight. Many individuals have been startled by this loud unexpected flurry of wings. Though good fliers, grouse seldom fly more than a couple hundred yards before either landing in a tree or on the ground to run into a thicket to hide. Interestingly, sometimes when they land in a tree, they will back up, stretch out their necks, and flatten out against the tree trunk, appearing to camouflage themselves from predators.



*Ruffed grouse range map from **Birds of the World**, maintained by the Cornell Lab of Ornithology.*

During winter, grouse will burrow or dive into soft, powdery snow when available. This not only helps keep them warm, but also hides them from predators. In times of extreme cold, temperatures beneath the snow can be as much as 25 degrees warmer than the air.

A forest species, ruffed grouse prefer young forest habitats and are generally found in areas with active or recent forest cuts, recently abandoned agricultural areas that have reverted to early successional forest, or in areas affected by fire. Grouse can often be seen along the sides of gravel roads near these young forest thickets where they pick up grit (small stones) to aid in digestion.

Status

Despite declines in their numbers, ruffed grouse are still common, particularly in younger forests. Grouse attract thousands of hunters with their shotguns and bird dogs, anticipating the exciting flush of a grouse bursting from cover. Grouse are challenging quarry, rapidly flying and dodging through trees and thick cover.

In New York State, the reluctance to cut forests, and suppression of fires has greatly reduced the amount of early successional forest habitat available to ruffed grouse, as well as a host of other bird and wildlife species. In fact, 67% of the bird species that rely on this habitat are in serious long-term decline. While ruffed grouse are still a common bird in most forested areas of the state, their populations have declined more than 80% since the 1960s.

Short-lived, most ruffed grouse rarely live a full year, though a few will make it to three years. Mortality from the time the chicks hatch (early June) until they are fully grown (around mid-August) is often more than 50 percent. Most grouse succumb to predation, providing meals for a number of predators, including hawks, owls, fox, and coyotes. Some grouse die of disease or exposure to severe weather. Good habitat that provides adequate cover and food resources greatly increases the survival of ruffed grouse.

NEW YORK STATE | Department of Environmental Conservation

Short-eared Owl

Scientific Name: ***Asio flammeus***

New York Status: **Endangered**
Federal Status: Not Listed

Description

Short-eared owls are medium size owls with small ear tufts on the top of the head. They have round, beige facial disks similar to those of barn owls. The underparts are white/buff (male) or tawny/rust (female), and streaked with brown, while the back is brown and mottled with white. When perched, the wings extend beyond the tail and in flight, the undersides of the wings show dark markings on the wrists and wing tips. The short-eared owl's flight is frequently described as "moth or bat-like" because it flies low over grasslands or marshes, moving back and forth with unhurried, irregular wing beats.

Short-eared owls are the most diurnal (active during the day) of all the northeastern owls. They are most often observed in the late afternoon and at dawn or dusk. These birds eat primarily small mammals, but they occasionally take small birds and the young sometimes eat insects. When hunting, they dive from perches or fly low over the ground and pounce on prey from above, sometimes hovering briefly before they drop.

Drawing by Jean Gawalt

Life History

Short-eared owls are birds of open country including grasslands and marshlands. They often opportunistically inhabit areas where small mammals, especially meadow voles (*Microtus pennsylvanicus*), are abundant. Their breeding sites, the number of wintering birds, the number of nesting pairs, and the number of eggs or young may change from year to year based on the food supply. Breeding occurs in March through June when both sexes begin defending territories and courting with elaborate flight displays that include wing-clapping, exaggerated wing-beats and skirmishing.

Nests are placed on the ground where the female creates a cup and lines it with grasses and down. Four to nine eggs are typical, but clutches as large as fourteen have been reported in years of peak small mammal abundance. Incubation, which is done by the female alone, lasts about a month. The eggs hatch asynchronously and fledging occurs about a month later.

In winter short-eared owls gather in open habitats that support large numbers of voles such as both fallow and cultivated grasslands, marshlands, and landfills. When food is abundant they may form large communal roosts of up to 200 birds in sheltered sites ranging from conifers to grassy tussocks and abandoned quarries.

Deep snow and ice may reduce the availability of prey locally and cause the owls to abandon wintering areas occupied earlier in the season. However, where food remains plentiful into the spring and summer, wintering areas may become breeding sites.

Distribution and Habitat

Short-eared owls are widely distributed breeding in marshes, grasslands, and tundras throughout North America and Eurasia, and on every continent except Australia and Antarctica. They are also found on islands such as Iceland, the Hawaiian Islands, the Greater Antilles, and the Galapagos. Within their extensive global range they occur in open areas where small mammals are abundant, favoring habitats such as prairies, coastal grasslands, heathlands, shrub-steppe, and tundra.

Although there are scattered breeding records in the east as far south as Virginia, New York is at the southern edge of this owl's breeding range. Northern populations are believed to be highly migratory, and there is a marked increase in the number of birds in New York in the fall and spring. Short-eared owls are more common as winter residents in New York State. As breeders they are very rare, being largely limited to the St. Lawrence and Lake Champlain Valleys, the Great Lakes plains and the marshes of Long Island's south shore.

*Short-eared owl range map from **Birds of the World**, maintained by the Cornell Lab of Ornithology.*

Status

Early in the twentieth century Eaton called the short-eared owl "one of our commonest owls" outnumbering all other owls in lowlands and marshy areas. By 1974 it was already considered a local breeder, declining in numbers. A comparison of historical and modern breeding records suggest that this species may have been lost as a breeder in many areas including eastern Suffolk County and the upper Hudson Valley. However, knowledge of their status and distribution may be incomplete because they occur in some parts of the state that are sparsely populated, breed early in the season, and hunt late in the day.

During the second New York State Breeding Bird Atlas, this species was found at a total of 24 survey blocks resulting in a 33% total decline from the first atlas. The most substantial losses occurred on Long Island with the species detected in only one survey block during the second atlas, as compared to nine blocks during the first.

Short-eared owls winter, sometimes in significant numbers, at concentration areas located throughout the state including the Finger Lakes region, the Lake Ontario lake plains, especially in Jefferson County, several sites in the Hudson Valley, and on the shores of Long Island. Historically, many winter concentration areas were also documented as breeding areas.

In the Northeast region, six of the thirteen states list short-eared owls as endangered while one other includes them on their state list at a lower level of conservation concern. Most biologists believe reforestation along with the loss of large, intact grasslands and other open habitats are largely responsible for this species decline.

Management and Research Needs

The conservation of short-eared owls in New York depends on protecting relatively large, open sites that support small rodents. Except for a few large marshes, most of the nest sites recorded in recent years have been found on farms, typically in active hayfields or pastures where the nests and young birds are sometimes mowed or plowed. Once abandoned, agricultural sites rapidly become unsuitable for owls because they succeed to woodlands or are replaced by development. In order to protect short-eared owls it will be necessary to identify suitable nesting sites that can be managed for small rodents and owls. Such management will likely have the added benefit of protecting other imperiled grassland birds with similar habitat requirements.

Recent efforts have been made to more closely monitor and identify wintering raptor concentration areas throughout New York State, with the short-eared owl included as a primary target species.