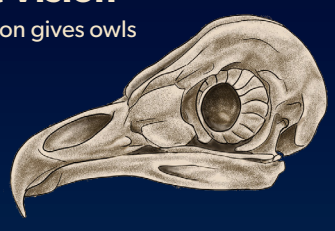
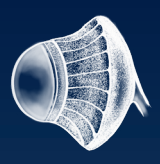
The Wonderful World of
OWLS

Keen Night Vision

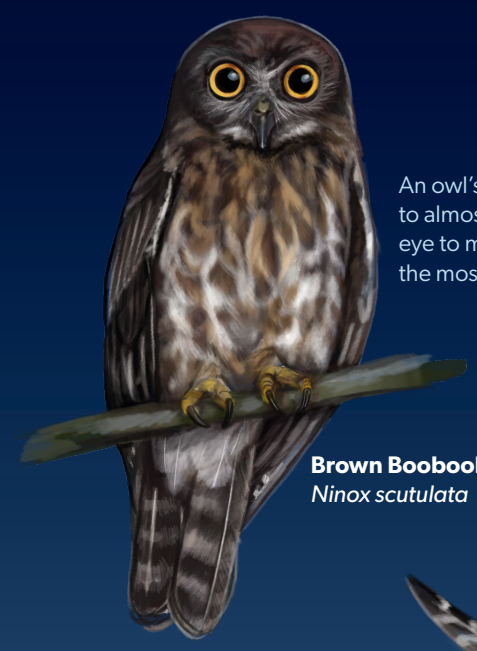
Excellent night vision gives owls a hunting edge.



An owl's pupils can expand to almost the full size of the eye to make the most of low light.



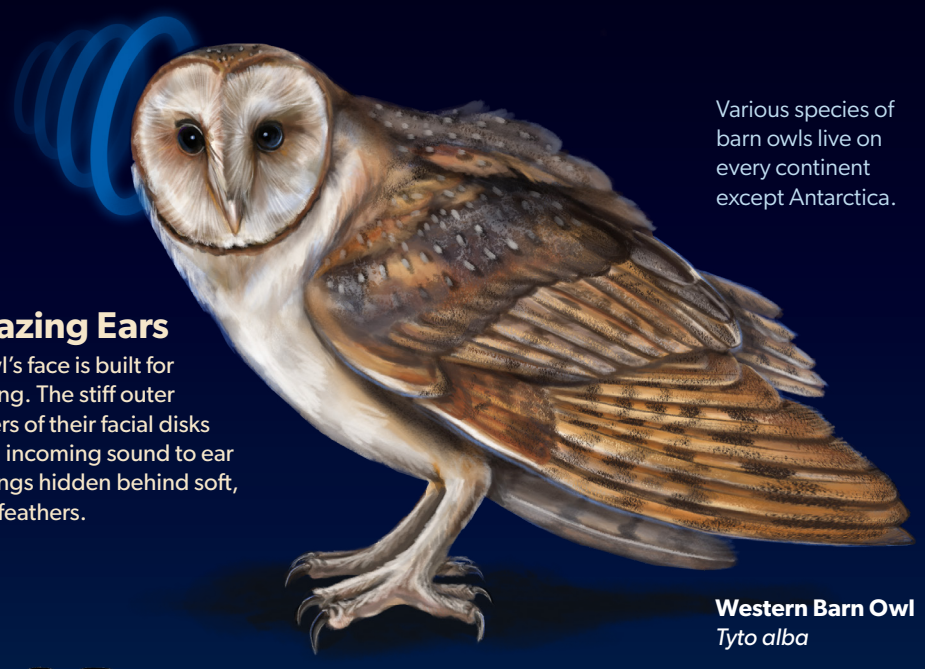
Tube-shaped eyes and sockets allow for larger retinas in a smaller skull.



Brown Boobook
Ninox scutulata

Amazing Ears

An owl's face is built for listening. The stiff outer feathers of their facial disks funnel incoming sound to ear openings hidden behind soft, loose feathers.



Various species of barn owls live on every continent except Antarctica.

Western Barn Owl
Tyto alba

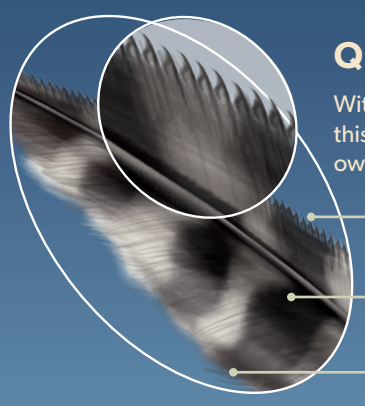


To pinpoint the location of prey, a Boreal Owl's asymmetrical ear openings triangulate sounds coming from above and below.



Ear tufts are used for communication and camouflage, not for hearing.

Blakiston's Fish-Owl
Ketupa blakistoni



Quiet Flight

With special feathers like this, you won't hear an owl's approach.

- Comb-like leading edge breaks up turbulent air for quieter flight
- Velvety surface also decreases friction and sound
- A fringed trailing edge further reduces turbulence and sound

Owls Big and Small

Largest wingspan: Blakiston's Fish-Owl, 6′3″
Tallest owl: Great Gray Owl, 2′–almost 3′
Shortest owl: Elf Owl, 5–7″



The Exceptional Burrowing Owl

Not nocturnal, hunts during the day. Lives in found burrows, not in trees. Chases after prey on foot.

Burrowing Owl
Athene cunicularia

Specialized Talons: Semi-zygodactyl Feet

Owls' amazing feet have two positions. Two toes up and two down is for perching on a branch. For grabbing prey, owls can move one toe to the side for a wider "net." This fish-owl has especially rough skin to grip slippery fish.



Elf Owl
Micrathene whitneyi



Juvenile

Adult

Owls Young and Old

Young owls can look very different from the adults they become! Just look at these juvenile and adult Spectacled Owls.

Spectacled Owl
Pulsatrix perspicillata



Camouflage

Colors and patterns camouflage nocturnal owls during daylight hours. The Snowy Owl blends into the snowy Arctic where it breeds. Other owls, like the Great Gray Owl, have mottling that mimics the bark of trees.

Snowy Owl
Bubo scandiacus



Great Gray Owl
Strix nebulosa

CornellLab of Ornithology

Scan to learn more about owls in this free preview of the **Wonderful World of Owls** online course.

Illustrations by Liz Wahid
2022 Bartels Science Illustrator

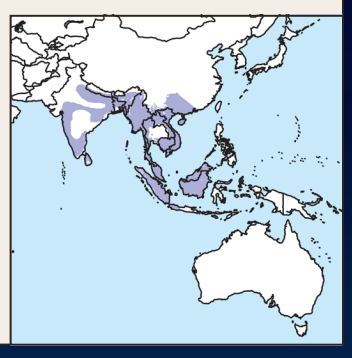
Brown Boobook

Ninox scutulata



The hawk-like Brown Boobook is a medium-sized owl that occurs over a wide swath of India and Southeast Asia. In lowland rainforests, mangroves, city parks, and gardens, the boobook preys on flying insects and the occasional frog, lizard, or small bird. Between dusk and dawn, it hunts by scanning for movement from a regular perch, or by grabbing insects out of the air while flying.

During the day, it rests hidden under the thick tropical canopy or inside a tangle of creeping vines. Like most owls, it nests in tree hollows.



Length: 0.9–1.1 ft (27–33 cm)
Weight: 0.3–0.5 lb (146–227 g)
Wingspan: 0.6–0.7 ft (17.6–22.8 cm)

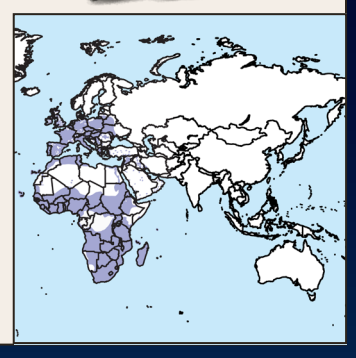
Western Barn Owl

Tyto alba



Ghostly pale and usually nocturnal, this odd-looking owl roosts in quiet, hidden places during the day. At night, it flies back and forth over open open fields and meadows, searching for rodents primarily by sound.

Listen for their eerie, raspy calls; quite unlike other owls.



Length: 1.0–1.4 ft (29–44 cm)
Weight: 0.4–1 lb (187–470 g)

Spectacled Owl

Pulsatrix perspicillata



From northern Argentina to southern Mexico, the Spectacled Owl is fairly common but seldom seen due to its nocturnal and reclusive lifestyle. It inhabits a wide range of forest habitats, from lowland rainforests to dry forests and savannah woodlands where it preys on small mammals like opossums, rats, and even bats and lizards. There are six subspecies of this owl, and though they look similar, they vary quite a bit in size.

In Brazil, it is known as the "knocking owl," for the sound it makes on moonlit nights, sometimes duetting with a mate by making soft, overlapping knocking sounds.



Length: 1.4–1.7 ft (43–52 cm)
Weight: 1.1–2.8 lb (500–1250 g)

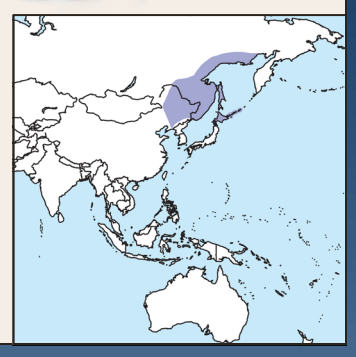
Blakiston's Fish-Owl

Ketupa blakistoni



In far-eastern China, Russia, and northern Japan, Blakiston's Fish Owl lives in old-growth forests near fast moving rivers and on seacoasts; places where water still flows in winter. It spreads its huge wings wide as it crashes into shallow water to grab fish, its primary prey.

Despite being one of the largest owls in the world, little is known about it. Deforestation, dams, and overfishing in much of its range have caused the population to dwindle to fewer than 2500 mature birds.



Length: 2–2.3 ft (60–71 cm)
Weight: 6.9–10.1 lb (3150–4600 g)
Wingspan: 5.8–6.2 ft (178–190 cm)

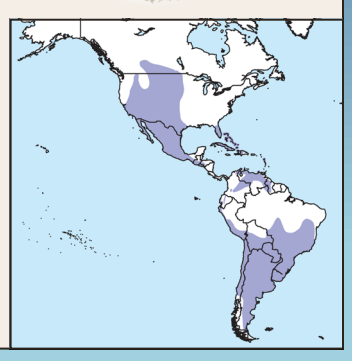
Burrowing Owl

Athene cunicularia



Small and sandy colored with bright yellow eyes, Burrowing Owls live in grasslands, deserts, and other open areas where they hunt mainly insects and rodents. They hunt on the ground during the day and live in underground burrows they've dug themselves or taken over from a prairie dog, ground squirrel, or tortoise.

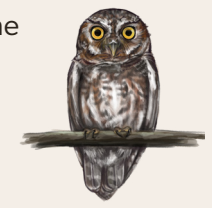
Their numbers have declined sharply with human alteration of their habitat and the decline of prairie dogs and ground squirrels.



Length: 0.6–0.8 ft (19–25 cm)
Weight: 0.3–0.5 lb (150–230 g)
Wingspan: 1.8 ft (55 cm)

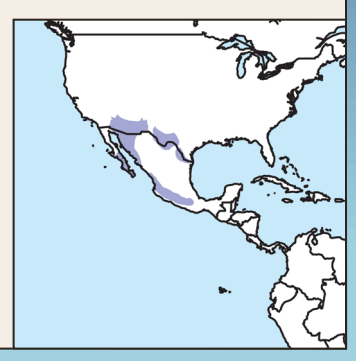
Elf Owl

Micrathene whitneyi



An Elf Owl is really small—no larger than a juice box! This tiny owl lives in dry thorn forests, deserts, pine-oak forests, and woodlands near water on the border of the United States and Mexico and on the western coast of Mexico.

Elf Owls nest in old woodpecker holes and similar cavities, which provide relief from heat, shelter from rain, and protection from predators. At night, they emerge to hunt insects and other small prey, the male giving puppylike calls to mark its small territory.



Length: 0.4–0.5 ft (12.4–14.2 cm)
Weight: 0.08–0.1 lb (35–55 g)
Wingspan: 1.1 ft (33 cm)

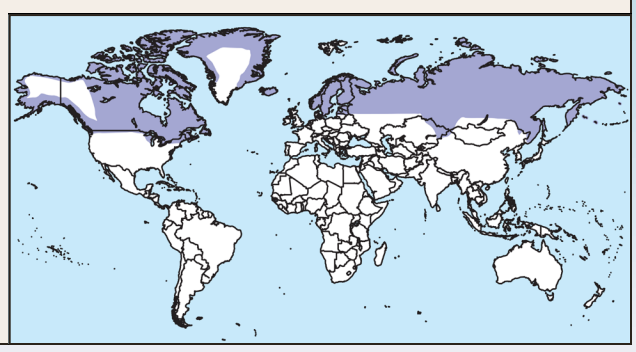
Snowy Owl

Bubo scandiacus



In summer, Snowy Owls live north of the Arctic Circle hunting lemmings and other prey in 24-hour daylight. In winter months of darkness, if they aren't hunting ducks in frigid Hudson Bay, they show up irregularly in more populated areas to hunt in windswept fields or dunes, blending in perfectly with the snow.

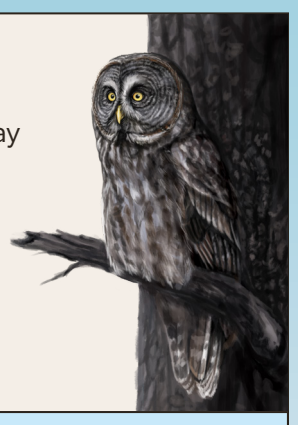
Strong muscles make Snowy Owls one of the heaviest owls—nearly twice the weight of the taller Great Gray Owl.



Length: 1.7–2.2 ft (53–66 cm)
Weight: 1.6–6.6 lb (0.7–3 kg)
Wingspan: 4.1–5.4 ft (125–166 cm)

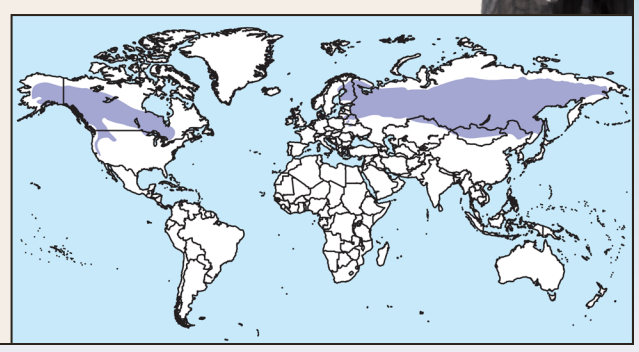
Great Gray Owl

Strix nebulosa



Dressed in a gray suit and white bow tie, the Great Gray Owl lives in dense boreal forests of the Northern Hemisphere. This elusive giant (the world's tallest owl) quietly floats on broad wings across meadows and openings in evergreen forests, looking for small mammals to pounce upon.

When prey is scarce, it will venture south to more populated areas, to the delight of those lucky enough to see this majestic owl.



Length: 2–2.7 ft (61–84 cm)
Weight: 1.5–3.7 lb (700–1700 g)
Wingspan: 4.5–5 ft (137–153 cm)