



Great Horned Owl

The **Great Horned Owl** (*Bubo virginianus*) is one of the ten species of owl found in Alaska. Owls are finely tuned hunting machines. Large eyes enable them to see in the dark. Their acute hearing can pinpoint the precise location of small mammals — even under a blanket of snow. They glide on silent wings to grasp unsuspecting prey with their piercing, curved talons. Owls are aerial predators, and they need all of these adaptations in order to survive.

These mostly nocturnal (active at night) creatures are the subject of numerous myths and legends which credit them with attributes as noble as wisdom, and as gruesome as a foreshadower of death. In Alaska, owls inhabit landscapes as diverse as the windblown, treeless tundra of the Arctic, the deep, still, boreal forest of the Interior, and the moss-draped rainforest of Southeast.



Owl characteristics: The wing feathers of an owl have a stiff leading edge and are softly fringed on the trailing edge. These traits affect the way air flows over the wing, and prevent the whistling sounds made by other birds in flight. Owl wing feathers can also slide soundlessly over one another due to their velvet-like surfaces. An owl's flight is silent not only to human ears, but even to the ultra-sensitive hearing of small animals. Owls can use their own keen hearing to zero in on an unsuspecting "meal" that never hears them coming.

The feathered facial disks that surround an owl's eyes also cover hidden ear openings. The dish shape acts like a parabolic reflector, amplifying sounds. By turning and tipping its head, an owl can focus these reflectors to precisely locate prey. Owls hear higher frequency sounds than humans by detecting 10-150 millionths of a second difference in the time it takes the sound to reach each of their ear openings. Owls that hunt primarily by sound have asymmetrical ear openings that allow them to pinpoint faint sounds.

Owl eyes are extremely large for their body size. If we had eyes proportional to those of the Great Horned Owl, they would be the size of grapefruit and weigh 2-3 pounds each! Owl eyes face forward and are immovable, providing great binocular vision. Owls compensate for immovable eyes by the ability to rotate their heads about 270 degrees. Contrary to popular belief, owls have excellent vision both in daylight and at night. They can see in near darkness with large pupils that let them discern objects at one-tenth to one-hundredth the amount of light that we need.

Owls and other raptors cannot chew their food so they either swallow it whole or tear it into pieces before swallowing. Undigested material is collected in the gizzard while the softer digestible material passes through. After several hours, an owl will regurgitate, or cast, the undigested material in the form of a pellet. In addition to bones and hair, it is possible to find entire skulls of small mammals and birds in these pellets. Pellets are usually found under limbs of trees used by owls as a roost while digesting their meals.

An owl can grip with either three toes in front and one behind, or with two toes forward and two behind. This versatility combined with their long, sharp talons gives owls a powerful, sure grasp. Owls catch their prey with their talons but use a twist of their sharp, hooked bill to deliver the fatal blow.

Description: The Great Horned Owl is about 18-25" long and has prominent ear tufts creating the "horned" appearance. Its large size and white throat, or "bib," distinguish the Great Horned Owl. It is Alaska's only large owl with ear tufts. The back of this raptor is various shades of brown and gray, mottled with white and buff. The underparts are white, tinted with buff and barred with dark brown or black. The facial disk is reddish, and the eyes are deep yellow. In flight, these owls are recognized by their large heads, very short necks, and white throats.

These birds live primarily in forested habitats nesting in old hawk, eagle, raven, or squirrel nests, and may occasionally nest in a large natural cavity of a hollow tree or cliff edge. They hunt in fields, meadows, old burns and along forest edges.

Great Horned owls rely mainly on their acute vision to detect prey and tend to hunt in the twilight hours near dusk and dawn. Snowshoe hares are their primary prey, but they will eat whatever they can get their talons on including small mammals, birds and even fish. Great Horned Owl populations fluctuate with changes in prey populations.

A Great Horned Owl call is usually a five-noted, deep, resonant hoo, hoo-hoo, hoo, hoo song but variations are common. Unlike other owl species, both male and female Great Horned Owls sing. Intensive courtship calling occurs from December

Adapted from The Alaska Owlmanac: A guide to the identification, habits, and habitat of ten owl species found in Alaska in 2025.