

Maria Metler Education Program Director | Vashon Nature Center

Play video sound clip 0:25 - 0:45 How many of you have ever heard anything like that before? Let's listen again!

This is a barred owl. The most common owl on Vashon and Maury island as far as we know.

Raise your hand if you know how many different species of owls there are in the world?

134 kinds of owls around the world...... How many on Vashon?

- 1. BARRED OWL (most common)
- 2. GREAT HORNED OWL
- 3. BARN OWL
- 4. NORTHERN SAW-WHET OWL
- 5. NORTHERN PYGMY OWL
- 6. WESTERN SCREECH OWL
- 7. LONG-EARED OWL
- 8. SHORT-EARED OWL
- 9. SNOWY OWL (uncommon)
- 10. SPOTTED OWL (historical)

How many different kinds of owls have been recorded here? Today - as many as 9 species. Historically, 10.

From most to least Common:

BARRED OWL (most common)

GREAT HORNED OWL

BARN OWL

NORTHERN SAW-WHET OWL

NORTHERN PYGMY OWL

WESTERN SCREECH OWL

LONG-EARED OWL

SHORT-EARED OWL

SNOWY OWL (uncommon)

SPOTTED OWL (historical)

Owls are Nocturnal Raptors

Nocturnal = Active at night

Raptor = Bird of Prey

Features include:



Hooked talons



Sharp, pointed beaks



Forward facing eyes



Large, round facilial discs



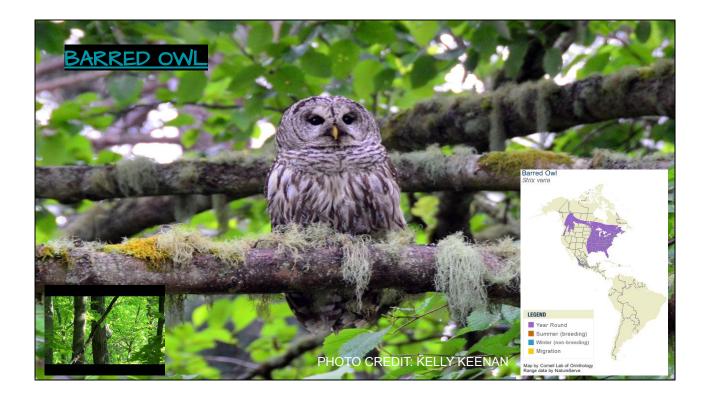
Specialized feathers for near silent flight

VIDEO: 0-23 sec 1 min 2 min

NOCTURNAL RAPTORS = active at night / bird of prey

- 1. Hooked talons capture prey.
- 2. Sharp pointed beaks tear apart their prey.
- 3. Forward facing eyes.
- 4. Neck rotate 270 degrees to compensate for fixed eye sockets.
- 5. Large round facial discs focus available light to their eyes and sound to their ears.
- 6. Hollow bones.
- 7. Nearly silent flight from specialized wing feathers.
- 8. Nest in cavities rather than making their own

Diet: small mammals- they are excellent rodent control! Moths,



VIDEO CLIP: 23 sec - 43 sec for vocals

Size & Shape: 20" large, stocky owls with rounded heads, **no ear tufts**, and medium length, rounded tails.

Color Pattern Eyes are dark brown, almost black. Mottled brown and white overall. The underparts are marked with vertical brown bars on a white background, while the upper breast is crossed with horizontal brown bars. The wings and tail are barred brown and white.

Behavior They roost quietly in forest trees during the day, though they can occasionally be heard calling in daylight hours. At night they hunt small animals, especially rodents, and give an instantly recognizable "**Who cooks for you?**" call.

Habitat Mature mixed forests, often near water. They nest in tree cavities.

- Recently expanded their range into the Pacific Northwest. First in WA and BC in '70's; previously only East of the Rockies.
- Don't migrate.
- The Great Horned Owl is the most serious predatory threat.
- Fossils at least 11,000 years old, from the Pleistocene era, have been dug up in Florida, Tennessee, and Ontario.
- Young Barred Owls can climb trees by grasping the bark with their bill and talons, flapping their wings, and walking their way up the trunk.
- The oldest Barred Owl on record was at least 24 years old.

Status: Most common resident and breeder. Populations continue to rise. First sighted in the Puget Sound region in the 1970's. Previously only East of the Rockies.

FIND THIS BIRD: visit a mature forest in the evening and listen for the "who cooks for you?"



Size & Shape: Large, stocky, up to 25 inches tall

Color Pattern: Mottled dark and light brown overall with tan facial discs, and a white collar bar on their chest. Large tufted ears make this the quintessential storybook owl such as the one who live in the Hundrad Acre wood with Winnie, Piglet and Christopher Robin.

Behavior Adaptable and a fierce hunter capable of taking down birds and mammals larger than themselves.

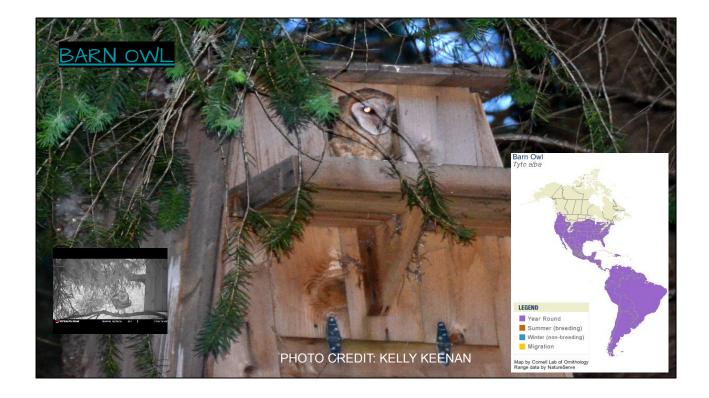
Habitat In forest, desert, urban, grassland and most semi-open habitats. They nest in tree cavities.

- Great Horned Owls are fierce predators that can take large prey, including raptors such as Ospreys, Peregrine Falcons, Prairie Falcons, and other owls.
 They also eat much smaller items such as rodents, frogs, and scorpions.
- When clenched, a Great Horned Owl's strong talons require a force of 28 pounds to open. The owls use this deadly grip to sever the spine of large prey.
- If you hear an agitated group of cawing American Crows, they may be mobbing a Great Horned Owl. Crows may gather from near and far and harass the owl for hours. The crows have good reason, because the Great Horned Owl is their most dangerous predator.
- Even though the female Great Horned Owl is larger than her mate, the male has a larger voice box and a deeper voice. Pairs often call together, with audible differences in pitch.

- Great Horned Owls are covered in extremely soft feathers that insulate them
 against the cold winter weather and help them fly very quietly in pursuit of
 prey. Their short, wide wings allow them to maneuver among the trees of the
 forest.
- Great Horned Owls have large eyes, pupils that open widely in the dark, and retinas containing many rod cells for excellent night vision. Their eyes don't move in their sockets, but they can swivel their heads more than 180 degrees to look in any direction. They also have sensitive hearing, thanks in part to facial disc feathers that direct sound waves to their ears.
- The oldest Great Horned Owl on record was at least 28 years old when it was found in Ohio in 2005.

Status: Previously our most common resident and breeder more recently displaced by barred owls.

FIND THIS BIRD: visit a mature forest in the evening and listen for the "who cooks for you?"



VIDEO: KELLY KEENAN

Size & Shape 18" Medium-sized owls with rounded head, long rounded wings, and short tail wings. The legs are long.

Color Pattern Eyes are dark. Pale overall with buff and gray on the head, back, and upper wing. White on the face, body, and underwings. When seen at night they can appear all white.

Behavior Roost in cavities, abandoned barns and other buildings, and dense trees. At night, Barn Owls hunt by flying low, back and forth over open habitats, searching for small rodents primarily by sound.

Habitat Require large areas of open land over which to hunt: marsh, grasslands, or mixed agricultural fields. For nesting and roosting, they prefer quiet cavities, either in trees or man-made structures such as barns or silos.

- The Barn Owl has excellent low-light vision, and can easily find prey at night by sight. But its ability to locate prey by sound alone is the best of any animal that has ever been tested. It can catch mice in complete darkness in the lab, or hidden by vegetation or snow out in the real world.
- Barn Owls swallow their prey whole—skin, bones, and all. About twice a day, they cough up pellets instead of passing all that material through their digestive tracts. The pellets make a great record of what the owls have eaten,

- and scientists study them to learn more about the owls and the ecosystems they live in.
- Up to 46 different races of the Barn Owl have been described worldwide. The North American form is the largest, weighing more than twice as much as the smallest race from the Galapagos Islands.
- Barn Owl females are somewhat showier than males. She has a more reddish and more heavily spotted chest. The spots may indicate the quality of the female. Heavily spotted females get fewer parasitic flies and may be more resistant to parasites and diseases. The spots may also stimulate the male to help more at the nest. In an experiment where some females' spots were removed, their mates fed their nestlings less often than for females whose spots were left alone.
- The oldest known North American Barn Owl lived in Ohio and was at least 15 years, 5 months old.

Used to be rare. Now is common.

FIND THIS BIRD: Frequently seen around Wax Orchards fields and Paradise Valley.



BARN OWL SNOWY OWL

18" Barn Owl vs. 24" Snowy Owls

Rounded heads without ear tufts

Hunt in open habitats

White with brown. White, with black, sometimes only white (males)

Little to no leg feathers Dense feathering on legs

Black eyes Yellow eyes



Size & Shape 7" These are very small owls with large, rounded heads that lack ear tufts.

Color Pattern Mottled brown birds with a whitish facial disk and white-spotted head. Their eyes are yellow.

Behavior Nocturnal and hard to see, but they have a shrill, penetrating call that they give many times in succession. During daylight they roost in dense vegetation, typically just above eye level and near the trunk in evergreen trees.

Habitat Forest birds. They breed across northern North America, and winter across the central and southern U.S.

- May have been named for giving a call that sounds like a saw being sharpened on a whetting stone.
- The main prey items of the Northern Saw-whet Owl are moths and mice, and especially deer mice of the genus *Peromyscus*. Saw-whets usually eat adult mice in pieces, over the course of two meals.
- The female Northern Saw-whet Owl does all of the incubation and brooding, while the male does the hunting. When the youngest nestling is about 18 days old, the female leaves the nest to roost elsewhere. The male continues bringing food, which the older nestlings may help feed to their younger siblings.
- The female saw-whet keeps the nest very clean, but a mess starts to

- accumulate when she leaves. By the time the young owls leave the nest, 10 days to 2 weeks later, the nest cavity has a thick layer of feces, pellets, and rotting prey parts.
- Migration in saw-whets has historically been poorly understood, because of their nocturnal, reclusive behavior. In the 1990s researchers began Project Owlnet, a collaboration that now consists of more than 100 owl migration banding sites. Researchers use the too-too-too call to lure owls in to mist nets, and band thousands of saw-whets every fall.
- Migrating Northern Saw-whet Owls can cross the Great Lakes or other large bodies of water. In October of 1999, one landed on a fishing vessel 70 miles from shore in the Atlantic Ocean near Montauk, New York.
- The oldest Northern Saw-whet Owl on record was at least 9 years, 5 months old when it was captured and released by a Minnesota bird bander in 2007. It was originally banded in Ontario in 1999

Status: Uncommon winter resident and rare breeder. Confirmed breeding has occurred in Flicker nesting boxes.



- Build or purchase nest boxes to install around your home. Most owls
 use dead standing trees as homes. Snags are often removed due to
 the hazards they pose to humans, making it harder for young owls to
 find homes. More owls around our homes helps control rodent
 populations.
- Learn and read about owls and share the information you learn with those around you. There are many superstitions surrounding owls. Be careful to distinuquish between the truth and alternative facts!
- 3. Turn off outdoor lights at night. Most owls hunt better and feel more secure and comfortable in darkness. Turning off porch lights, landscape lighting and other outdoor illumination will help owls roam more freely. Similarly, decorative string and net lights should be minimized not only to reduce light levels, but to minimize the risk of hunting owls getting tangled in the wires.
- 4. Remove all types of netting from your yard at night, including soccer or hockey nets and the netting from basketball hoops. Flying owls can get tangled in these nets, causing distress, injuries and even death.
- 5. Encourage adults to not use pesticides to control rodents. Pesticides and rodenticides are a grave threat to owls. As <u>apex predators</u>, these birds can accumulate lethal levels of chemicals in their blood as they consume contaminated prey a process called biomagnification leading to illness and death. Instead of relying on chemicals to control

- 1. rodent populations, invite owls to hunt with appropriate habitat and they will quickly keep the prey in check.
- 2. Join VNC on an owling expedition as part of our traditional BioBlitz events.
- 3. Find an organization which allows you to adopt an owl for a donation fee.

Owls do not build their own nests. They take the abandoned nests of other raptors.

Or use old woodpecker holes, raccoon nests, or other holes in snags

Snags are dead standing trees.

Most people see snags as hazards, since they can easily fall threatening our safety and property, so they are often removed.

Since owls need large trees with big cavities, and those just don't' exist like they used to, the competition for nesting spots is high.

Nest boxes increase the number of cavities available for owls.

Humans benefit since owls are major contributors to helping control rodent populations.

They are part of the island ecosystem and worth supporting.

They have an intrinsic value to many people, providing comfort simply by their existence.

What can YOU do to help owls?

- 1. Install nest boxes around your home.
- 2. Share the information you learn about owls with those around you.
- 3. Help adults remember to turn off outdoor lights at night.
- 4. Remove all types of netting from your yard at night.
- 5. Encourage adults to not use pesticides to control rodents.
- 6. Join VNC on an owling expedition at next summers BioBlitz.
- 7. Find an organization which allows you to adopt an owl for a donation fee.





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WHY NEST BOXES???

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- Snags are dead standing trees.
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- Since owls need large trees with big cavities, and those just don't' exist like they used to, the competition for nesting spots is high.
- Nest boxes increase the number of cavities available for owls.
- Humans benefit since owls are major contributors to helping control rodent populations.
- They are part of the island ecosystem and worth supporting.
- They have an intrinsic value to many people, providing comfort simply by their existence.

Thank you Gary Shugart!



Nights at the Museum

Sources

Cornell Lab of Ornithology. All About Birds https://www.allaboutbirds.org/

Hungry Owl Project. http://www.hungryowl.org/index.html

Parker, Harsi. Phone conversation and email.

Sibley, David Allen. The Sibley Field Guide to Birds. Chanticleer Press Inc. New York; 2003.

Swan, Ed. Birds of Vashon Island. The Swan Company. Vashon, WA; 2005