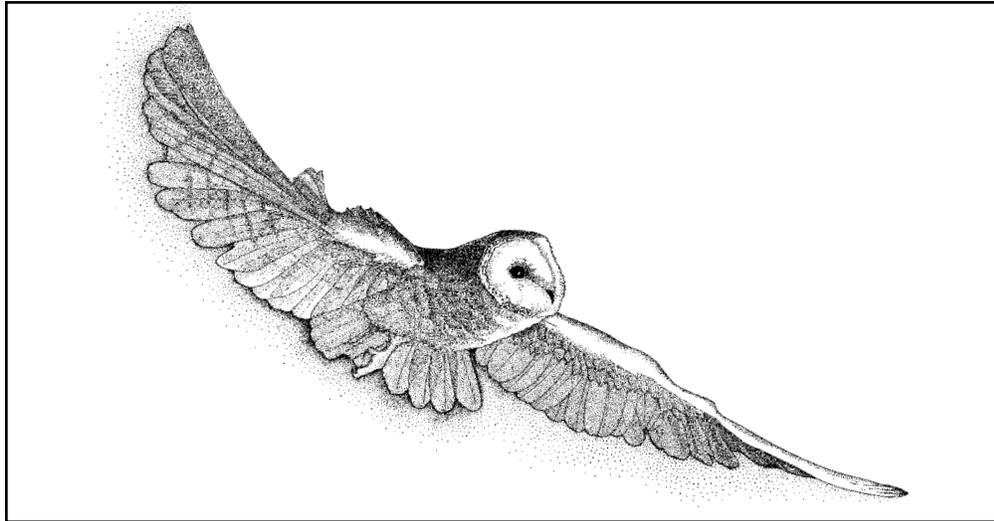
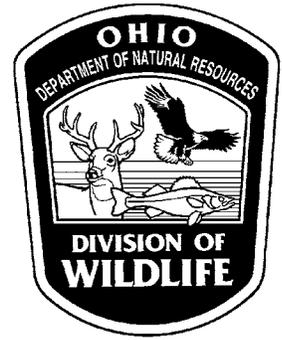


Ohio Division of Wildlife
Life History Notes
Barn Owl

Scientific Name: *Tyto alba*



Publication 184
(1007)

Introduction

Eight species of the genus *Tyto* have been identified worldwide. Only one of these species, the barn owl, inhabits North America.

The barn owl was first documented in Ohio in the late 1800s, particularly in the southwestern part of the state. The barn owl was more closely associated with the southern United States, and was probably not present in Ohio until the influx of European settlers. Numbers of this species increased during the early 1900s as forests were cleared and grassland-associated agriculture developed. By 1930, Ohio's barn owl population was well established and the bird could be found throughout most of the state. But just as land use changes in Ohio helped the original spread of the species, later changes in agricultural practices contributed to the major decline in its numbers. Commercial development of farmland, reduction of the dairy and sheep industry, conversion to intensive row-crop farming, and a decline in the number of farms have all contributed to the loss of nest sites and foraging habitats. As a result, the barn owl is rare and classified as endangered in the state of Ohio today.

Description

The barn owl has a white, heart-shaped facial disc, no ear tufts, and long legs; it appears white from below and tan from above. Sexes can be distinguished by coloration and weight, although these characteristics overlap substantially in adults. Males usually have whiter breasts with fewer and smaller dark spots. Fe-

males are typically heavier and have more and larger dark spots, and more buff coloring on the breast. Barn owls cannot be sexed accurately at the time of fledging.

Habitat and Habits

The barn owl's preferred foraging habitat includes open areas such as grass fields, old fields, wet meadows, and wetland edges. The barn owl is selective in its diet, seeking certain kinds of prey. The meadow vole, a rodent of grassland and wet meadow, is the preferred prey, constituting 60 percent or more of the barn owl's diet. Barn owls also take a variety of other rodents, including rats. Known as great "mousers" and closely associated with man, barn owls are agriculturally valuable predators. A barn owl family of six young and two adults may consume over 1,000 rodents during the nesting period.

Barn owls make a wide variety of sounds. Some can be quite startling and, in combination with their silent form as they fly, may be the inspiration for some stories about haunted buildings. Most common adult sounds are alarm shrieks, a shorter and less intense screech, termed a conversational call, and a rapid squeaking or ticking, which is associated with a pair. The rasping, food begging call of the young can be heard almost continuously from soon after sunset until just before sunrise. The young also hiss and bill-click when disturbed by man or a predator.

Reproduction and Care of the Young

Barn owls are usually monogamous, meaning that the male mates with only one female; however, polygyny has been documented among barn owls in Ohio. The pair will work together to rear the young.

Barn owls use both natural and man-made sites for nesting. These sites include tree cavities, barns, silos, abandoned and occupied buildings, and chimneys. Barn owls don't construct a nest; however, pellets (regurgitated balls of fur and bones from prey they have eaten) litter the base of the nest cavity.

Eggs are usually laid every other day, and the female incubates them for approximately one month. Hatching occurs in the same order as the eggs were laid, so a gradation of ages and sizes can be observed in a brood. Young are fed by both adults for approximately two months; the offspring may continue to beg for food from the nest site for a short time after fledging.

One common cause of mortality is predation by raccoons, which have a knack for finding even secure nest sites and killing any age brood of barn owls. Human disturbance of the nest during incubation may cause nest abandonment, although barn owls are more tolerant of man's activities after the eggs have hatched.



Management Plans

Barn owls are the only endangered owls in Ohio. Ohio's first significant management effort was to afford barn owls a protected status in 1969. A barn owl management program was begun in the state in 1988. Installation of artificial nest boxes, in proximity to grassland foraging habitat is the basis of this program. These boxes are monitored; their use by barn owls helps identify productive barn owl habitat and provides knowledge of the species' distribution and relative abundance. Nesting barn owls have been found in 26 counties since 1987. Because they are limited by quality foraging habitat, barn owls are not expected to increase substantially in abundance or distribution without a change in land use that creates grassland habitats.

Viewing Opportunities

Locating barn owls, even where they are known to be, is often difficult. They have exceptionally keen hearing and eyesight. Their coloration and often secretive habits allow them to blend in with many structures. Barn owls can also flush and get out of sight quickly. Pellets in barns, silos, and other farm buildings, and at the base of trees are all evidence of barn owl activity. Another clue is the vocalizations of both adults and young. The food begging calls of the young, particularly when they are near fledging, can be heard a quarter-mile away.

Since this bird can be so difficult to locate, your best chance of seeing them may be in a controlled setting. Two of the Division's officially designated "Watchable Wildlife" areas rehabilitate injured wildlife, including barn owls. Hueston Woods State Park and the Brukner Nature Center may allow you to get a first-hand look at the elusive barn owl. A call ahead to either location is recommended to determine if there is a barn owl available for viewing.

Do Something Wild!

The barn owl is among the majority of wildlife species in Ohio that are not hunted. All of these animals are vital parts of our overall ecosystem and contribute to the wildlife diversity of the state. Helping us manage and study these species are the generous citizens of the state of Ohio. With money they either donated through the state income tax checkoff, by the purchase of wildlife license plates, or their direct contribution to the Endangered Species Special Account, the Division is able to purchase critical habitat essential to sustaining many species of wildlife and to implement programs that benefit species like the barn owl.

Contributions to our Wildlife Diversity Program are accepted throughout the year. To make a donation, please send a check to: Endangered

Species Special Account, Ohio Division of Wildlife, 2045 Morse Road, Bldg. G, Columbus, Ohio 43229-6693. All contributions, whether made on your income tax return or directly, are tax deductible.

At a Glance

Mating: Usually monogamous

Peak Breeding Activity: In April

Incubation Period: 30-34 days

Young Hatch: In mid-May; young are altricial

Clutch Size: 3-10 eggs, 6 is average

Young Fledge: At 8-10 weeks

Number of Broods per Year: Usually 1, but a second brood is possible

Adult Weight: Male 14-19 ounces, average 17 ounces; female 17-25 ounces, average 20 ounces

Adult Length: 13-15 inches, including the tail

Life Expectancy: About 3-4 years. There is high mortality in the first year.

Migration Patterns: Many Ohio barn owls migrate to southern states for the winter.

Typical Foods: Small mammals, most commonly the meadow vole and short-tailed shrew; other prey includes the meadow jumping mouse, mole, white-footed mouse, deer mouse, and Norway rat. Birds make up less than 2 percent of total prey.

Adapted from original text written by Bruce A. Colvin

