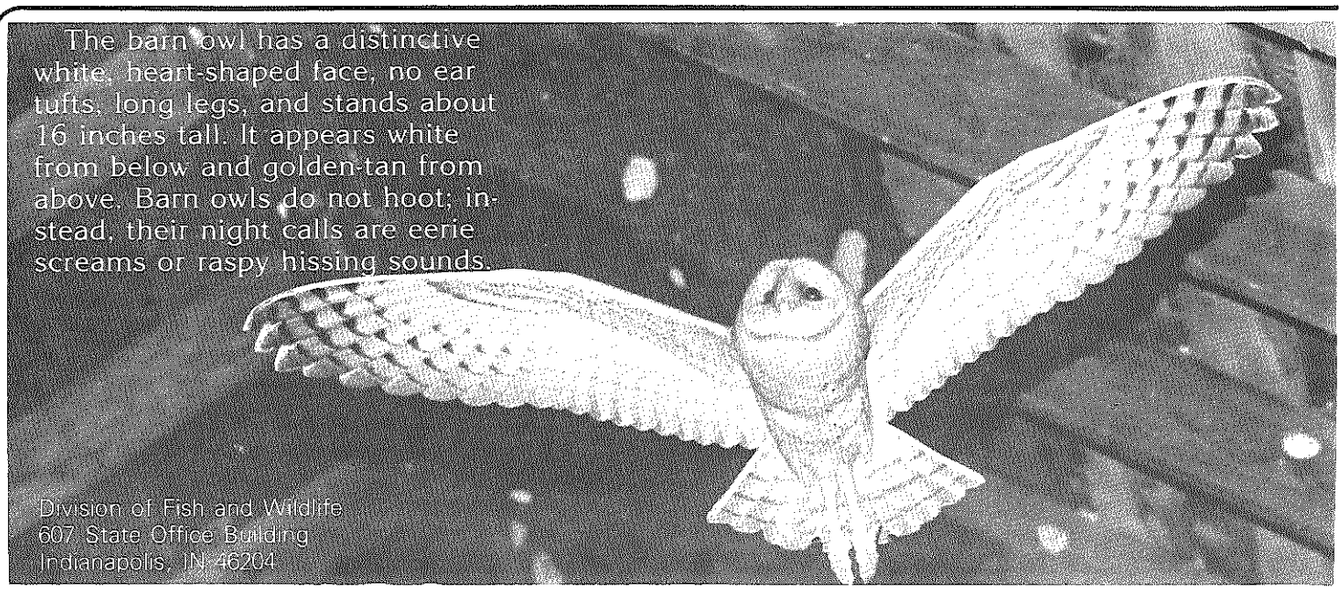
BARN OWL NEST BOXES



The barn owl has a distinctive white, heart-shaped face, no ear tufts, long legs, and stands about 16 inches tall. It appears white from below and golden-tan from above. Barn owls do not hoot; instead, their night calls are eerie screams or raspy hissing sounds.

Division of Fish and Wildlife
607 State Office Building
Indianapolis, IN 46204

Nesting Facts

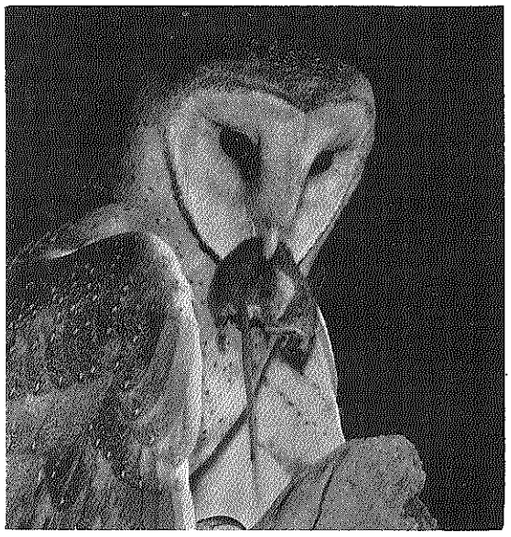
Barn owls select a place to nest during late March or April. They usually lay 6 eggs and incubate the clutch for 32 days. Barn owls are very sensitive to disturbance while incubating and will often abandon the nest if disturbed. No matter how great the temptation, do not peek into your box during this period (April 1 to May 30)! Since incubation begins after the first egg is laid, owls from the same clutch hatch at different times. If food is scarce, the youngest owlets will starve or may even be eaten by larger siblings or by the parents. An average of 3 to 4 young usually survive and fly from the nest at 8 to 10 weeks of age.

Often, a nest of young barn owls can be a vocal bunch. Late in the nesting period (late June to early July), the young beg for food from the parents. Begging owlets begin calling just after sunset and continue all night.

You have a barn owl!

Should a barn owl take up residence in a box you have installed, we would like to know. Please inform the local District Wildlife Biologist or Conservation Officer. This information will help the Nongame and Endangered Wildlife Program continue conservation efforts for the endangered barn owl.

Barn owl research in Indiana is funded by contributions to the Nongame Wildlife Fund, found on the state income tax form -- a chance to take wildlife under your wing!



Barn owls can be easily confused with other common owls that occur in Indiana:

Screech Owl--stands 8 " tall, brown or reddish color, distinctive "ear" tufts, and does not hoot but has a descending whinney-type call.

Great Horned Owl--stands 22" tall, brownish-grey with a white throat, also has distinctive "ear" tufts, and hoots at night, generally a series of five calls.

Barred Owl--stands 21" tall, brownish with chest streaking, no "ears," and hoots in a series of eight to nine calls.

Short-eared Owl--stands 13" tall, brown to light-tan color, no "ear" tufts, hunts by day, and no call.

"We use ta' have em' here years ago"

This is an all-too-familiar response encountered by biologists while studying the barn owl. In Indiana, the barn owl was once a common resident. Although, their number has declined so severely that barn owls are now considered an *endangered species* in the Hoosier State.

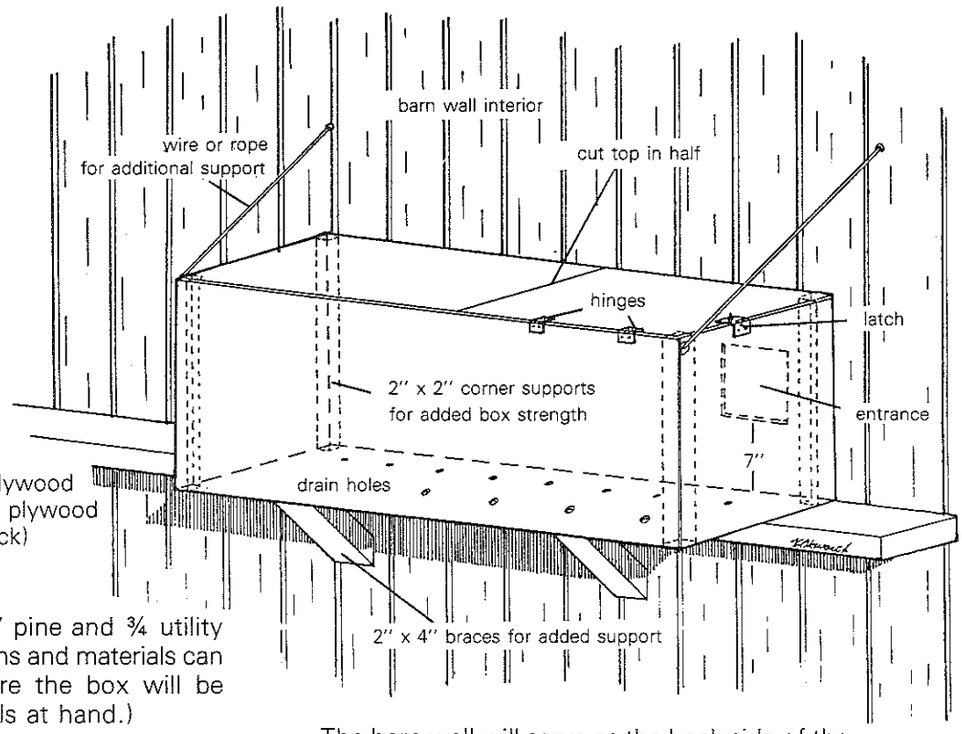
The barn owl is one of many wildlife species suffering from drastic changes in the use of farmland. In the 1920s, '30s and '40s, Indiana's countryside was dominated by large tracts of pastures and hayfields, necessary for livestock. These grasslands also fed large numbers of rodents such as meadow voles -- the major food of barn owls. Down the road, livestock became less important and grasslands were gradually converted to row crops. When the barn owl's hunting areas disappeared, this mouser could no longer survive.

Loss of hunting ground was not the only problem for barn owls. A lack of secure nest sites has also played a role. Barn owls are cavity nesters, making homes in large, hollow trees, especially silver maple and sycamore. These types of old trees are either lost to natural causes, cut for firewood, or removed from urban settings because they are judged a hazard.

Where natural cavities are scarce, barn owls will nest in man-made structures. They select old barns and silos in rural areas, and will also adapt to urban situations where they often nest in bell towers or church steeples. However, these structures are also disappearing from the Indiana landscape. Tightly-constructed metal buildings and glass-lined silos are replacing the open buildings of the past.

Construction

You can help barn owls by putting up a nest box in an area with good hunting grounds. If you follow some simple instructions, nest boxes will provide the owls with a secure place to raise their family. They work too! During a two-year study in Utah, barn owls nested in 28 of the 38 nest boxes installed. In a similar study in New Jersey, nesting barn owls moved from insecure nest sites in old trees to the security of nest boxes. Barn owls here in Indiana have also moved into nest boxes.



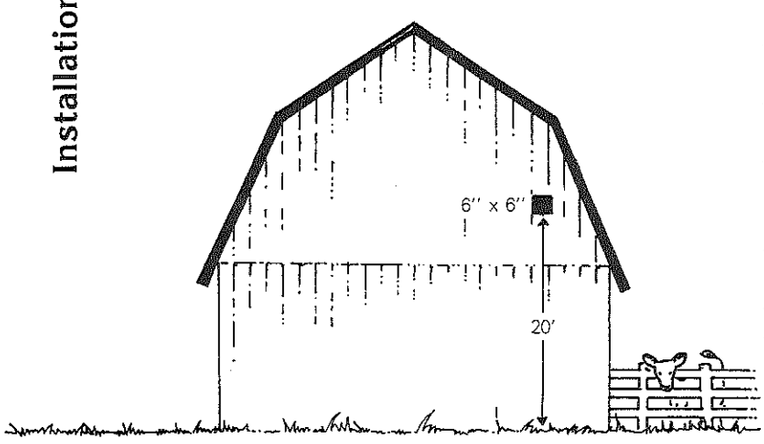
Box dimensions: 36" long
16" tall
12½" wide

Pieces-- 1 bottom: 34½" pine
2 ends: 15" pine
1 front: 15" x 36" plywood
1 top: 12½" x 36" plywood
(barn wall acts as back)

-- Materials include 1" x 12" pine and ¾ utility grade plywood. (Dimensions and materials can vary, depending on where the box will be mounted and the materials at hand.)
-- Hinge the top to provide easy access for box cleaning.
-- Latch the top to prevent access by raccoons -- the barn owl's principal predator. (Raccoons can destroy a complete nest of eggs or young.)
-- The barn wall will serve as the back side of the nest box.
-- 2" x 2" framing on the box's interior can increase its strength.
-- Drill 6 to 8 holes (one-half inch) in the bottom to drain moisture.

Installation

Although any barn can be used, the best building to install a barn owl nest box in is an abandoned or seldom used barn on a farmstead.



-- Select the "clean face" or end of a structure having few or no openings.
-- Choose a crossbeam on which to mount the box.
-- Cut a 6" x 6" hole in the barn wall, providing a direct entrance into the box from outside the barn.
-- The entrance hole should be 20 to 25 feet above the ground.
-- Mount the box by nailing it to the beam.
-- Provide additional support as necessary by bracing the box with 2" x 4" lumber or by attaching wire or rope from the lower outside corner of the box to the wall.

Maintenance

Barn owls will return to the same nest site year after year. Owl pellets (regurgitated wads of undigestable bones and fur) should be cleaned from the box after each nesting. Pigeon nest litter must also be removed. Barn owls may not move into the box if pigeons are living there. Each year in January or February, boxes should be cleaned of all debris.

Having barn owls around can be a real help to farmers. These owls are expert mousers that help check harmful rodent populations. A pair of adult barn owls can capture up to 1,000 rodents per season to feed themselves and a brood of hungry owlets.

Picking a Site

The main ingredient necessary for barn owls to adopt a nest box is foraging habitat -- places where owls can find rodents. Communities with dairy farms or old feed mills seem to be key areas used by barn owls. The chance of a barn owl using the nest box is greater if fallow pastures, hayfields, wet meadows or marsh edges are nearby.

Barn owls are more likely to find your box if signs of previous barn owl use are in the area. In barns, look for whitewash (barn owl droppings) on the walls and beams, or pellets on the floor and in lofts. You might even find one of its golden-brown feathers. This is a sure sign that a "monkey face" lives in the neighborhood.