



OWLS OF OHIO **cd** guidebook

DIVISION OF WILDLIFE



Introduction

O W L S O F O H I O

Owls have long evoked curiosity in people, due to their secretive and often nocturnal habits, fierce predatory behavior, and interesting appearance. Many people might be surprised by how common owls are; it just takes a bit of knowledge and searching to find them. The effort is worthwhile, as owls are among our most fascinating birds, both to watch and to hear. Owls are also among our most charismatic birds, and reading about species with names like fearful owl, barking owl, and powerful owl makes many a birder want to visit the distant lands in which these species occur.

Closer to home, examples abound of the popularity of owls. An easily observed nest of great horned owls along busy Cleveland Avenue in Columbus, Ohio was visited by well over 1,000 people while it was active, and featured in local newspapers.

In the winter of 2002, a snowy owl frequented an area near Wilmington in Clinton County, and became quite a celebrity. She was visited by scores of people – many whom had never seen one of these Arctic visitors – and was featured in many newspapers and TV news shows. A massive invasion of northern owls – boreal, great gray, and Northern hawk owl – into Minnesota during the winter of 2004-05 became a major source of ecotourism for the North Star State. Thousands of birders traveled from all over North America and beyond to witness this spectacle.

Ohio is a great state for owls. To date, 12 species have been recorded; more than any adjacent state other than Michigan, which also has tallied 12 species. To put that number into context, there are only 19 regularly occurring species of owls in North America (two others, the mottled owl,

and stygian owl are known from one and two Texas records, respectively. Another, the Oriental scops-owl, is known from two Alaska records). On a global scale, there are 27 genera of owls in two families, comprising a total of 215 species.

In Ohio and abroad, there is great variation among owls. The largest species in the world is the great gray owl of North America. It is nearly three feet long with a wingspan of almost 4 ½ feet, although the smaller great horned owl outweighs it by 15% on average. The smallest is the elf owl of Central America and the southwestern U.S. Less than six inches long and with a wingspan of about one foot, elf owls are smaller than the familiar Northern cardinal. It would take 35 elf owls to equal the weight of one great horned owl.

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Owl Morphology

O W L S O F O H I O

EXCEPTIONAL HEARING owl morphology

Most birds have great hearing; in owls, this sense is truly exceptional, much better than is the case in humans. The “ear tufts” that many species display are not ears at all; rather they are probably just for display purposes. The actual ear opening, known as an aperture, is hidden under the feathers on each side of the head. In some species, each aperture is offset, or asymmetrical, which better helps the owl triangulate on the location of a sound. Owls can more or less instantly tell if a sound has come from the right or left. Studies have shown that the brains of some species of owls can process a right/left difference in the arrival of a sound of only 30 millionths of a second. These highly developed audio abilities allow owls to even catch prey that is hidden under snow!

SPECIALIZED VISION owl morphology

Owls have highly specialized vision, not only to allow them to navigate at night – most are nocturnal – but also to accommodate their highly predatory habits. Owl eyes are enormous, and in some species may encompass up to five percent of the bird’s overall mass. This allows them to more efficiently collect and process light in dim conditions, thus allowing them to visually locate prey under dark conditions. Owl’s eyes face directly forward, providing them with binocular vision, meaning they see an object



Northern saw-whet owl,
showing ear aperture

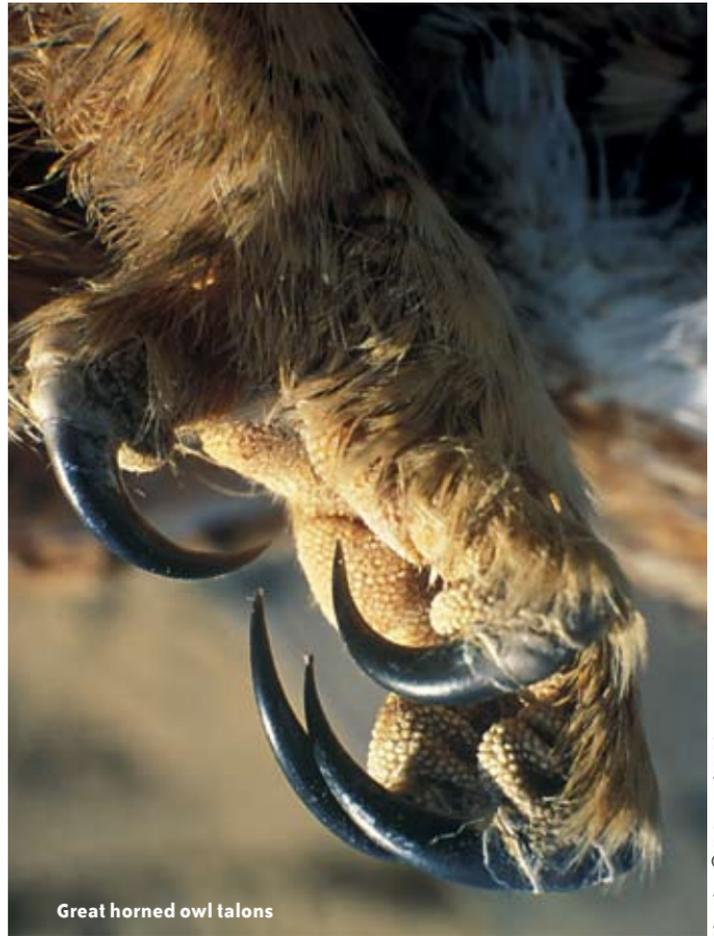
with both eyes simultaneously. Another adaptation is the ability to swivel their heads about 270 degrees, and thus look directly behind them without moving their body. Fourteen neck vertebrae allow this exceptional flexibility; for comparison, humans have only seven vertebrae in the neck.

POWERFUL TALONS AND BILL owl morphology

As befits predators near the top of the food chain, owls have very powerful talons that allow them to forcefully seize prey. In many species, the legs and feet are fully feathered. This is probably primarily an adaptation for cold weather, but these feathers may also help them to “feel” their prey and make rapid adjustments if need be. Each foot has four talons; three face forward and one backwards, creating an exceptionally effective snare. While humans must keep their muscles contracted when holding an object, owls have what is essentially a mechanical locking device that allows them to grasp an object with full force without constant muscle contractions. Their bills are also powerful and hooked, and the owl can exert great force with it. Smaller prey are often quickly dispatched with crushing pressure using the bill.

DIGESTION owl morphology

Owls, like all other birds, cannot chew their food. Thus, smaller prey is swallowed whole, and larger prey is ripped into manageable pieces which can then be swallowed. The problem with this system is that indigestible parts of the animal are also consumed. To effectively rid their digestive tracts of indigestible materials such as bones and fur, owls regurgitate what



Great horned owl talons

are commonly known as “owl pellets.” Within several hours of consuming a meal, indigestible materials are compacted into small oblong pellets comprised mainly of bone and fur, and eventually expelled through the mouth. Researchers studying the diets of owls can pick through these pellets and determine what type and how many animals are being consumed. The presence of owl pellets often leads birders to roosting owls, too.

SOUNDS owl morphology

In general, owl sounds are easily recognized, and in many cases even the uninitiated will be able to recognize the call as that of an owl. A number of species deliver what could best be described as “hoots,” such as the great horned owl, and no one should have any difficulty determining that the singer is an owl. Some calls, however, are not as obviously owl-originated, such as the odd quavering whistles of Eastern screech-owls or the monotone piping of Northern saw-whet owls. In many species, the calls of the male are lower in pitch than the female, and the sexes can be easily differentiated when a pair is calling back and forth. Most if not all owl species also deliver non-vocal sounds such as bill snapping, or in the case of short-eared owls, wing clapping during courtship display flights. The accompanying CD contains many typically heard calls and sounds produced by North American owls.

Owl Mythology



Photo Courtesy of the Ohio Historical Society

Barred owl effigy pipe. Created by Hopewell Indian craftsmen between 100 B.C. and 500 A.D. Found in the Tremper Mound near Portsmouth, Scioto County, Ohio.

History is filled with strange lore about owls. Interesting tales regarding owls date back to the beginning of recorded history; after all, given their mysterious nocturnal habitats and often eerie vocalizations, owls are ripe fodder for superstitions. By turns, owls have been considered omens of good luck, bad fortune, impending doom, wisdom, foolishness, evil and witchcraft, and even predictors of weather.

As far back as ancient Greece, owls were making their mark on the cultural psyche. Athene, the mythical Goddess of Wisdom, was deeply impressed by the charisma of owls, and thus caused them to be held in high regard. In fact, a genus of owls is named after her – *Athene*, which includes the burrowing owl, *Athene cucularia*, of North America.

MODIFIED FEATHERS owl morphology

Owls are truly silent killers; they have specialized feathers that greatly reduce sound caused by air passing over the feathers. The leading edge of the primary flight feathers are *fimbriate*; that is, they have comb-like extensions along the feather's edge that greatly muffle sound, allowing the bird to better ambush prey.



Long-eared
owl flight
feathers.

Photo by: ODNR Division of Wildlife / Jim McCormac

By Roman times, owls had fallen from favor – at least in Rome – and among other things were accused of being transformed witches using the form of owls to suck the blood from infants.

At least some Englishers of long ago viewed owls somewhat more favorably – they thought that seeing an owl brought good luck. This is in contrast to some of their counterparts, who believed the best way to stave off lightning strikes was to nail a barn owl to the barn door, a practice that continued into the 19th century in some quarters.

Bizarre examples of owl mythology abound around the globe. In Cameroon, some believe owls to be so evil that they can't be named, and they are known by the cumbersome “bird that makes you afraid.” Greenlanders take a much more hospitable view of owls, and regard them as a source of helpful direction. Owls in Ireland would be wise to not enter dwellings. A legend there has it that any owl entering a house must be killed immediately, lest it depart and take the home's good luck with it. Fortunately, most owls are not very prone to entering abodes, save for barn owls on occasion. In nearby Scotland, it is considered unlucky to see an owl during the day. They must not have interviewed many birders when developing that superstition. In one of the strangest beliefs of all, Transylvanian farmers once attempted to frighten owls from their fields by walking their land while naked. Depending on the farmer, this strategy might work on nearly anything.

Finally, owls have recently been thrust into the limelight in a major way via the immensely popular Harry Potter series of books and movies. Collectively, J.K. Rowling's six Potter books have sold well over 250 million copies in over 200 countries, and have been translated into at least 60 languages. Owls are prominent characters in these books; they serve as winged messengers transporting mail, and are generally cast in a favorable light. Harry's owl, Hedwig, is based on a snowy owl, *Bubo scandiacus*, a rare winter visitor to Ohio.

Finding Owls

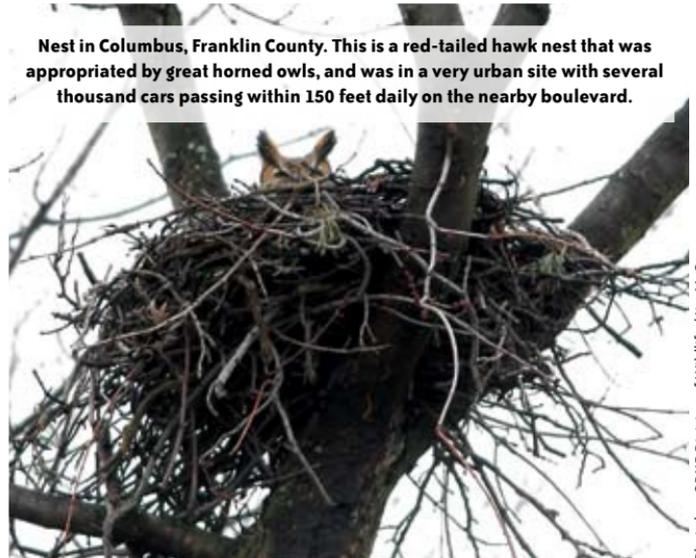
O W L S O F O H I O

Even though several species of owls can be common, given their nocturnal habits they can be tough to find. Few people in Ohio probably realize just how common our “big three” are – Eastern screech-owl, barred owl, and great horned owl. It is likely that nearly everyone reading this is within earshot of an owl, at least at some point during the day. Some good tips that can greatly increase the likelihood of locating owls follow here and in the species accounts.

NEST AND ROOST SITES *finding owls*

Finding owl nests is not always as difficult as it might seem. The easiest Ohio owl to find on the nest is the great horned owl, which nests very early. They often are sitting on eggs in January or February. Most great horned owls use old American crow, great blue heron, or hawk nests, and these large owls can be quite conspicuous as they sit on their nests as no leaves are yet out that would hide them. Inspect such nests carefully in late winter and early spring; the owl’s ear tufts often stick above the nest, giving them away. Barred and Eastern screech-owls - and sometimes great horned owls – normally use cavities in trees or even wood duck nest boxes. Closely inspecting cavities as you move through the woods occasionally results in the discovery of an owl basking at the entrance to the hole.

Other owls require different strategies to locate. Read the species accounts in this booklet for details on their habitats and habits, and techniques for finding them.



Nest in Columbus, Franklin County. This is a red-tailed hawk nest that was appropriated by great horned owls, and was in a very urban site with several thousand cars passing within 150 feet daily on the nearby boulevard.

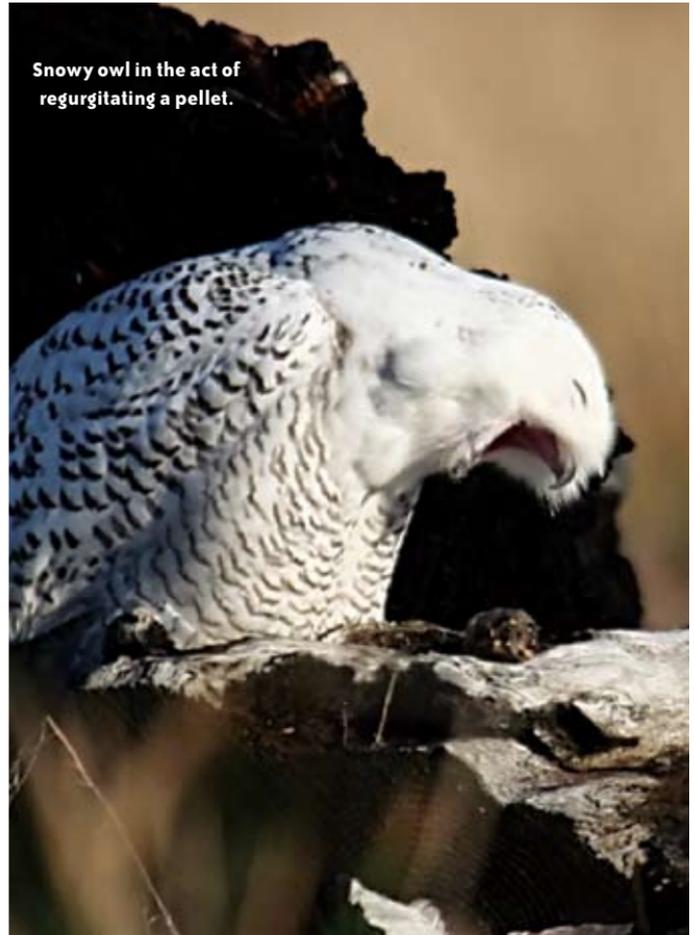
PELLETS AND WHITEWASH *finding owls*

In favored sites, owls will return to roost on a regular basis. Often, these roosts are in dense conifers like pines or spruces. At such sites, owl pellets (see section on digestion) accumulate on the ground beneath the roosting owls. Sometimes it is easier to walk through seemingly suitable roosting spots and look at the ground for pellets, rather than trying to spot the owls concealed in dense cover. If pellets are located, then the trees overhead can carefully be searched for owls. Long-eared owls frequently roost communally, and the pellet beds below their roosts can be quite impressive.

The trees and ground beneath roosting sites are often stained with “whitewash,” or excrement, and areas prominently stained by droppings are always worth investigating. Owl droppings are often quite liquid and very white, and expelled forcefully. Thus, prominent streaks can be left on the branches and tree trunk below the roosting owl. There was a case in Delaware County in which a landowner noticed a gradual accumulation of “whitewash” on one of his bee hives, which was located under a white pine. Finally, he investigated the tree above, and there sat a Northern saw-whet owl, which ended up overwintering at this site.

RECORDINGS *finding owls*

The use of recordings can be a great way to trigger owls to call, but their use comes with a caveat. Playing owl calls to stimulate reactions should be done very judiciously and never more than a few times in any given locale in one season. While a recording often prompts local owls to answer, overuse of this technique may disturb them and cause disruption of nesting. When an



owl hears a recording of its call, it thinks a rival owl has entered the area and comes in to investigate. If the recording is played but briefly and is stopped after a response has been obtained, probably no harm at all is done. However, if the owl is in an area where frequent “owl walks” are taken or for whatever reason people are routinely playing owl tapes, problems may occur.

NIGHTTIME LISTENING *finding owls*

The easiest way to seek owls is to just be outside in suitable habitats at night. Rural locations where ambient noises are reduced are best, particularly on clear windless evenings. Owl vocalizations can carry long distances, and by quietly listening sooner or later you will detect owls. The time of year makes a difference; owls tend to be early nesters and vocalizing increases in early winter and continues through spring, although owls can and will call at any time of year.

MOBBING *finding owls*

Owls are generally not well thought of by their avian brethren, and the hapless owl that is discovered at a daytime roost is often harried mercilessly by other birds. American crows are well known for this, and when they find a roosting great horned owl, their loud cawing reaches a fevered, almost maniacal pitch. These calls draw in other crows, and sometimes quite a mob forms. Great horned owls and other large owls can occasionally be found with the help of mobbing crows.

Small owls, like the Eastern screech-owl, are sometimes mobbed by smaller songbirds like chickadees and nuthatches. As with crows, the frenzied actions of these birds as they swarm an owl can tip off the birder to its presence.



ABOUT THIS BOOKLET AND CD owls of ohio

Of the 12 species of owls that have been recorded in Ohio, only three are common widespread breeders: the Eastern screech-owl, barred owl, and great horned owl. One other, the barn owl, is a rare and local nester, but can be expected in the limited area in which it occurs. Three other species – long-eared owl, short-eared owl, and Northern saw-whet owl – are regular migrants and/or winter visitors, and probably much more numerous than thought as they are easily overlooked. Another species, the snowy owl, occurs sparingly and in varying numbers most winters. Finally, there are two records each of these vagrant owls: the Northern hawk owl, burrowing owl, and great gray owl. The last owl added to the Ohio list is the boreal owl, found in 1997 and to date the only record of this northern species.

Because learning about interrelationships is important to gaining a better understanding of birds, we have also included the recordings of the other seven species of owls that regularly occur in North America. Although an Ohio birder will never encounter these species in the Buckeye state, it is still interesting and educational to hear how their sounds differ – or are similar – to Ohio species. Several of them, such as the western species of screech-owl, are closely related to Ohio owl species.

Owls belong to the order *Strigiformes* (Strij-ih-fore-meez [from *Strix* or *Strigidix*, a screech-owl]) and we have two families within the order in Ohio. The barn owls are in the family *Tytonidae*

(Tie-toe-nih-dee [night owls]) and are represented here by one species. There are 16 species in the *Tytonidae* worldwide. All other owls belong to family *Strigidae* (Strij-ih-dee), the typical owls. There are 199 species in this family worldwide. This booklet is arranged into four categories: regularly occurring Ohio species; rare Ohio species; other North American owls; and accidental North American owls. The species are listed alphabetically within each category.



BARN OWL

Tyto alba (Tie-toe [a night owl] al-bah [white])

TRACKS 2-6

This species has the broadest distribution of any owl, ranging nearly worldwide. In addition to being found across North America as far north as southern Canada, they occur in Africa and Eurasia – even Australia. No owl is more intimately associated with people, and the common name is apropos, as this species often nests in barns or other man-made structures. Adaptability to human civilization coupled with an incredible ability to locate and capture small mammals under the darkest conditions have allowed the barn owl to colonize such a broad range. However, they have declined precipitously in parts of northern North America in recent decades.

DESCRIPTION barn owl

Length = 16 inches

Wingspan = 3.5 feet

Weight = 1 lb.

Sometimes called the “monkey-faced owl,” with good cause. Barn owls have a white, heart-shaped face that is monkey-like, and their head appears quite large in relation to the body. They lack ear tufts. This is one of Ohio’s two owl species with dark eyes, the barred owl being the other. They are very white below, and a tawny brown above. In flight, barn owls seen from below appear very pale ghostly white. When perched, their long legs are very evident. With a good look they are unmistakable.



OHIO STATUS barn owl

Barn owls have had a fluctuating history of abundance in Ohio. They are not found in heavily forested regions, and prior to European settlement 95% of Ohio was blanketed by old-growth forests. If barn owls were present pre-settlement, they would have been rare and confined to the limited areas of prairie and marsh.

As settlement of eastern North American and Ohio progressed, forests were felled and the landscape was opened up for agriculture, greatly benefiting barn owls and allowing them to expand northward. They were first recorded here in the mid-1800s, and populations peaked in Ohio in the 1930s, by which time they had been documented in 84 of our 88 counties. Early Ohio ornithologist Lawrence Hicks described them as being Ohio's second most common owl at this time, after the Eastern screech-owl – a status nearly incomprehensible today, given their great rarity.

By the mid-1900s, they were in steep decline, and the population bottomed out around 1990, with a statewide population of perhaps one or two dozen nesting pairs. Today, barn owls are listed as threatened by the Ohio Division of Wildlife, but programs by the Division and other interested parties have increased populations substantially. By placing nest boxes in suitable structures near good foraging habitat, Ohio's barn owl population has increased to 50 pairs or so.

HABITAT barn owl

Barn owls require extensive tracts of grasslands, marshes, and meadows to forage. This is a primary reason for their decline; agricultural practices have become much “neater” and there are not nearly as many fallow fields and untilled land as there was when they were at their peak. It is likely that good grasslands must be older and established to provide maximum benefit, as they must support viable populations of voles and mice, the major prey of barn owls. There must also be suitable nest sites nearby, and this is another limiting factor.



HABITS barn owl

Few birds are as strictly nocturnal as barn owls. They roost in barns or other structures, or sometimes dense conifers, during daylight hours and normally don't begin foraging until well after dusk. Barn owls hunt over open fields, and patrol for prey with a rather sluggish, buoyant flight. When surprised at the nest site, they hiss, lower their head towards the ground and sway from side to side, and often spread their wings to appear larger.

DIET barn owl

Small mammals make up the vast majority of prey items. In particular, the meadow vole, *Microtus pennsylvanicus*, is a staple of barn owl diets, as this small mouse-like rodent is very common in habitats favored by these owls. In some areas, meadow voles can comprise nearly 100% of the diet. Other small mammals are taken as well such as bats, flying squirrels, chipmunks, rabbits, and sometimes small birds.

On average, two pellets are expelled daily, and each pellet is ejected about 6-8 hours after the meal has been consumed.

NESTING barn owl

Most barn owl nests are located in barns; usually high in a loft or some niche well off the floor. A variety of other man-made structures might be used, such as under bridges, in abandoned wells, old houses, and church steeples. Very rarely, at least now, barn owls will use cavities in trees. Nesting success has been greatly bolstered



Fresh barn owl pellets, collected near a nest site in Jackson County.



Roosting barn owls high on a barn's hay rail in Holmes County.

by people placing nest boxes in barns, thus providing suitable nest sites where none were present before.

Most nesting takes place from March through May, although if food is plentiful barn owls may attempt to nest at any time of the year. The average clutch size is five eggs, although more might be produced under especially favorable circumstances.

VOCALIZATIONS barn owl

This species definitely does not make hooting sounds that many people associate with owls. Rather, barn owls typically deliver a drawn-out shriek, with the female's call supposedly a bit less harsh and quieter than the male's. They also utter defensive hisses, and on occasion a variety of other twittering or snoring sounds.

INTERESTING FACTS barn owl

- ▶ Barn owls can be long-lived. The record for a wild bird is 34 years of age. However, the average life span is just under two years.
- ▶ Some barn owls are polygynous, or have more than one mate at a time. While it is mostly males who engage in this practice, some females are also known to mate with more than one male.
- ▶ Barn Owls are undoubtedly responsible for many reports of “haunted houses.” Their tendency to nest in old structures, including the attics of abandoned houses, coupled with their ghostly white plumage and hissing screams, have no doubt spooked many an uninitiated person.



Known barn owl nest site,
Jackson County

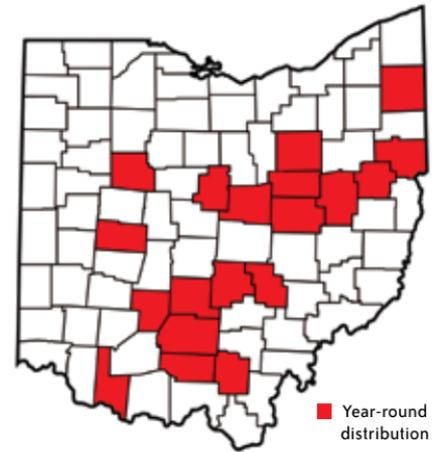


TIPS FOR FINDING A BARN OWL

This is not an owl that one is likely to stumble into unexpectedly. As can be seen from the range map, barn owls are quite localized in Ohio, occurring mostly along the glaciated Allegheny Plateau. Furthermore, most barn owls nest and roost in barns, and permission must be granted to look for them in these sites. As a threatened species, great care must also be exercised to avoid disturbing them. By far the best way to observe one is to find a cooperative farmer who has them in his barn or silo, and obtain permission to view them. Even when they are known to be in a barn, spotting one is not always easy, as barn owls often roost high on the hay rail at the extreme top of the barn, and can blend well with the dusky gloom of a barn's interior.

Another good strategy for detecting barn owls is to search the floors of barns for owl pellets. In barns that are regularly used by barn owls, there will be many pellets scattered about, particularly under the areas where the owls regularly roost. Barn owls often use different barns for roosting, so they may not be present on a given visit. But the presence of fresh owl pellets is a surefire sign that they are using the barn and a return visit may result in a sighting.

The areas of greatest barn owl densities are Holmes and Wayne counties, especially in the vicinity of Killbuck Marsh Wildlife Area; and Pike and Ross counties.



BARRED OWL

Strix varia (*Strix* [a screech owl; not very apropos] var-ee-ah [variegated; because of plumage pattern])

TRACKS
7-12

No other Ohio owl produces the bizarre sound effects of this species. When a pair of barred owls begins hooting and caterwauling back and forth in a pitch-black forest, the sounds they produce can make the hair on the back of your neck stand up. The following quote from ornithologist Arthur Cleveland Bent is a colorful description of barred owl talk: "The antiphonal hootings of a pair of these owls, heard at any time of the day or night, will hold the hearer spellbound; when heard close at hand at night, they are fairly startling, as if a pair of demons were fighting."

DESCRIPTION barred owl

Length = 21 inches

Wingspan = 42 inches

Weight = 1.6 lb.

Barred owls are large, and in measurements nearly equal that of the great horned owl. However, they are not nearly so powerful and bulky, weighing not much more than half of that species on average. This is one of only two Ohio owls with dark eyes, the other being the barn owl. All other species have yellow eyes. Barred owls lack ear tufts, but have very prominent facial discs. They are mostly brown above, with some white mottling, and prominently marked with vertical brown streaking below.

Females are slightly larger than males, but the difference is so slight that it can be hard to separate the sexes even when a pair is seen together.



Adult barred owl

OHIO STATUS barred owl

Barred owls are common to fairly common statewide, but their presence is dependent upon the availability of suitable habitat. While they once would have been very common throughout the Till Plains of western Ohio, they can now be hard to find in many counties in this region. The first Ohio Breeding Bird Atlas, conducted from 1982-87, documented them in nearly every Ohio county, although owls are few and far between in some counties. They have likely increased somewhat since that time, as Ohio forests continue to mature.

HABITAT barred owl

This is a species of mature forests, with a particular affinity for poorly drained swampy woods and forested ravines. They are especially likely to be found in woodlands with plenty of mature American beech, *Fagus grandifolia*, as these trees habitually form the hollowed out cavities that barred owls often use for nesting. Barred owls are tolerant of some forest fragmentation, but do best in larger, unbroken blocks of woodlands. Older forests provide better habitat, in part because there will be larger timber that is more likely to have suitable cavity nesting sites.

HABITS barred owl

While primarily nocturnal, barred owls can often be heard calling during daylight hours, especially on overcast days. These are very vocal owls, and sometimes call for extended periods of time. They respond well to tapes of their calls, or even crude imitations by people. Owls responding to tapes typically fly in quietly and observe the situation in silence for up to several minutes. If the owl was not observed as it flew in, one would not know it was close at hand. Eventually, it will begin to call, and this often stimulates its mate to join in. In many cases, the pair will start caterwauling back and forth, filling the woods with a raucous cacophony of sounds.

Barred owls have a light, graceful flight, and maneuver with ease through dense forest canopies. As they are loath to leave heavily wooded habitats, all of their hunting is done in the forest. Typically, they will hunt from a perch, waiting for prey to appear. Like other owls, their vision and hearing are outstanding and allow them to locate prey even in pitch-black conditions. Peak activity tends to be shortly after nightfall.



Barred owl being scolded by a gray squirrel. Harassment of owls by other birds and small animals is common and their loud, scolding calls can often lead an observer to the owl.

DIET barred owl

Barred owls probably consume small mammals like mice and voles primarily, but they will capture a diversity of small prey. Some studies have shown high percentages of amphibians in their diet, and this makes sense given their affinity for wet wooded habitats. It is likely that many barred owls in Ohio shift to a diet heavy in amphibians during warm months, but this is hard to document as pellets composed mostly of amphibians rapidly disintegrate after being expelled. These owls also take small birds, reptiles, and even aquatic prey such as small fish. They have been observed actively wading in shallow water attempting to seize fish or other aquatic animals.

NESTING barred owl

Most barred owls use tree cavities as nest sites, often where broken limbs have created a recess within the tree. Occasionally, they will nest in abandoned stick nests built by American crows, red-tailed hawks, or other raptors. Barred owls typically lay their clutches of two or three eggs in early to mid-March. The incubation period is about 30 days, and young hatch in April. The young birds leave the nest after four or five weeks, but remain in the immediate vicinity. They are not capable of strong flight until three months or so of hatching, and it takes them six months to fully molt into adult plumage.

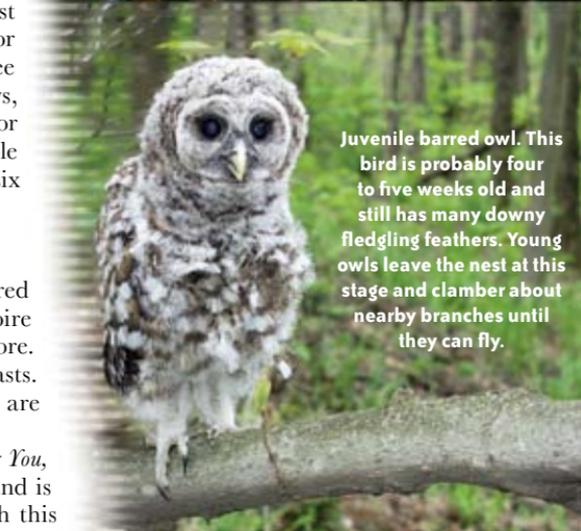
VOCALIZATIONS barred owl

Few nighttime sounds are as loud and extravagant as a pair of barred owls in full song. Once they get going, a pair might keep up their repertoire of hoots, screams, chuckles and other odd sounds for half an hour or more. More than one camper has had their sleep disrupted by these noisy beasts. When two pairs engage in territorial squabbles, the sounds produced are enough to scare an uninitiated person out of the woods.

The typical call is often described by the mnemonic *Who Cooks For You, Who Cooks For You All*. This song is unmistakable and often heard, and is used to announce territories. A pair will often engage in duets with this



Barred owl on nest. This site is typical; a hollow formed within an older tree.



Juvenile barred owl. This bird is probably four to five weeks old and still has many downy fledgling feathers. Young owls leave the nest at this stage and clamber about nearby branches until they can fly.

song, occasionally veering off into caterwauling hoots and screams. Both sexes give a two-note *Hoo-aww* call that serves as a contact call between the pair. Fledglings give a high-pitched ascending squeal, often trailing off at the end, which is used as a begging call when seeking food from the adults.

INTERESTING FACTS barred owl

- ▶ Barred owls are one of two Ohio owls with dark eyes; all others but the barn owl have yellow eyes.
- ▶ Their calls are easily mimicked and barred owls are very responsive to imitations; even barking dogs have been known to set them off.
- ▶ Closely related to and known to hybridize with the spotted owl, which has become a symbol of old-growth forests in the western U.S.
- ▶ The oldest documented wild barred owl was over 18 years old.

TIPS FOR FINDING A BARRED OWL

Oftentimes, no real effort is necessary; the loud raucous calls of this talkative species will reveal the presence of barred owls from long distances. They will even call during the day, especially when skies are overcast. Sometimes, barred owls are found roosting in trees during the day, and are often rather tame and approachable. Dense stands of large pines are sometimes used by roosting owls, and checking such groves may produce owls.

When suitable habitat is located, such as swampy woods or large, forested ravines, barred owls can be coaxed into vocalizing by imitating their calls. When attempting to call them in, exercise patience. A very common modus operandi for barred owls in response to imitations of their sounds is to quietly fly in to observe the situation. If you did not catch a glimpse of the owl as it flew into a nearby tree, you'd have no idea it was there. Frequently the owl will sit quietly for several minutes before calling. Once it does start up, its hooting often entices the mate over, and the pair will engage in a raucous duet.



EASTERN SCREECH-OWL

Megascops asio (*Meg-ah-scops* [great little horned owl] ay-see-oh [a king horned owl])

TRACKS
13-17

This is the most common owl in Ohio, and occupies more ecological niches than our other species. It was long placed in the genus *Otus*, but recent DNA work with this group of owls has shown North American species to be distinct enough from their Old World counterparts that segregation into a different genus is justified. The Eastern screech-owl occurs throughout the eastern half of the U.S., barely ranging into southern Canada. Its range largely parallels that of the eastern deciduous forest. This species is replaced in western North America by the Western screech-owl. The whiskered screech-owl of Central America barely enters the U.S. in Arizona and New Mexico.

DESCRIPTION *screech-owl*

Length = 8.5 inches

Wing span = 20 inches

Weight = 6 ounces

Screech-owls are by far the smallest owl that one is likely to encounter in Ohio; they are about the same size as an American robin, although twice as heavy. The only other common breeding owl with prominent ear tufts is the great horned owl, which is nearly three times larger and eight times heavier. Long-eared owls, which are generally uncommon and local winter visitors and very rare breeders, also have conspicuous ear tufts. However, they differ in being nearly twice as large and are much more elongate in general shape, and have prominent orange-buff facial discs.

There are two primary color morphs in Eastern screech-owls, red and gray. Red morphs are most frequent in southern Ohio where they may be as common as gray morphs, at least locally, and gray morphs become predominant to the north. In northwestern Ohio, 75 to 90 percent of screech-owls are of the gray morph. There is also a much rarer intermediate brown morph.



Photo by: Ohio Department of Natural Resources / Al Staffan

OHIO STATUS *screech-owl*

The Eastern screech-owl is easily the most common owl in the state, and occurs in every county. They are often plentiful, and searchers making concerted efforts to locate them can often find 15-20 birds in a few hours. An example of just how common screech-owls can be was documented during a 1982 Toledo area Christmas Bird Count. In just a 15 mile diameter area, bird counters found 112 screech-owls in 24 hours!

This species is near the northern limits of its range in Ohio, and populations in counties near Lake Erie can be vulnerable during very cold or snowy winters. At such times there can be significant localized mortality.

One reason for their greater abundance as compared to our other common owls, the great horned and barred owls, is that Eastern screech-owls require much smaller territories. One pair may only require a dozen or so acres if the habitat is optimal. They also occupy a broad range of habitat types that are commonly found throughout the state.

HABITAT *screech-owl*

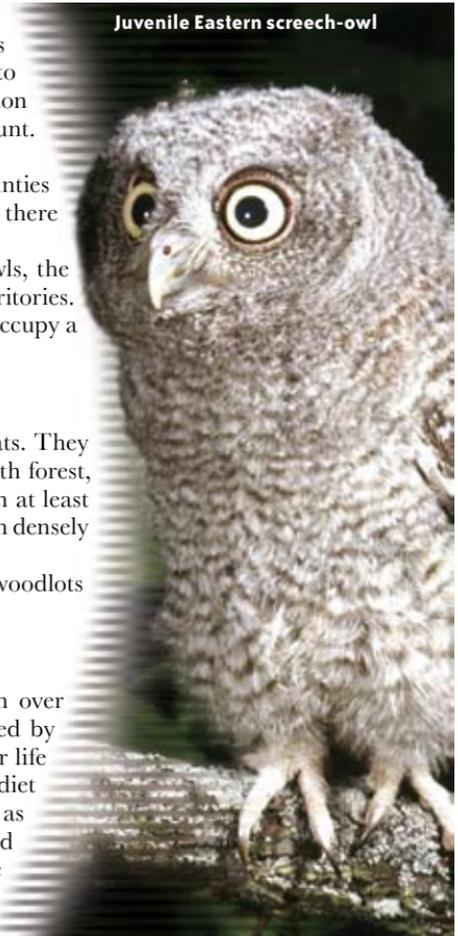
A generalist, the Eastern screech-owl routinely occurs in a wide array of habitats. They occur in all manner of woodlands, but are least likely to occupy dense older-growth forest, particularly those with a dense understory. Urban and suburban sites that contain at least scattered large shade trees are likely to have screech-owls, and they are often found in densely populated areas.

Optimum habitats are areas with scattered large trees and rather open woodlots interspersed with fields and pastures, particularly if a stream is nearby.

DIET *screech-owl*

One of the landmark studies on Eastern screech-owl biology was undertaken over a period spanning over 30 years in northwestern Ohio. This research, conducted by Laurel Van Camp and published in 1975, revealed many interesting facets of their life history, including dietary information. Eastern screech-owls have the most varied diet of any North American owl, with at least 138 species of vertebrates and at least as many invertebrates documented as prey items. Everything from cedar waxwings and woodpeckers to a variety of snakes, lizards, salamanders, crayfish, and insects are consumed. An odd but regular staple of the diet are fish of a number of species, including catfish, minnows, and sunfish.

Juvenile Eastern screech-owl



NESTING screech-owl

Screech-owls are obligate cavity-nesters and normally select natural cavities, such as those formed by broken-off limbs. Perhaps 1/3rd of them will use abandoned woodpecker nests, and the Northern flicker seems to be the most frequent excavator of such nest sites. Appropriately constructed nest boxes placed in suitable spots often will attract screech-owls, too. Nest heights vary greatly, from nearly ground level to over 60' high; elevation does not appear to be a major factor in nest placement. Placement of a nest box is an excellent way to entice Eastern screech-owls to nest.

On average, egg-laying commences in mid-March, and clutch size is normally four white or off-white eggs, although as few as two or as many as six might be laid. These are incubated for about a month, and the young depart the nest about four weeks after hatching.

VOCALIZATIONS screech-owl

Easily imitated by a good whistler, screech-owls don't normally "screech"; rather they emit quavering whistles. There are two primary vocalizations, and these are often heard and easily mimicked. Males have a lower-pitched voice, and this difference can be heard if both sexes are calling together. One principal vocalization is a monotone trill; a drawn-out quavering tremolo. This is a "contact song"; it is used between pairs or family units for communication. The other common sound is a descending trill, which is reminiscent of a horse's whinny. Occasionally heard are quiet hoots, barks, or screech-like sounds.

Eastern screech-owls often seem ventriloquous and it can be hard to gauge how far away the bird is. A calling bird is often closer than it may seem. Sometimes birds will sing inside nest cavities – often males announcing nest sites to females – and thus the song will be greatly muffled. The frequency of vocalizations seems greatest on clear moonlit nights.

Green Lawn Cemetery in Columbus.
Cemeteries often provide good
screech-owl habitat.



"Red" Eastern screech-owl

"Gray" Eastern screech-owl

INTERESTING FACTS screech-owl

- ▶ Easily the most common Ohio owl
- ▶ The only eastern North American owl with two distinct color morphs – red and gray
- ▶ Eastern screech-owls have the most varied diet of any North American owl, eating everything from earthworms to songbirds

TIPS FOR FINDING AN EASTERN SCREECH-OWL

With a bit of knowledge, Eastern screech-owls are very easy to find, and one might be surprised at not only how common they can be, but at the places they'll turn up. Even urban and suburban sites with scattered trees harbor screech-owls. The easiest way to find them is to venture out on clear nights, and listen. Judicious playing of their songs – or imitating them if you are a good whistler – frequently provokes a response.

While they might turn up nearly anywhere, an ideal habitat is young or semi-open woods, preferably with a stream nearby. In such places, two or three owls might be heard calling simultaneously.

It always pays to take a good look at tree cavities during the day. Occasionally, a drowsy owl will be spotted at the entrance to the cavity and can be admired at length. Take note of abnormally excited flocks of small birds like chickadees, nuthatches, and titmice. These species often “mob” screech-owls found roosting in grapevine tangles or other dense cover during the day and frenzied groups of small songbirds occasionally lead an observer to a roosting screech-owl.



GREAT HORNED OWL

Bubo virginianus (*Sew-bo [eagle owl] ver-jin-ee-ain-us [of Virginia; location of first specimen]*)

TRACKS
18-24

An 1890 quote from famed naturalist Ernest Thompson Seton sums up this owl well: "...their untamable ferocity... magnificent bearing... strictly carnivorous tastes... would make me rank these winged tigers among the most pronounced and savage of the birds of prey."

These powerful predators are near the top of the avian food chain, and one of their colloquial names, "cat owl," is an indication of the size of prey that they can take. The great horned owl is the second most common Ohio owl, after the Eastern screech-owl. They occur across the length of North America, to the limit of trees where the tundra begins in the north, and south through Central America and into South America. At least 16 subspecies have been described, and plumage variations among these subspecies follow Gloger's Rule: the darkest populations occur in the most humid areas. Great horned owl and snowy owl are the only members of the genus *Bubo* in the Western Hemisphere; about a dozen other species are found in Africa and Eurasia.

DESCRIPTION great horned owl

Length = 22 inches

Wingspan = 44 inches

Weight = 3.1 lb.

This is our largest resident owl, and great horned owls appear very powerful and thick-bodied. They are our only large owl with prominent ear tufts; the next largest tufted owl is the long-eared owl, which is five times lighter and about 1/3rd smaller overall. Long-eared owls are generally much scarcer, only likely to occur from late fall through early spring, and are quite secretive and seldom vocalize



Adult great horned owl

here. The combination of large ear tufts and massive size should make great horned owls easy to identify. Females are larger and more massive, averaging about $\frac{3}{4}$ of a pound heavier than males.

OHIO STATUS great horned owl

Great horned owls are common statewide, and occur in every county. Because they can accept a variety of different habitats, they are found in areas where other owls seldom are present. They are scarcest in the large, mature forested regions of southeastern Ohio, as unbroken woodlands are one of the few habitats that great horned owls are rarely found in.

Amazingly, this magnificent species became quite rare – at least locally – in Ohio by the early 1900s. Reviled as a predator thought to regularly kill more desirable animals, great horned owls were frequently shot and no laws were in place to protect them. Their populations plummeted and they became rare if not extirpated in many areas. By the early 1940s, species such as this were finally under legal protection, and their numbers rebounded.

HABITAT great horned owl

The best great horned owl habitat is in areas where the landscape is a mosaic of scattered woodlots, open fields and meadows, marshes, and other open to semi-open habitats. They generally shun large, older-growth forests. Peak populations are found in places with large marshes interspersed with small patches of woods and open fields, such as are commonly found along western Lake Erie. They are rather easily found in heavily agricultural areas, and often occur in suburban sites. On occasion, great horned owls even occupy very urban sites within cities, and will feed on Norway rats at dumps.

HABITS great horned owl

Almost strictly nocturnal, great horned owls become active after dusk, both in terms of hunting and calling. Only rarely are they seen during the day, unless discovered at a roost site. These fierce predators typically hunt from a perch, scanning the area for prey and when a potential meal is spotted, dropping from their lookout and rapidly pouncing on the victim.



Normally solitary except during the nesting season, great horned owls often roost in large trees, particularly conifers, and if flushed depart with strong, deep wingbeats in a direct and powerful flight.

DIET great horned owl

As one of the largest and most powerful owls anywhere, great horned owls can capture substantial prey. In many areas, rabbits are the most common food item, but this species is thought to consume the greatest diversity of vertebrates of any North American raptor, and a wide array of animals are regularly captured by these opportunistic hunters. After rabbits, larger rodents such as Norway rats, muskrats, and woodchucks are probably the most common food items. Great horned owls also regularly take mice, voles, birds of many species up to the size of ducks and the ring-necked pheasant, various reptiles, and even large insects. This is one of a few predators that routinely captures skunks.

Pellets are fully cast and expelled about 16 hours after the owl consumes a meal, and as befits the size of the bird, are generally the largest of our owls (see photograph).

NESTING great horned owl

About half of Ohio's great horned owls commandeer large stick nests built by other birds, such as red-tailed hawks, American crows, and great blue herons. Most of the other nests are located within broken-off tree snags or large relatively open cavities within trees. The presence of nesting great horned owls can often be discovered by carefully watching suitable nests for the telltale "ears" projecting over the top. Great blue heron rookeries are always good places to detect breeding owls, as they often take over one of the heron nests. As befits their place at or near the top of the bird world's food chain, great horned owls have even been known to drive bald eagles from their nest and assume it as their own.

Nesting is very early; this species normally commences courtship and breeding before any other species of bird in Ohio. Males will begin

Young great horned owls. These birds are about five weeks old.



hooting in mid-to late fall, and eggs are often laid by the end of January. The owls' insulating down is extremely efficient and able to warm the eggs to about 98 degrees, even when temperatures plummet to below zero Fahrenheit. Incubation lasts about a month, strictly by the female, and the young typically hatch in late February or March. Within six weeks, the young owls are active and able to climb about, at which point they may scramble onto limbs away from the nest. Forty-five to fifty days after hatching, they are capable of flight.

VOCALIZATIONS great horned owl

Great horned owls produce classic hooting that even people with very little familiarity with owls should easily recognize as an owl. Typical territorial hooting, which is the most commonly heard vocalization, is a loud, uniform series, typically of five or six hoots, but sometimes only four: *Whooo-hoo-hoo-hoo-hoo* with the first three hoots somewhat more emphatic and the last few more drawn out. This call carries long distances, and can be heard up to a 1/2 mile or more on a still night. Pairs often duet back and forth, and the sexes can be easily differentiated. Males have a deeper, mellower quality.

Also heard on occasion, especially around active nest sites, are a variety of screams suggestive of hawks, delivered by alarmed adults or begging young. Adults are also capable of a broad array of sounds, including dog-like barking calls, soft whistles, and low laughing sounds. As with all owls, great horneds can produce surprisingly loud clacking sounds by snapping the mandibles of their bills together.

INTERESTING FACTS great horned owl

- ▶ Great horned owls can take larger prey than most raptors, including skunks, domestic cats, barred owls, and even osprey
- ▶ Of North American owls, only the Arctic-nesting snowy owl is heavier. It would take 135 American goldfinches to equal the weight of an average female great horned owl.
- ▶ Probably the longest-lived of our owls. One wild individual was documented through banding to have lived to nearly 29 years.
- ▶ Humans intruding on nest sites should take care. Great horned owls are known to strike people with their talons, and you probably won't hear them coming.



Great horned owl pellets. This photo shows a pellet that has been broken apart to show the fur and bone fragments that form the bulk of owl pellets.

TIPS FOR FINDING A GREAT HORNED OWL

The easiest way to locate this species is to venture into open countryside on clear nights, ideally from November through March, and listen for calling owls. Their vocalizations carry great distances, and often a pair will be heard calling back and forth. Playing tapes to encourage callbacks often meets with only marginal success, as the owls frequently seem to ignore tapes. Studies have shown that only about 1/3rd of females within the vicinity of taped calls responded, although a higher percentage of males did call back.

Studying large stick nests of raptors and herons in late winter/early spring will often reveal the presence of nesting owls. Look carefully for their ear tufts protruding above the nest. Another way this species is often detected is by the unintentional assistance of mobbing American crows. When crows locate a roosting owl during the day, they often go into a frenzy, and their caws take on an unusually stressed, strident quality which attracts even more crows.

An unusual way that great horned owls are sometimes found is by smell. As they regularly kill skunks, they can also get heavily dosed with the skunk's pungent discharges. Their nests can become saturated with the aroma, too. Smelling the strong odor of skunk from odd places, such as high in a tree, might lead to an owl.

Large cemeteries are excellent places to look for great horned owls. They can sometimes be found roosting near the tops of large ornamental conifers. Killdeer Plains Wildlife Area and the vicinity of Magee Marsh Wildlife Area and the marshes of western Lake Erie are great places to find this species. Listening for their calls shortly after dusk often produces birds.

Finally, canoeing creeks and rivers is almost a surefire way to find great horned owls. They often roost in large streamside cottonwoods and sycamores, and will frequently flush in front of the canoe.



LONG-EARED OWL

Asio otus (*Ay-see-oh* [a type of horned owl] *oh-tus* [an eared owl])

TRACKS
25-29

This species is somewhat suggestive of a great horned owl, but is much smaller and not nearly so common. Long-eared owls are largely birds of the boreal forest of Canada and the northern U.S., and are only expected in Ohio in migration and winter. There have been documented nestings in the state, and breeding birds might be more frequent than thought, but could be easily overlooked. This is true of wintering birds, too. Long-eared owls are virtually never heard calling in Ohio, although they certainly would vocalize around breeding sites. Wintering and migrant owls are normally silent.

A wide-ranging owl, long-eareds also occur across Eurasia, and resident populations are found in parts of Africa, the Azores, and Canary Islands.

DESCRIPTION *long-eared owl*

Length = 15 inches

Wingspan = 36 inches

Weight = 9 ounces

Three species of Ohio owls have prominent ear tufts; this one, great horned owl, and Eastern screech-owl. The long-eared owl, which is the least likely to be encountered, obviously differs in its orange facial discs and size, which is intermediate between those two species. Long-eareds are in the same genus as the short-eared owl, and look extremely similar to them in flight, although unless flushed, long-eared owls are not normally seen flying during the day. While superficially similar to great horned owls, long-eareds are but 1/5th as heavy, noticeably smaller and more slender in overall dimensions, and have more erect ear tufts that are set closer together.



Relaxed long-eared owl.
Note lowered ear tufts and plump body

OHIO STATUS *long-eared owl*

While this owl is undoubtedly more common here than thought, relatively few birds are found. Most turn up in winter, when their roosts are discovered. These roosts might contain anywhere from a few birds to, on rare occasions, 20+ individuals. Perhaps six to twelve long-eared owl congregations might be reported in a winter, and they can turn up anywhere in the state, but are least likely in the unglaciated hill country.

Migrants also are found sometimes, mostly in March and April, and in November. They are extremely hard to locate in migration, as they migrate individually and are prone to hiding in very dense cover, such as thick grapevine tangles, during the day. Most migrants are found in places that get heavy visitation by birders, and there are many eyes carefully searching the habitat.

Documented nesting records are scarce, and Ohio is on the southern edge of long-eared owls' breeding range. This species undoubtedly is a rare breeder in Ohio, but like migrants and wintering birds, probably somewhat overlooked. Owls have been documented nesting in 22 counties, primarily in the northern 1/3rd of the state. Almost all of these breeding records are many decades old; recent nestings are few.

HABITAT *long-eared owl*

Long-eared owls are the strictly nocturnal counterpart of short-eared owls, which are largely diurnal. They hunt over open fields and meadows, and will concentrate in sites that have plenty of meadow voles and other small mammals, as rodents are their primary prey.

Good daytime roosting habitat near the hunting fields is essential. Long-eareds are attracted to conifers in particular, and pine plantings within or near fields are frequently used. They will also roost in native red cedars, which are particularly common in areas where underlying limestone is near the surface, such as southwestern Ohio. Owls will also use grapevine tangles, and sometimes pin oaks, which tend to have dense branching and retain their leaves well into winter, thus offering concealment.

Migrant owls can sometimes be found in large cemeteries, where they may spend the day roosting in ornamental conifers.



Photo by: © Gary Meszaros

HABITS long-eared owl

Strictly nocturnal, long-eared owls will not be seen hunting during the day and do not become active until it is almost completely dark. Hunting owls are very suggestive of short-eared owls, and like that species, fly with very deep wingbeats interspersed with long glides with wings held flat.

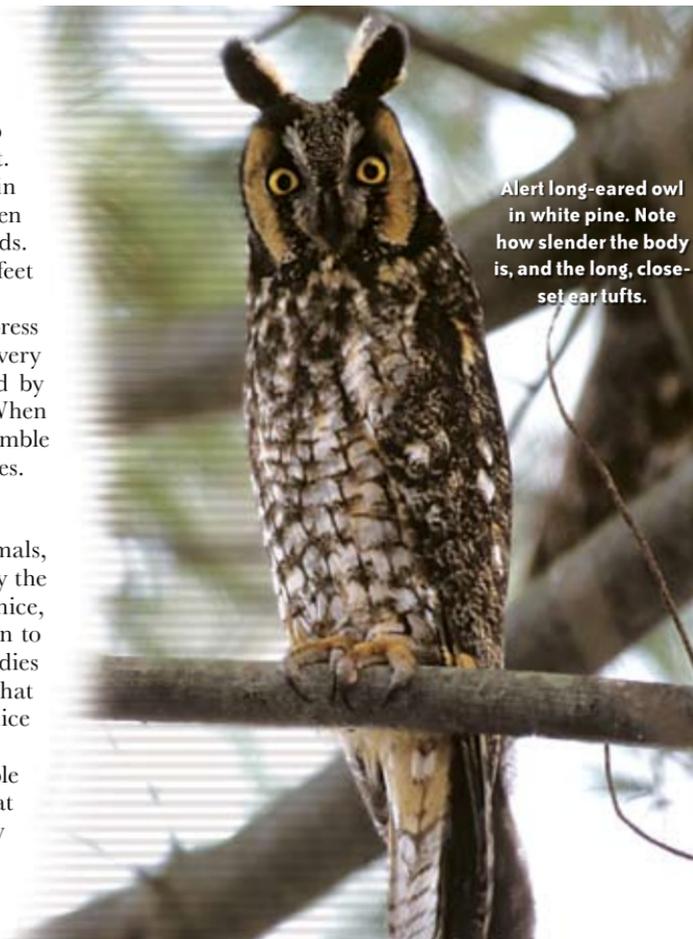
A social owl, long-eareds don't appear to maintain territories other than around active nest sites. They are often found in winter roosts, which sometimes number over 20 birds. In such roosts, the owls will often be perched within a few feet of each other.

When potential threats appear, long-eared owls can compress their bodies to amazingly slender proportions, and look very much like a broken-off branch. If not regularly harassed by people, these owls can sometimes be closely approached. When flushed into the open and seen in flight, they closely resemble short-eared owls and are sometimes mistaken for that species.

DIET long-eared owl

Most long-eared owls in Ohio capture small mammals, primarily. The meadow vole, *Microtus pennsylvanicus*, is likely the most common prey in most areas, but many species of mice, voles, and other mammals are taken. They are also known to capture small birds when opportunities permit. Dietary studies of long-eared owls in North America have documented that over 90% of the prey items were voles (*Microtus*) and mice (*Peromyscus*).

Tests have demonstrated that long-eared owls are capable of capturing mice in complete darkness, suggesting that their ability to triangulate on specific objects via a strongly developed sense of hearing is quite advanced. Mammals are normally dispatched with a powerful bite to the back of the skull; captured birds are beheaded.



Alert long-eared owl in white pine. Note how slender the body is, and the long, close-set ear tufts.

NESTING long-eared owl

Long-eared owls use the abandoned stick nests of other birds almost exclusively. Host species include the red-tailed hawk, Cooper's hawk, and American crow. The latter two species are probably the most frequent nest donors of Ohio-nesting long-eared owls.

Pairs probably form sometime after winter roosts disband, and eggs are laid in March or April. Most clutches contain five or six eggs, and these are incubated exclusively by the female. Hatching occurs at about 28 days, and the young remain in the nest for about three weeks. The owlets are sometimes referred to as "branchers," as when they depart the nest they remain in nearby trees and move around by climbing about branches using their bill and talons. They begin to fly about five weeks after hatching.

VOCALIZATIONS long-eared owl

These owls very seldom call away from active nest sites. The typical advertising song, given by the male and the most commonly heard vocalization, is a series of deep uniform hoots, spaced a few seconds apart. Females give a nest call during the early part of the breeding season; this is a rather nasal-sounding hoot, and may be given in response to the male's hoots.

Displaying males often clap their wings during courtship; this sound is surprisingly loud and sounds somewhat like hands being clapped together. Like all owls, long-eareds can create loud clicks by snapping their bills when disturbed.

A wintering owl "hotspot" at Killdeer Plains Wildlife Area in Wyandot County. This is a mature planting of white pine within a large area of open fields that attracts many raptors. Both long-eared owls and Northern saw-whet owls are often found roosting in these pines.



Long-eared owl pellets

Photo by: ©Gary Meszaros

INTERESTING FACTS *long-eared owl*

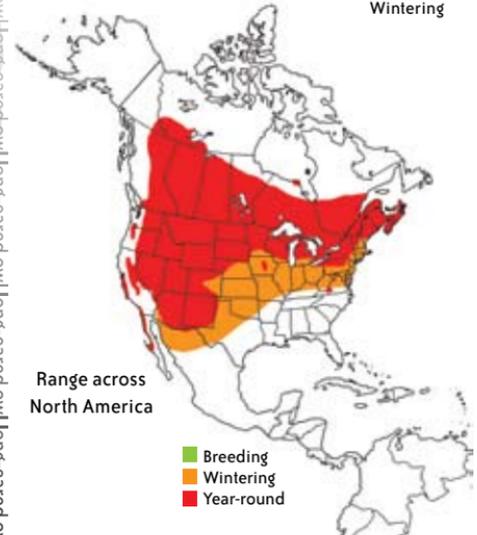
- ▶ Our only owl to form communal roosts. The largest roosts found (not in Ohio) have contained over 100 birds!
- ▶ Long-eared owls have some of the most acute hearing among owls; they can capture prey in total darkness.
- ▶ When threatened, long-eared owls can compress their bodies to incredibly slim proportions, and by also raising their ear tufts, assume a striking resemblance to a broken tree limb.

TIPS FOR FINDING A LONG-EARED OWL

Perhaps the best way to locate this species is to seek out winter roosts. The easiest way to do so is to first locate good hunting grounds, such as fields that seem to have an abundance of prey like meadow voles. If you find a site that supports plenty of avian predators like short-eared owls, Northern harriers, and rough-legged hawks, the area may also have long-eared owls. Once a seemingly suitable habitat is found, look for good roosting spots. Thick groves of conifers, like white pines, are ideal. Stands of pin oak may be used, as will grapevine tangles. Searching such haunts may turn up owls.

When searching potential roost sites, be sure to watch the ground closely for pellets. Long-eared owls can blend with their surroundings so well that they can easily be missed; sometimes, a pile of pellets is the only clue that they are overhead. Also, be wary of mistakenly identifying flushed long-eareds as short-eared owls. The two species look extremely similar in flight. The upper wings of long-eareds are grayer, the buff-colored patch near the end of the wings is less prominent, and they are more heavily streaked below. These differences can be tough to see in short glimpses of a fleeing owl, though.

Playing recordings of calls probably will not work well with long-eared owls, as they don't seem very responsive to vocalizations away from nest sites.



NORTHERN SAW-WHET OWL

Aegolius acadicus (ee-jole-ih-us [a kind of owl] ah-kade-ih-cus [of Acadia; first specimen was from Nova Scotia])

TRACK
30-35

Ornithologist Arthur Cleveland Bent, writing in the 1930s, had this to say about the Northern saw-whet owl: “I shall never forget the thrill I experienced when I first met this lovely little owl. I had never seen so small an owl, or one so beautiful.”

The smallest owl found in Ohio; a full grown Northern saw-whet owl is about the size of an American robin. Because of their tiny size, strictly nocturnal habits, and penchant for roosting in heavy cover, this is one of the toughest Ohio owls to locate. However, it is perhaps the most abundant species of owl in northern forests, and recent banding studies have begun to shed light on population densities and seasonal movements. Most Northern saw-whet owls seen in Ohio are migrants; overwintering birds are fairly rare, and there are only a handful of nesting records.

DESCRIPTION saw-whet owl

Length = 8 inches

Wingspan = 17 inches

Weight = 3 ounces

A tiny owl; first-time observers are often incredulous at how little they are. And their interesting appearance can be admired close up more often than not, as saw-whets tend to roost low to the ground and are exceedingly tame.

They are easily identified; the only other owl that looks remotely similar is the accidental boreal owl (one Ohio record), but the latter is larger, more spotted above and below, and has prominent black lines outlining the face. Adult Northern saw-whet owls are striped with thick brown streaks below, have light brown facial discs, and lack ear tufts. Juveniles, which would be unlikely in Ohio, are even more distinctive, being dark chocolate-brown above, with rufous-orange underparts and a white chevron on the forehead.

OHIO STATUS saw-whet owl

Until recently, it was widely believed that saw-whets were relatively rare migrants and



Photo by: ©S. Lipschutz/VIREO

rare winter visitors. Like the long-eared owl, our impression of their status is skewed by the difficulty of finding these secretive birds. In recent years, a research effort known as Project OwlNet, which is a consortium of bird banders in North America and Canada that focuses on Northern saw-whet owls, has shed considerable light on populations of this owl and their seasonal movements.

In Ohio, a group of banders affiliated with OwlNet began saw-whet studies near Chillicothe in Ross County in 2003. In the fall of 2004, they caught an amazing 45 owls at one location within a two-month period. To date, in four seasons of banding they have captured nearly 120 different owls. Owls caught in Chillicothe have been recaptured in Indiana, Minnesota, and West Virginia. Owls previously banded in Maryland, Ontario, Canada, and Michigan have been caught in Chillicothe. The frequency of captures in Ohio offers a glimpse into the potential numbers of owls that may migrate through Ohio.

Most saw-whet owls pass through Ohio on their way to wintering grounds in states to our south. Some individuals do overwinter, though; several are found each winter.

Documented nesting records are very scarce. There were summer records from about 16 counties prior to 1940; all were in the northern half of the state. In recent years, there have been but a few reports of potential nesters, mostly in the Cleveland area. Based on historical reports, it seems likely that only Ashtabula County may have once had an established breeding population, but this population is probably no longer present. However, this owl is easily overlooked and it's possible that they still sporadically breed in Ohio.

HABITAT saw-whet owl

The saw-whet is a forest owl, although tolerant of a wide variety of woodlands. Peak breeding populations occur in coniferous forests, but saw-whets will nest in a range of forest types, and age classes. Migrant and wintering birds turn up in shrubby thickets, young successional woods, grapevine tangles, planted conifer groves, and scattered ornamental conifers in cemeteries. Probably hunts mostly in open woods or along woodland borders or openings.

HABITS saw-whet owl

Northern saw-whet owls are strictly nocturnal and very difficult to locate during the day, as roosting owls blend well with their surroundings. Owls holed up in thick grapevine tangles are especially difficult to spot. However, they tend to perch fairly low to the ground – anywhere from five to fifteen feet – which makes spotting one a bit more

Saw-whets are very rare Ohio breeders. Juveniles are chocolate brown.



Adult saw-whet captured by banders near Chillicothe, Ohio.

likely. When one is found, a very close approach is often possible without unduly disturbing the bird. They are quite tame, and particularly on sunny days, will hardly open their eyes to look at an intruder.

An interesting behavior is their habit of food caching. When temperatures are very cold, owls will sometimes catch more prey than can be eaten, and stash the surplus in trees. When hungry, the owl will remove the cached item and hold it with its feet, incubating the vole or mouse like an egg and thus thawing it out so it can be consumed.

Saw-whets become active and commence hunting about one-half hour after nightfall, and return to roost sites well before dawn.

DIET *saw-whet owl*

Almost entirely small mammals. Consumes lots of rodents and shrews that frequent wooded habitats, such as the white-footed mouse (*Peromyscus leucopus*) and short-tailed shrew (*Blarina brevicauda*). Saw-whets are known to capture birds when opportunities arise, including the Northern cardinal, winter wren, and hermit thrush.

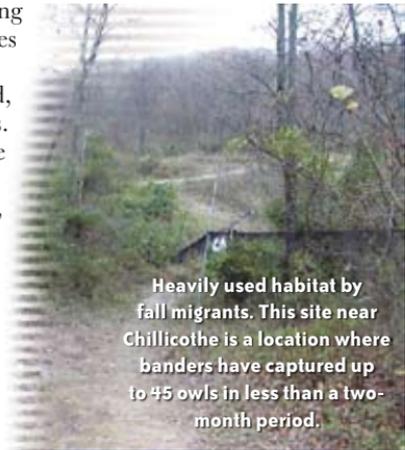
NESTING *saw-whet owl*

Nesting activities commence in April on average, preceded by an increase in vocalizations. Northern saw-whet owls are cavity-nesters, and most often use holes constructed by woodpeckers, particularly those of the Northern flicker and pileated woodpecker. They will use artificial nest boxes; one of the last Ohio nesting records was of a pair using a box. Clutches normally contain five or six eggs, laid about two days apart. These hatch after four weeks, and the young leave the nest three or four weeks later. Recently fledged young would most likely be seen from late May into early July.

VOCALIZATIONS *saw-whet owl*

The most common and easily recognized call is the male's advertising song, a long series of monotonous piping whistles, given at a rate of about two whistles per second. This song can be given for lengthy periods without pause. Females sometimes deliver a similar version during the breeding season. Saw-whets have been documented uttering at least eight other types of calls, most not nearly so easily recognized as the advertising song. These include bill snapping, soft whines, chitters, and ascending low screams. Some of these calls vaguely resemble calls made by sora rails.

While saw-whets are unlikely to be heard here, unless one lucks into a nesting



Heavily used habitat by fall migrants. This site near Chillicothe is a location where banders have captured up to 45 owls in less than a two-month period.



Banders hold a saw-whet under black light. Feathers that appear pinkish are the newest and indicate the age of the bird.

territory, they will respond to tapes of their calls. While they may not call back to a tape, owls do fly in to investigate. A trick that banders have learned to greatly increase capture rates at their nets is to loudly broadcast saw-whet calls from speakers located at the base of the nets.

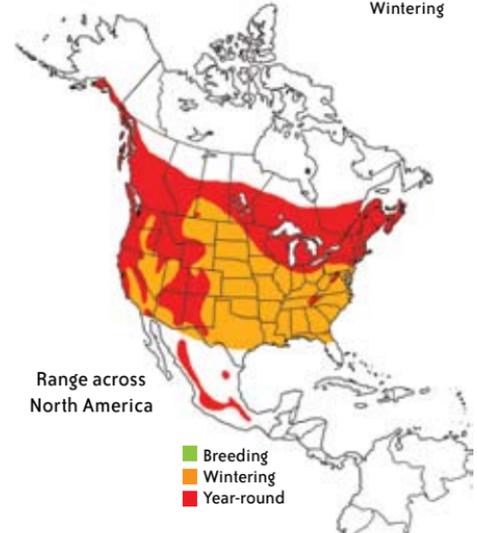
INTERESTING FACTS *saw-whet owl*

- ▶ The Northern saw-whet owl is the smallest owl found in Ohio; adults weigh about the same as an American robin.
- ▶ While these very secretive little owls have never been seen by most people, they are possibly the most common species of owl in northern forests.
- ▶ The oldest documented captive saw-whet lived to 16 years; most wild birds probably don't survive to reach three years of age.
- ▶ An owl banded in Chillicothe, Ohio was recaptured later the same year in Tofte, Minnesota – a distance of 691 miles!

TIPS FOR FINDING A NORTHERN SAW-WHET OWL

Most birds discovered are migrants found in March and April, and November. A good way to find them is to check ornamental conifer plantings within large cemeteries, such as Woodlawn in Toledo, Green Lawn in Columbus, and Spring Grove in Cincinnati. Most often, the owls will be found within ten or fifteen feet of the ground, but are surprisingly difficult to spot within the dense growth that they favor. Many owls are also routinely located in grapevine tangles in wooded habitats along the Lake Erie shore, such as at the Bird Trail at Magee Marsh Wildlife Area or Sheldon Marsh State Nature Preserve.

Wintering birds are also occasionally found, often in similar haunts as Long-eared Owls (see tips under that species). Northern saw-whet owls that are overwintering are prone to roosting in the same spot night after night. They often streak the foliage and ground near their roosting site with “whitewash”, so an obvious accumulation of droppings is always worth investigating.



SHORT-EARED OWL

Asio flammeus (Ay-see-oh [a type of horned owl] flam-ee-us [flame-colored])

TRACKS
36-39

Short-eared owls are among the most easily observed of owls found in Ohio, thanks to their diurnal (active during daylight) habits. Numbers vary from year to year, but in invasion winters, favorable areas can support staggering numbers. This species can quickly recognize sites that are experiencing a boom in small mammal populations and will gather in large numbers to exploit such locales.

The core breeding range of short-eared owls in North America lies mostly north of the U.S., and they nest far into the northern reaches of the Arctic tundra. Ohio lies at the very southern edge of their breeding range, and they are sporadic and rare nesters here.

These curious owls are one of our most interesting birds to observe. Their buoyant moth-like flight is quite distinctive, as is their habit of hunting over open fields and grasslands. Towards the onset of spring, they can sometimes be observed engaging in their odd courtship flights. Upon witnessing a courtship display in New York in 1924, Francis Harper was prompted to write: "...I noticed one of the owls high in the air, flying with exceptionally slow and somewhat jerky wing strokes... making scarcely any headway. Now and then the bird would swoop downward, meanwhile striking its long wings beneath its body, perhaps 8 or 12 times in the space of a second or two. It was a remarkable act, quite unlike anything known to me among other birds."

DESCRIPTION short-eared owl

Length = 15 inches

Wingspan = 38 inches

Weight = 12.5 ounces

These large, tawny-colored owls are unmistakable; quite unlike any other Ohio bird. Even from great distances and while on the wing, they can be recognized by their languid unhurried flight propelled by deep wingbeats,

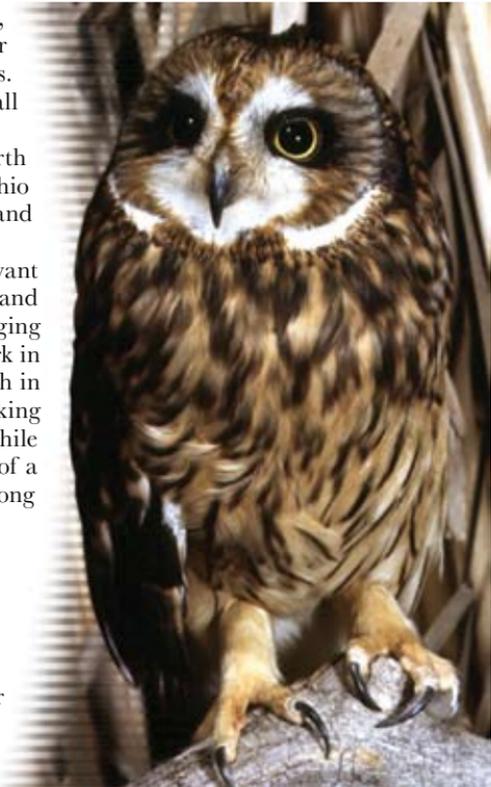


Photo by: Ohio Department of Natural Resources / Al Staffan

giving the impression of a giant moth. The common name is accurate; the very short ear tufts are hard to see, and an observer will only notice them on a clearly seen perched owl.

Northern harriers, which frequent the same habitats, can look similar when perched on the ground with only the head and upper body visible. These hawks have facial discs similar to owls, but their heads appear smaller, they lack dark eye patches and ear tufts, and do not have pale V-shaped “eyebrows.”

Long-eared owls, the strictly nocturnal counterpart to the short-ear, look very similar in flight and when flushed are sometimes misidentified as this species. The upper wings of long-eareds are grayer, the buff-colored patch near the end of the wings is less prominent, and they are more heavily streaked below.

OHIO STATUS **short-eared owl**

Occurs primarily as a migrant and winter visitor. Often actively migrates during the day, and birds can appear nearly anywhere, even in urban sites. Winter numbers vary greatly from year to year and site to site, depending on food availability. Short-eared owls are very opportunistic and they can concentrate in large groups at locales experiencing peak small mammal populations. In 1999, at least 80 were present at the Wilds, a large reclaimed surface-mined area in Muskingum County. The next year, only a few were there. This type of annual fluctuation is very typical in Ohio.

Breeding short-ears have never been common in Ohio; our state is at the extreme southern periphery of their range. Most nesting records probably coincide with spikes in small mammal populations. However, documented nestings are very rare, and some summering individuals are probably unmated non-breeders.

HABITAT **short-eared owl**

Strictly open habitats; short-eared owls even roost on the ground in fields, only rarely choosing conifer groves for roosting. They prefer large fields, grasslands, marshes, and sometimes the grassy areas of airports. In recent years, an increasing number of owls are being found in the massive tracts of open grassland resulting from reclamation of former coal surface mines in southeastern Ohio. There have been several breeding records in these sites, and in general, the numbers of wintering owls seems to be increasing.



Day old short-eared owls in nest.

Good short-eared owl habitat; massive reclaimed surface mine grasslands. This area, at the Wilds, sometimes supports large numbers of wintering owls, and several pairs have also nested here.



HABITS *short-eared owl*

Short-eared owls are partly diurnal, or active in the daytime, which sets them apart behaviorally from most owls. Sometimes they can be observed actively hunting on bright, sunny days, but more often they are crepuscular, meaning that they are most active during twilight hours.

When actively hunting, short-ears fly at low to moderate heights, watching for prey on the ground. Sometimes they will also hunt from low perches, such as fence posts or the tips of small trees. When prey is spotted the owl dives towards it, sometimes after hovering briefly.

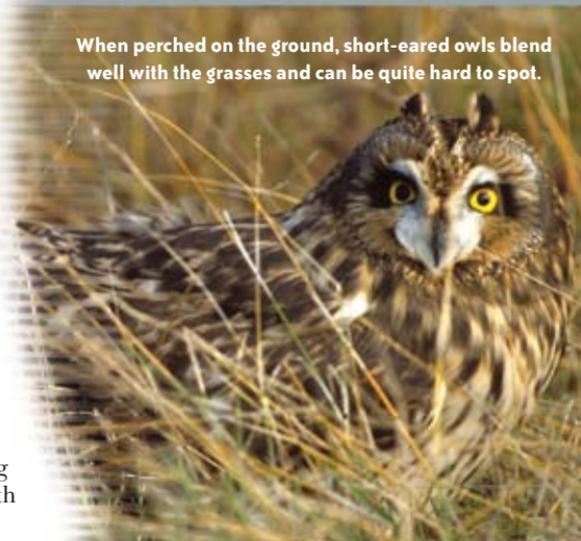
Resting short-ears normally perch on the ground within dense grass, and sometimes large numbers roost within a small area. The peak of activity normally begins in the half-hour prior to sunset, and this is the best time to watch for them.

Hunting owls can be territorial and prone to skirmishing with other short-eared owls or raptors that intrude on their space. Owls that are aggressively confronting other birds will dive at the intruder, and pull their feet up and forward to reveal the talons. Often, they will deliver loud barking calls.

Occasionally, their peculiar aerial courtship displays are seen in late winter or spring. Sometimes referred to as “sky dancing,” the males use this display to impress prospective mates. These spectacular shows involve the male owl ascending skyward by flying in tight circles, sometimes to a height of several hundred feet. At the apex, he will hang in one spot by fluttering his wings, while delivering a series of deep piping hoots. After that, the bird drops into a steep dive, rapidly “clapping” its wings together creating a rapid fluttering sound. The claps are made by the owl rapidly smacking the tips of its wings together under its body. After several rounds of this, the male slipsides earthward with rocking side to side movements. Sometimes the female will then chase him, and occasionally they engage by locking talons. This is one of the most fantastic courtship displays of any North American bird.



Short-eared owls are distinctive in flight due to their deep wingbeats and moth-like flight, and the black patch at the bend and tip of the wings.



When perched on the ground, short-eared owls blend well with the grasses and can be quite hard to spot.

DIET short-eared owl

Short-eared owls consume small mammals almost exclusively. In Ohio, the meadow vole (*Microtus pennsylvanicus*) is probably the primary prey in most areas. Dietary studies elsewhere in North America have shown that meadow voles comprised up to 79% of the diet. A variety of other small animals, such as mice, rabbits, and rats have been documented in short-ear diets. They will also capture small birds, but they are not a common food source and probably only captured opportunistically.

Most prey is probably detected through a keen sense of hearing, as with most other owls. However, one study demonstrated that hunting success increases with increased illumination, strongly suggesting that short-eared owls also rely heavily on vision in locating prey, which makes sense given their diurnal habits.

On average, one pellet per meal is produced, and these are ejected from eight to ten hours after the meal is consumed, depending on the size of the prey.

NESTING short-eared owl

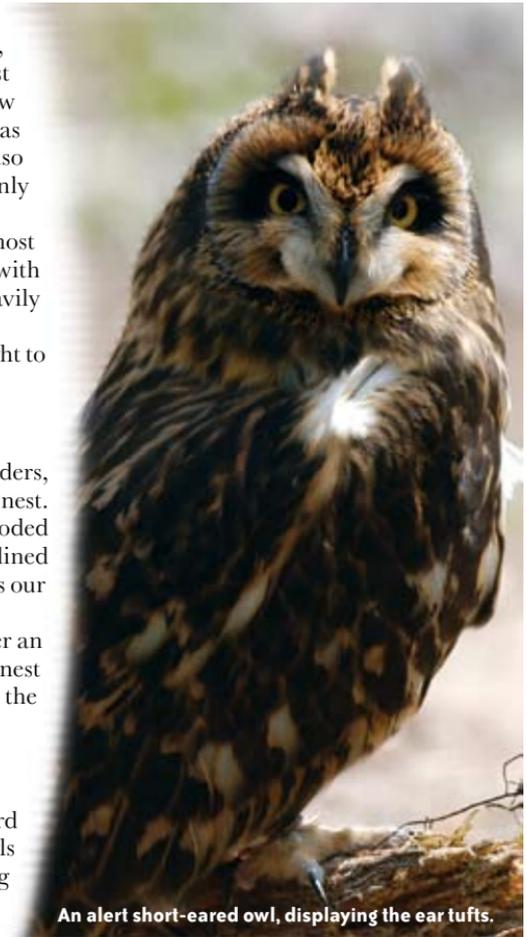
This is our only ground-nesting owl. As short-ears are opportunistic breeders, sites that supported many wintering owls may also have a pair remain to nest. Nests are placed within stands of relatively dense grasses, far from any wooded habitats. The nest is built by the female, and is a shallow depression that is lined with soft down feathers and various grasses. While not a complex affair, this is our only species of owl that builds its own nest.

Nesting typically commences in April, with five or six eggs being laid. After an incubation period of about 30 days, the young hatch, then disperse from the nest two to three weeks later. The female feeds the young exclusively, although the male provides the female with food.

VOCALIZATIONS short-eared owl

While not an exceptionally vocal owl, Short-ears can routinely be heard uttering barking calls when engaged in agonistic encounters with other owls or raptors. These barks, generally given in flight, can take on a hoarse yelping quality or a harsh ascending scream.

If you are lucky enough to be around an active nesting territory, the male's



An alert short-eared owl, displaying the ear tufts.

interesting primary song might be heard; a deep series of uniform hoots. This song is normally delivered on the wing, and is often accompanied by a non-vocal sound, loud wing-clapping created when the owl smacks the tips of its wings together under the body.

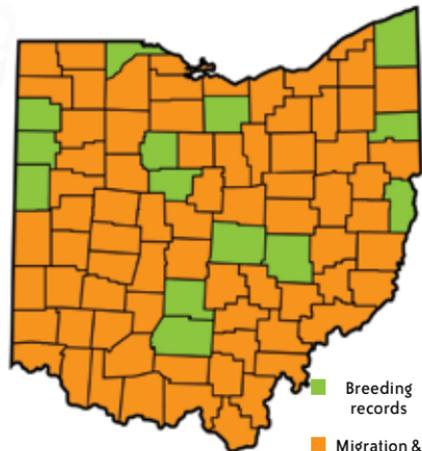
INTERESTING FACTS *short-eared owl*

- ▶ This is one of the most broadly distributed owls in the world, occurring on every continent but Australia.
- ▶ Our only owl that routinely hunts during the day (excepting the very rare snowy owl).
- ▶ Can be highly migratory; a short-eared owl landed on a ship 500 miles from land in the Pacific Ocean. Migratory owls undoubtedly led to the establishment of populations on Pacific islands like Hawaii.

TIPS FOR FINDING A SHORT-EARED OWL

The best strategy for observing these fascinating owls is to visit one of their traditional wintering areas, such as Killdeer Plains Wildlife Area in Wyandot County or the Wilds in Muskingum County. Keep in mind that numbers can vary greatly from year to year, depending upon meadow vole populations. Any area that has expansive grasslands or open fields might support short-ears, though.

While owls can be active at any time of day, the half-hour before dusk is the best time to see them at peak activity. Sometimes a dozen or more cars of birders will be patrolling the roads at Killdeer Plains during the twilight period seeking owls! If meadow vole numbers are high, as they were in 1999, the Wilds can be incredible for short-eared owl watching. That year, several dozen owls could be seen hunting from one location at the same time! Wildlife observations are easy at the Wilds, as the roads are lightly traveled, and birders can use their vehicles as blinds. The owls are less frightened of cars than they are of people on foot, and sometimes an owl perched on a roadside fence post can be closely approached.



SNOWY OWL

Subo scandiacus (*Sew-bo [eagle owl] scan-dee-ay-kus [of Sweden]*)

TRACKS
40-43

Few birds generate as much excitement as these massive, Arctic-nesting owls. Not too many make it down to Ohio, which is nearly 2,000 miles south of the nearest nesting areas, and numbers vary from year to year. Some winters, only one or two are found; peak years might bring up to a dozen or more reports. The immediate vicinity of Lake Erie is where most snowy owls are found. These enormous birds are not shy, and as they are largely diurnal (hunt during daylight hours); they are conspicuous and easily observed. Snowy owls are intimately associated with the cycles of small rodents called lemmings, and the big southward movements of snowy owls correlate with collapses in lemming populations. Southward irruptions into Ohio have diminished considerably since the early to mid-1900s. For instance, during the winter of 1926-27 at least 138 snowy owls were documented in the state. In recent decades, a dozen or so would constitute a big flight.

DESCRIPTION snowy owl

Length = 23 inches

Wingspan = 52 inches

Weight = 4 lb.

Unmistakable and shouldn't be confused with any other species. Adult males are very white, with few black markings. However, virtually all Ohio owls are first-year birds, mostly females, which are far more likely to wander south in the winter. These youngsters are heavily marked with black bars, and can appear quite dark. Their faces are always pure white, though.



OHIO STATUS snowy owl

Varies from year to year, but normally anywhere from a few to perhaps a dozen sightings. In good years, snowy owls may appear by late October, although most turn up in November and December. They are most likely along the shoreline of Lake Erie, and sightings become increasingly scarce away from the lake. However, once in a while a snowy will appear as far south as the Ohio River.

HABITAT snowy owl

Rocky breakwalls around harbors on Lake Erie are favored haunts, such as at Conneaut, Fairport Harbor, and the Cleveland lakefront. Snowy owls frequent sites that support lots of waterfowl and gulls, which are preferred food items. The flat, wide-open spaces around airports provide another good habitat, and Burke Lakefront Airport in Cleveland sometimes hosts multiple owls simultaneously. Snowy owls also frequent open agricultural landscapes. In general, they are birds of big, open spaces – similar to their tundra breeding habitat.

HABITS snowy owl

Snowy owls are unusual among owls in that they are largely diurnal, or feed during daylight hours. They are primarily perch and pounce hunters; in other words an owl will sit on a perch that offers a good view of the surrounding terrain, and fly out after potential prey. Occasionally an owl will capture prey that has been spotted while on the wing. Because they often hunt from a conspicuous perch, and may wait long periods for hunting opportunities, snowy owls are frequently easy to locate and can be observed for extended periods. Snowys commonly perch on the ground or the rocks of breakwalls, too.

While multiple owls may frequent the same hunting grounds, such as airport fields or harbors, they are solitary in winter and will not tolerate close approaches by other owls.

Snowy owl in the act of disgorging pellets.



Photo by: Scott Carpenter / www.westerngrebe.com



Typical snowy owl habitat in Ohio; the harbor and breakwalls at Lorain.

Photo by: ODNR Division of Wildlife / Jim McCormac

DIET snowy owl

On their Arctic tundra breeding grounds, snowy owls are intimately associated with lemmings, which are small mouse-like mammals. An adult owl that remains on the tundra year-round might consume as many as 1,600 lemmings in a year.

Owls that move south into Ohio in winter switch to other prey, as lemmings are not found this far south. Snowy owls in Ohio probably consume lots of ducks of various species, as well as other birds like gulls. Depending on the habitat and food availability, they will also take many small mammals like meadow voles and even Norway rats in urban areas.

NESTING snowy owl

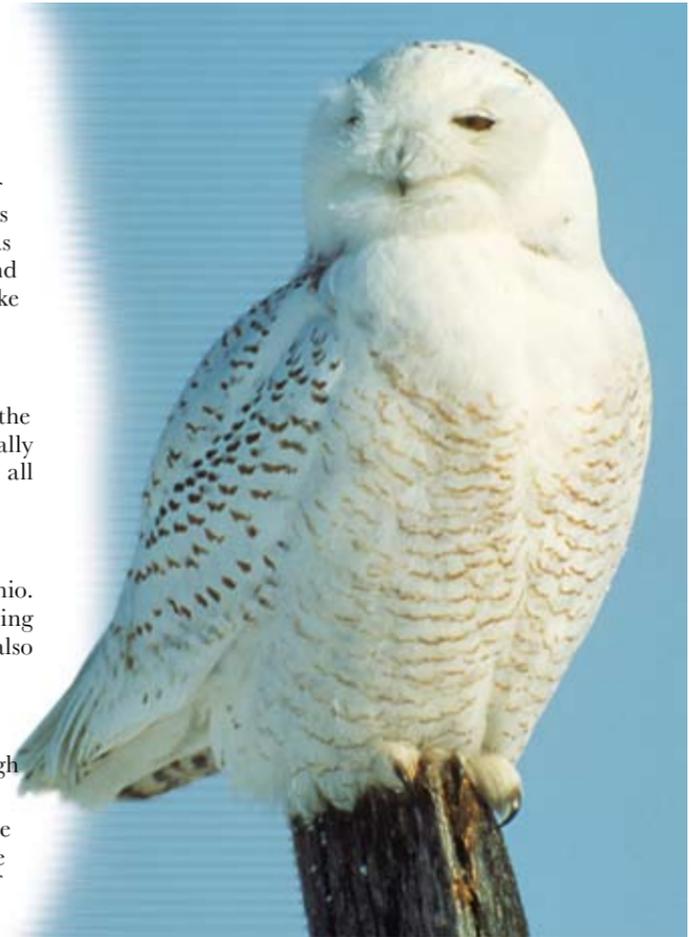
Does not nest in Ohio; breeds in open tundra far to the north. Nest is little more than a scrape on the ground, usually an elevated windswept knoll that offers good sightlines in all directions.

VOCALIZATIONS snowy owl

Normally silent in winter, and unlikely to be heard in Ohio. Territorial males on breeding rounds emit spectacular booming hoots. Both sexes give a barking sound, and females will also give plaintive whistles.

INTERESTING FACTS snowy owl

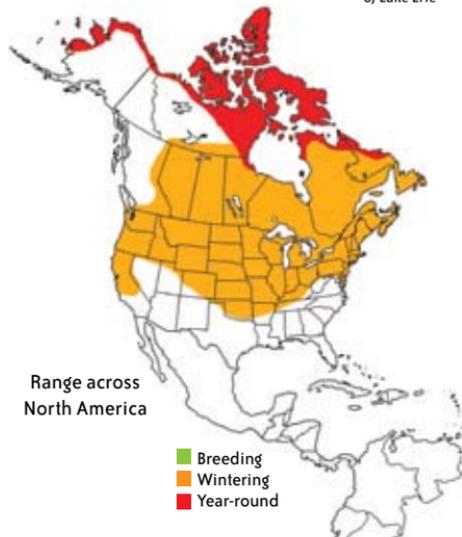
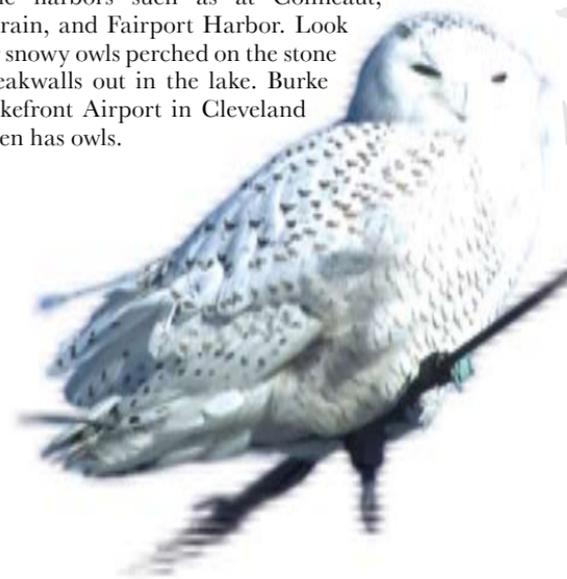
- ▶ This is the heaviest North American owl; females can weigh as much as 6 ½ pounds.
- ▶ Snowy Owls stage periodic “irruptions” in winter; some years many more owls go south than other years. These movements are thought to correlate with shortages of their primary prey, lemmings.



- ▶ Recognizable reproductions of snowy owls can be found in prehistoric cave art dating back several thousand years, indicating a fascination with this impressive bird going back to ancient civilizations.
- ▶ In recent times, snowy owls are in the public eye as Hedwig, Harry Potter's pet owl, is of this species.

TIPS FOR FINDING A SNOWY OWL

The numbers of snowy owls present in Ohio can vary greatly from winter to winter. Because they are easily found and of great interest, birders generally know where they are and word spreads through birding grapevines. Tried and true locales are Lake Erie harbors such as at Conneaut, Lorain, and Fairport Harbor. Look for snowy owls perched on the stone breakwalls out in the lake. Burke Lakefront Airport in Cleveland often has owls.



R A R E O H I O O W L S

BOREAL OWL

Aegolius funereus TRACKS 44-49

(ee-jole-ih-us [a kind of owl])

few-ner-ee-us [mournful; after the primary call])



Photo by: ©Gary Meszaros

BURROWING OWL

Athene cunicularia TRACKS 50-52

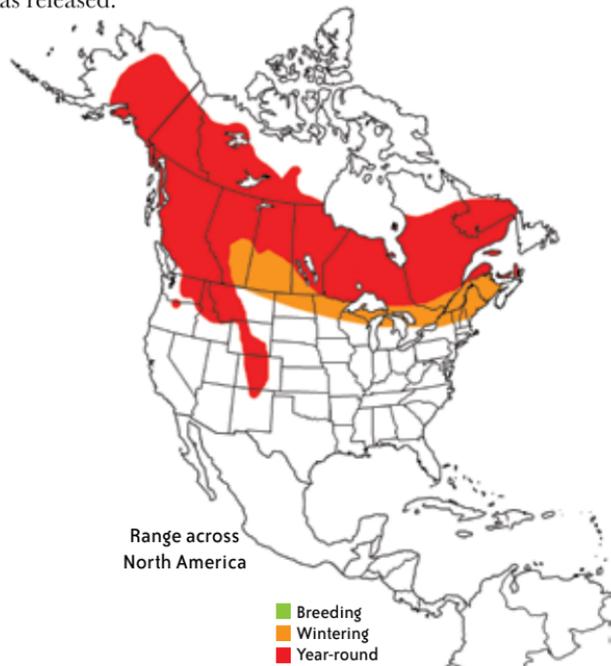
(Ah-thee-nee [from Greek goddess of wisdom])

cue-nik-u-lar-ee-ah [a miner or burrower; from Latin for rabbit])



Photo by: ©Gary Meszaros

Like the Northern hawk owl and great gray owl, this is another boreal species that occasionally stages winter irruptions into the northern U.S. The boreal owl is in the same genus as the Northern saw-whet owl, and like that species it is strictly nocturnal and very hard to discover in its roosting haunts during the day. Chances are great that any boreal owls appearing in Ohio would go undetected. The one Ohio record, from 1997 in Lake County, resulted from a bird being found that had struck a window. After being rehabilitated, it was released.



Incredible as it seems, there are two Ohio records of this curious owl that normally does not occur anywhere near here. However, burrowing owls are very migratory, and do occasionally appear far beyond their normal range. The two records date from 1944 and 1981, in Paulding and Ottawa counties, respectively. It is not inconceivable that another could appear in Ohio.



R A R E O H I O O W L S

GREAT GRAY OWL

Strix nebulosa TRACKS 53-55

(*Strix* [a screech owl; not very apropos]

neb-you-lo-sa [clouded; in reference to plumage coloration])



Photo by: ©Gary Meszaros

NORTHERN HAWK OWL

Surnia ulula TRACKS 56-59

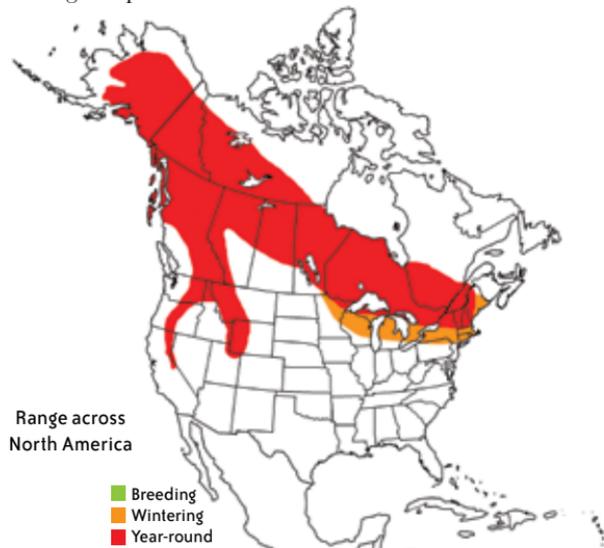
(*Sir-nee-ah* [Uncertain etymology; may be modern Greek for owl]

You-loo-la [screech owl; imitative of calls])



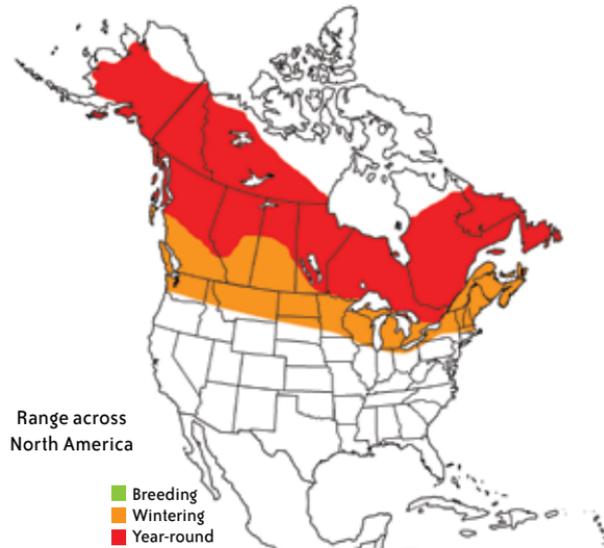
Photo by: ©Gary Meszaros

This is one of North America's most spectacular owls, and in dimensions, the largest. However, much of the mass of a great gray owl is comprised of thick plumage, which serves as excellent insulation. A great gray weighs 2.4 lbs. on average, while the smaller great horned owl weighs about 3.1 lbs. Great gray owls live in the northern boreal forest, and only rarely do significant numbers venture southwards in winter. Like other northern owls, these irruptions are stimulated by a crash in their primary prey populations; small mammals like lemmings. There are only two documented Ohio records, from 1898 in Mahoning County and 1947 on Starve Island in Lake Erie. There is a chance that one could appear again, and if it does, it will be one of the most exciting events in Ohio bird watching for quite some time.



This is a species of the northern boreal forest, and quite a rarity in Ohio. There have been at least two confirmed records, but several other reports have probably been correct as well. Like other boreal species, Northern hawk owls sometimes stage large southward flights in winter, known as irruptions. However, Northern hawk owls barely enter the U.S., except during major irruptions, but even then are extremely rare south of the Great Lakes.

Unlike most owls, this species is diurnal and often quite conspicuous as they are prone to perching in prominent spots like the tips of small trees. It is likely that Northern hawk owl will appear in Ohio again, probably in one of the counties bordering Lake Erie.



OTHER NORTH AMERICAN OWLS

ELF OWL

Microathene whitneyi TRACKS 60-62

(mik-rah-thee-nee [small goddess of wisdom;
micros = small and Athene was Greek goddess of wisdom]
wit-nee-eye [for Josiah Whitney, 1819-1896; geologist and
leader of expedition on which elf owl was discovered])



Photo by: ©G. Lasley / VIREO

FERRUGINOUS PYGMY-OWL

Glaucidium brasilianum TRACKS 63-64

(Glah-sid-ee-um [glaring; in reference to the eyes]
bra-zil-ee-ain-um [of Brazil])

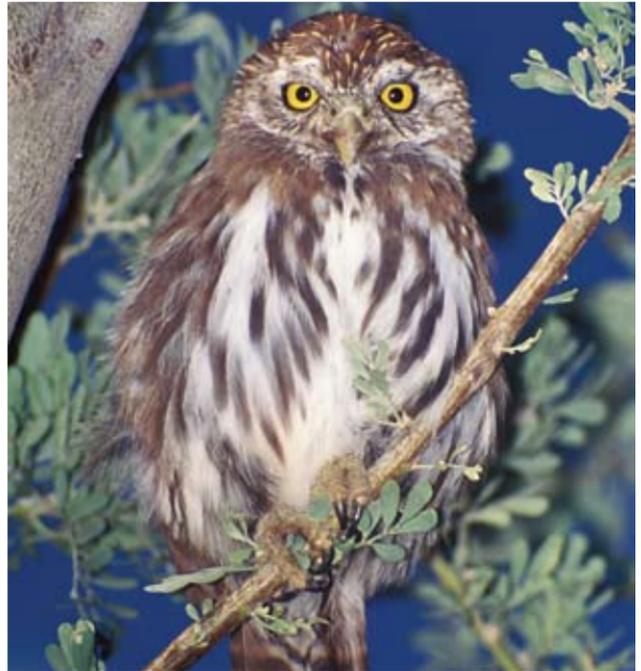


Photo by: ©Brian E. Small / VIREO

This is the smallest owl in the world; an adult is less than six inches long and weighs only 1.4 ounces! That's about the size of a house finch. Elf owls occupy a limited area in the extreme southwestern U.S., but they can be the most abundant owl in the desert regions that they inhabit.



This tiny owl of Central and South America barely ranges into North America; it occurs in limited areas of south Texas and south-central Arizona. Because this owl is often crepuscular in behavior (active before nightfall at dusk) and is so small, it can be mistaken for a songbird with a fleeting view as it hunts in the scrub.



OTHER NORTH AMERICAN OWLS

FLAMMULATED OWL

Otus flammeolus TRACKS 65-68

(*Oh-tus* [an eared owl])

flam-ee-ole-us [flame-colored; diminutive suffix *us* refers to reddish coloration])



Photo by: ©Rick Bowers / VIREO

NORTHERN PYGMY-OWL

Glaucidium gnoma TRACKS 69-70

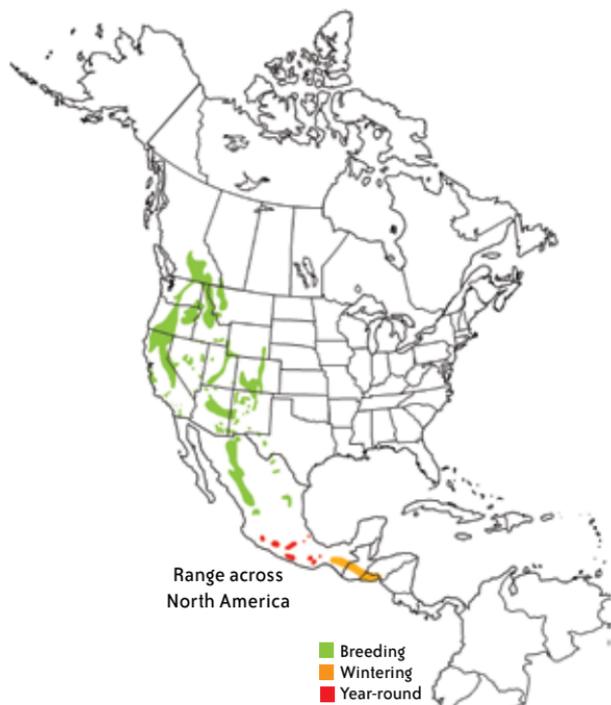
(*Glah-sid-ee-um* [glaring; in reference to the eyes])

no-mah [a spirit or sprite])



Photo by: ©P. LaTourrette / VIREO

This small owl has a broad but spotty distribution in the western U.S. It is closely related to the Eastern screech-owl, which is common in Ohio and which until recently was placed in the same genus, *Otus*. The ventriloquial hooting of this little owl is said to have one of the lowest frequencies of any North American owl.



A tiny western owl, the Northern pygmy-owl is significantly smaller than the smallest Ohio owl, the Northern saw-whet owl. Pygmy-owls occur in a variety of forested habitats, and are often diurnal. Reputedly one of the fiercest of North American owls in spite of their diminutive stature, they are known to enter towns and capture songbirds at backyard feeders.



OTHER NORTH AMERICAN OWLS

SPOTTED OWL

Strix occidentalis TRACKS 71-74

(*Strix* [a screech owl; not very apropos]
ox-ih-den-tal-iss [western])



Photo by: ©R. & N. Bowers / VIREO

WESTERN SCREECH-OWL

Megascops kennicottii TRACKS 75-79

(*Meg-ah-scops* [great little horned owl]
ken-ih-cot-ee-eye [for Robert Kennicott, 1835-1866; early
explorer of northwestern North America.])

In addition to the owl, two fishes and an Alaskan town are named for him



Photo by: ©R. & N. Bowers / VIREO

This species has become a symbol of old-growth forest preservation in the Pacific Northwest, as that habitat is of primary importance for spotted owls. Because of conservation interest in this species, it is one of the most thoroughly studied of North American owls. The spotted owl is closely related to the barred owl, and the two are known to hybridize.



A close ally of the Eastern screech-owl, a common Ohio species, and was long considered to be conspecific with that species. They were not officially separated until 1983. While similar to the Eastern in appearance, the calls are very different and are one of the main reasons that the two were separated. The primary song is often called the “bouncing ball” song.



OTHER NORTH AMERICAN OWLS

WHISKERED SCREECH-OWL

Megascops trichopsis TRACKS 80-84

(Meg-ah-scops [great little horned owl])

tri-kop-sis [hair appearance; refers to long whiskers])



Photo by: ©M. Hyett / VIREO

ACCIDENTAL NORTH AMERICAN OWLS

MOTTLED OWL

Strix virgata TRACK 85

(Strix [a screech owl; not very apropos])

ver-gate-ah [wand-like])



Photo by: ©R. & N. Bowers / VIREO

A Central and South American species, ranging to within 80 miles of the U.S. in Mexico. Mottled owls are moderate in size, noticeably smaller than the closely related barred owl, which is in the same genus. There is one record from extreme southern Texas, in 1983, of a bird found dead, and as yet to be verified reports from the same region in August 2006.

A Mexican and Central American species that barely enters the southwestern U.S. in southern Arizona and New Mexico. Once known as the spotted screech-owl, this species is very similar to other screech-owls in the genus *Megascops*. It is easily overlooked or confused with similar species, and is best separated by its fairly distinctive vocalizations.



ORIENTAL SCOPS-OWL

Otus sunia **TRACK** no recordings available

(*Oh-tus* [an eared owl])

soo-nee-ah [Nepalese word Sunya, meaning "empty"]



Photo by: ©J.G. Homes/VIREO

This is a wide-ranging owl of Eurasia and Asia, and is closely related to and similar in appearance to American screech-owls. There are two records in North America, from islands in the Pribilofs of Alaska. Of the 22 species of owls recorded to date in North America, birders probably have the least chance of seeing this species – or hearing it.

STYGIAN OWL

Asio stygius **TRACK** 86

(*Ay-see-oh* [a type of horned owl]) *stij-ee-us* [refers to the River Styx; hence hellish or dark, dismal; uncertain why this interesting owl is saddled with such an unflattering name!]



Photo by: ©J. Culbertson/VIREO

This owl of Central and South America is closely related to the North American long-eared owl, and is in the same genus. There are two North American records, both from south Texas in the same area where the mottled owl record came from. Stygian owls make an interesting *whoof* call as their advertising song.

Fast Facts About Ohio's Owls

- Three owl species breed commonly in the state.
- An additional four species also breed in Ohio, but only rarely.
- One of the rare breeders, the barn owl, is listed as threatened, and the other three rare breeders – long-eared, short-eared, and Northern saw-whet owls – are listed as special interest.
- Of the eight owl species that occur annually, only three are entirely dependent upon forested landscapes; the others require open habitats.
- Two species that occur in Ohio, the short-eared and snowy owls, often hunt during daylight hours.
- The biggest Ohio owl – and largest in North America – is the snowy owl, a rare winter visitor. They can weigh up to 6.5 lbs., and catch prey as large as geese.
- Possibly the toughest Ohio breeding bird is the great horned owl. These fierce predators can take prey up to the size of red-tailed hawks and are one of very few animals that regularly kill and eat skunks. They have also been known to appropriate bald eagle nests for their own use.
- Some owls, like the barn owl, have such acute hearing that they can capture prey in complete darkness.
- Owls have such effective hearing in part due to offset ears. They calculate the location of prey by gauging the difference of when a sound arrives at each ear. Some owls can compute an ear to ear difference of only 30 millionths of a second!
- Owls have 14 neck vertebrae (humans have 7), allowing them to rotate their heads 270 degrees.



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To purchase a plate visit your local registrar's office or call BMV 1-888-PLATES3

Donations may be mailed to:

Wildlife Diversity Fund
2045 Morse Road Bldg G.
Columbus, OH 43229-6693

For more information about Ohio's native wildlife, please contact the Division of Wildlife at:

1-800-WILDLIFE

(1-800-750-0750 Ohio Relay TTY only)

www.wildohio.com



HEADQUARTERS

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 Columbus, OH 43215
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952 Lima Avenue
 Findlay, OH 45840
 (419) 424-5000

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 (330) 644-2293

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District Four

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Birding Groups and Organizations in Ohio

One of the best ways to get involved with birding is to join a group of like-minded people. Fortunately, Ohio has a number of active groups throughout the state that have many birders as members, and most of these organizations host field trips regularly. Listed below are the names and contact information for many of the state's birding groups.

**APPALACHIAN FRONT
AUDUBON SOCIETY**

(South-central Ohio)

P.O. Box 67 • Mount Orab, OH 45154
937-444-4803

**AUDUBON OHIO
(Statewide)**

692 North High Street, Suite 208
Columbus, OH 43215
614-224-3303

www.audubon.org/chapter/oh/oh

**AUDUBON SOCIETY OF
GREATER CLEVELAND
(Cleveland Area)**

The Park Building

140 Public Square • Cleveland, OH 44114
216-861-5093

www.clevelandaudubon.org/

**AUDUBON SOCIETY OF OHIO
(Cincinnati Area)**

3398 West Galbraith Rd.
Cincinnati, OH 45239
513-741-7926

<http://home.earthlink.net/~audsocohio/>

**AUDUBON SOCIETY/
MAHONING VALLEY
(Youngstown Area)**

P.O. Box 3214 • Youngstown, OH 44512
<http://members.cboss.com/audubonmv/>

**AUDUBON MIAMI VALLEY
(Butler County Area)**

P.O. Box 556 • Oxford, OH 45056
www.audubonmiamivalley.org/

**BLACKBROOK AUDUBON SOCIETY
(Lake County Area)**

7573 Dahlia Drive • Mentor, OH 44060
440-255-0961

www.blackbrookaudubon.org/

**BLACK RIVER AUDUBON SOCIETY
(Elyria/Lorain Area)**

304 West Avenue • Elyria, OH 44035
www.blackriveraudubon.org

**BLACK SWAMP
AUDUBON SOCIETY
(Defiance Area)**

P.O. Box 7086 • Defiance, OH 43512
www.blackswampaudubon.org

**BLACK SWAMP
BIRD OBSERVATORY
(Northwest Ohio)**

P.O. Box 228 • Oak Harbor, OH 43449
419-898-4070
www.bsbobird.org

**CANTON AUDUBON SOCIETY
(Canton Area)**

P.O. Box 9586 • Canton, OH 44711
330-832-2491

**CINCINNATI BIRD CLUB
(Cincinnati Area)**

11 Mound Ave. • Milford, OH 45150
www.cincinnatibirds.com/birdclub

**CLARK COUNTY
AUDUBON SOCIETY**

121 Larchmont Rd. • Springfield, OH 45503
Phone: (937) 323-0782

**COLUMBUS AUDUBON
(Columbus Area)**

P.O. Box 141350 • Columbus, OH 43214
740-549-0333
www.columbusaudubon.org/

**DAYTON AUDUBON SOCIETY
(Dayton Area)**

1375 East Siebenthaler Avenue
Dayton, OH 45414
937-293-4876

www.dayton.net/Audubon/

**EAST CENTRAL
AUDUBON SOCIETY
(Newark Area)**

P.O. Box 55 • Granville, OH 43023
www.eastcentralohioaudubon.bravehost.com

**FIRELANDS AUDUBON SOCIETY
(Sandusky Area)**

P.O. Box 967 • Sandusky, OH 44870
419-433-2883

**GREATER AKRON
AUDUBON SOCIETY
(Akron Area)**

P.O. Box 80056 • Akron, OH 44308
330-315-5213
www.akronaudubon.org

**GREATER MOHICAN
AUDUBON SOCIETY
(Mansfield Area)**

P.O. Box 907 • Ashland, OH 44805
audubon.cjb.net

**KELLEYS ISLAND AUDUBON CLUB
(Lake Erie Islands)**

P.O. Box 42 • Kelleys Island, OH 43438
www.kelleysislandnature.com

**KIRTLAND BIRD CLUB
(Cleveland Area)**

4310 Bush Ave • Cleveland, Ohio 44109
216 556-0700
www.kirtlandbirdclub.org

**OHIO BLUEBIRD SOCIETY
(Statewide)**

PMB 111
343 West Milltown Rd. • Wooster, OH 44691
www.obsbluebirds.com

**OHIO ORNITHOLOGICAL SOCIETY
(Statewide)**

P.O. Box 14051 • Columbus, OH 43214
www.ohiobirds.org

**PRESIDENT R. B. HAYES
AUDUBON SOCIETY
(Fremont Area)**

P.O. Box 92 • Fremont, OH 43420

**SCIOTO VALLEY BIRD
AND NATURE CLUB
(Chillicothe Area)**

740-775-2247
www.svbnc.org

**SHAWNEE NATURE CLUB
(Portsmouth Area)**

4362 Swauger Valley Road
Portsmouth, Ohio 45662
740-820-8382

**TOLEDO NATURALISTS'
ASSOCIATION
(Toledo Area)**

19800 Sugar Creek Rd.
Bowling Green, Ohio 43402
www.toledonaturalist.org

**TRI-MORAINÉ
AUDUBON SOCIETY
(Lima Area)**

P.O. Box 5648 • Lima, OH 45802

**WESTERN CUYAHOGA
AUDUBON SOCIETY**

4310 Bush Avenue • Cleveland, OH 44109
216-741-2352
<http://www.wcasohio.org/>



OHIO DEPARTMENT OF NATURAL RESOURCES
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