

The Great Horned Owl

Rodents and Rabbits Beware

Introduction

The Great Horned Owl is the largest and most powerful of all the nocturnal raptors (birds of prey). They have been called “winged tigers” and have earned the reputation. They are superbly designed for nocturnal (nighttime) hunting and are able to pinpoint prey in near darkness. The leading edge of their flight feathers has serrations that break the airflow over the wings making their flight virtually silent. Because their ears are set forward on their face, the facial disk feathers funnel sound directly into their ears. These ears are offset with one ear slightly higher than the other, thereby creating 3-dimensional hearing. The owl’s eyes are almost as large as a human’s, and can collect great amounts of light. Although the eyes are fixed in their sockets, they can swivel their head more than 180°, making it possible for them to look in all directions very quickly. This superb binocular vision and exceptional hearing makes the owl a very efficient hunter.



Photo by Hugh Simmons

Identification

The Great Horned Owl is the only member of the genus or group (*Bubo*) in the Western Hemisphere, with 10 other species found in Eurasia and Africa. This owl is easily identified by its large size, ear tufts, white bib, and big yellow eyes. Very few owls can be mistaken for the Great Horned Owl with the possible exception of the long-eared owl, which also has ear tufts, but is slimmer and has smaller ear tufts. Although many owls hoot in some manner, the hooting of the Great Horned Owl is the most recognizable, and is what most people imagine when they think of owls calling. It has been compared to a distant foghorn, a far away locomotive, or even the cooing of a nearby dove. General descriptions are usually of a tremulous, subdued, or mellow "hoot," "whoo-hoo-ho-o-o" or "who-ho-o-o, whoo-hoo-o-o, whoo."

Distribution and Habitat

The Great Horned Owl has the widest distribution, utilizes the largest variety of food sources, and has the largest diversity of nesting sites of any owl in America. They are equally at home in deserts, grasslands, forested regions, and urban settings. The Great Horned Owl is generally a permanent resident, but birds at higher latitudes will move south when there are major declines in the prey base. The Great Horned Owl can be found throughout Maryland.

In forested and semi-forested areas the owls need open fields, pastures, and forest clearings for hunting. In desert regions, where foraging habitat is plentiful, they need occasional trees or cliffs for nesting sites. The Great Horned Owl has been considered the counterpart of the red-tailed hawk with one hunting by day and the other by night. Their ability to take prey larger than themselves makes them a great asset in controlling small- and medium-sized mammals.

Diet

The diet of the Great Horned Owl ranges from mice and snakes to rabbits, ground hogs, geese, and herons. Although diverse in what it can and will eat, nine out of ten prey items are mammals. Their main food items are usually hares and rabbits, mice, coots, and other waterfowl. Since owls don't have a well-developed sense of smell, Great Horned Owls are a prime

predator on skunks as well. In temperate forests similar to those in Maryland, almost half of all prey are hares and rabbits, but large rodents including ground squirrels, Norway rats, wood rats, and muskrats account for over one-third of their prey. The composition of the owl's diet changes seasonally and while mice and voles may make up a large portion of the diet in the spring and summer months, they may be scarce in winter pellets. Larger prey species are preferred and even within a species the owl will try and hunt the larger individuals. It typically hunts from a nocturnal perch, swooping down to capture its prey with extremely strong talons that can break the spinal column of the prey. Since most prey species are too large to swallow whole, the owl uses its well-developed hooked beak to tear it into pieces.

Primary foraging time for the owls is from 9:00 p.m. until 12:00 a.m. and again in the early morning hours from 4:30 until dawn. In times of low prey numbers or when raising young the owls may be forced to hunt all day long.

Great Horned Owls obtain their water through their food and, like other owls, regurgitate pellets. These pellets consist primarily of bones, feathers, fur, hair and any other indigestible portions of their prey. Pellets are cast (ejected) about twice daily and contain many identifiable portions of the owl's prey. They can be easily collected under a frequently used roost or nest site, and make for an interesting study.

Beneficial Species

If you currently have a Great Horned Owl on your property, you most likely do not have a problem with rabbits or large rodents. Great Horned Owls consume many different animals that are considered pests to agriculture and community gardens. Many people purchase plastic Great Horned Owls in efforts to scare unwanted birds and rabbits from an area. Unfortunately, to be effective these plastic owls need to be moved on a daily basis or animals begin to realize the owls are not real. It is against the law to buy a real Great Horned Owl, but you may be able to attract them to your property by following the guidelines in this fact sheet.

For many years, Great Horned Owls have been alleged to be a primary threat to chickens and game birds. However, research indicates that chickens are not a normal part of an adult Great Horned Owl's diet. Farmers should be far more concerned with skunks or raccoons,



Photo by Hugh Simmons

Baby Great Horned Owl

on cliffs, in trees, on power poles, on towers, and the list goes on. It is thought that two main factors influence whether an area is suitable for habitation by Great Horned Owls—an available nest site and an adequate amount of food. For this reason, they can be attracted to human constructed nest structures in areas that have an adequate supply of small mammals. Like most other owls, they do not make their own nest. The owls will require a nest to be already constructed for them. In most cases, they take the nest of a red-tailed hawk or other large diurnal (daytime active) raptor. Great Horned Owls nest much earlier (end of January into February) than red-tailed hawks and therefore can lay claim to a nest previously built by hawks before they arrive to breed.

Nest structures can be created in the crotch of a large tree, alive or dead. If the nest structure is placed in a live tree, it is best to be in a tree that has openings in the branches so the birds can easily access the nest as well as see their surroundings. Great Horned Owls have a 4- to 5-foot-long wingspan and thus need a sizable flyway to their nest site.

Installing a utility pole or using an abandoned pole may also work well for supporting a nest structure. Try to avoid placing the nest structure near power lines, because many raptors, especially young birds are susceptible to being electrocuted by power lines.

Some Great Horned Owls have been documented nesting on the ground in a rotted-out log and even in an abandoned Canadian goose

nest. However, more often than not, their nests are high in trees. For this reason, the nest structure should be placed a minimum of 15 feet above the ground.

A nest structure can be made without too much money or difficulty. A nest design diagram is provided at the end of this fact sheet. When constructing an artificial nest structure, two important steps need to be followed. First, a good-size drain hole must be cut in the bottom of all three designs so water can leave the nest. Second, make sure the nest structure is securely fastened to the tree or pole to prevent high winds from blowing it down.

Conclusion

The Great Horned Owl is one of North America's most formidable birds of prey. As this fact sheet has illustrated, the myths regarding Great Horned Owls have been exaggerated. Great Horned Owls may assist a farming operation or community garden with natural rodent and small mammal control without the use of rodenticides or traps.

References

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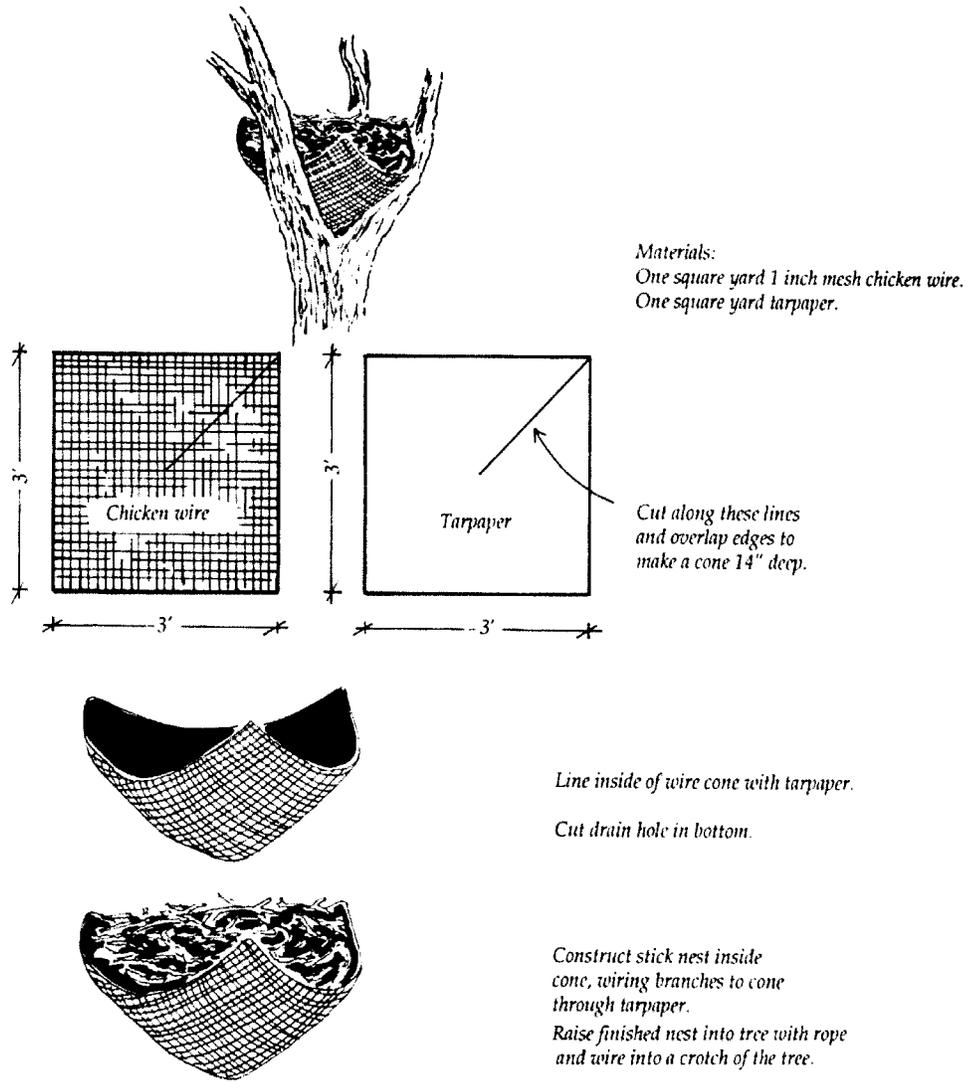


Figure 1. Great Horned Owl nest box platform. Reprinted with permission from the Minnesota Department of Natural Resources.

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