



# HABITAT ACQUISITION TRUST

# OWLS

## protection

## & stewardship

Western Screech Owl (*Megascops kennicottii*) Photo by Ann Nightingale

## Our Owls, Our Neighbours Being Owl Wise

**1. More seldom seen than heard**, thanks to their preference for the night, one of the best ways you can get to know your neighbourhood owl is to listen for its call. Owls use hoots, barks, screeches, and even clack their beaks to communicate. Surprisingly, Western Screech Owls rarely screech! Their most iconic courtship call resembles the sound of a bouncing ball with the notes closely spaced towards the end.

**2. All the better to hunt with!** The unique features of owls make them excellent hunters, taking down prey like rodents, bugs, and slugs. Their eyes are large for low light and held in place looking straight ahead. Owls make up for this by turning their heads up to 270 degrees both ways. Their disc-shaped faces direct sound to their ears. Owls' ears are asymmetrical allowing them to better pinpoint where sounds are coming from. Even owl feathers are specialized for silent flight. To top it off, owls have camouflage,



Western Screech Owl photo by Ann Nightingale.

sharp beaks, and strong talons.

**3. Owls make great neighbours, but awful carpenters.** As secondary cavity-nesters, Western Screech Owls rely on others to build a home where they can rear young. That means trees with natural cavities and holes made by Pileated Woodpeckers or Northern Flickers must be left standing tall for their survival. You can welcome owls as neighbours by installing a HAT owl box and supporting Habitat Acquisition Trust in conserving important owl habitat.

**4. Location, location.** In our region, most suitable habitat for owls is privately owned. Habitat protection by people like you means a whole lot to our winged friends. Mixed woodland and conifer forest habitats near water sources such as creeks or rivers with low shrubs or sword ferns to attract small mammals to eat are ideal for the Western Screech Owl.

The Owl Project is partially funded by:



## Stewardship Series

Issue 5: Fall 2016

### HAT's Western Screech Owl Project

Have you ever seen a Western Screech Owl? Their nocturnal behaviour can make owls a special sight for us to encounter. However that's not the only reason you probably haven't encountered a Western Screech Owl (*Megascops kennicottii kennicottii*).

Once a common sight, with 13 nests on the University of Victoria grounds alone, **Western Screech Owls (WSOW) in our region have declined by over 90% in the last 10 years.**

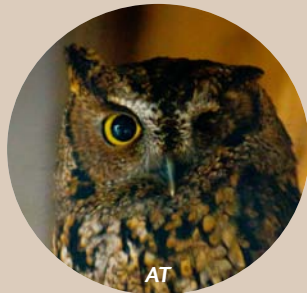
**With your kind support**, Habitat Acquisition Trust has launched the Western Screech Owl Monitoring Program to keep tabs on this species at risk in our region. **February to April is nesting season and WSOW are most vocal**, so that is when HAT and keen volunteers listen after dark for their calls around historically known sites or recent report areas.

During 2015 surveys, over **50 HAT citizen scientists heard WSOWs at 5 different sites.** We also **installed two audio meters** in WSOW habitat to record and analyze their calls. This data is integral to understanding local owl's habitat needs and behaviour.

**The future of owls in our forests depends on you.** You can heed the Western Screech Owl's call for help by reporting when you see or hear them and making a donation towards their stewardship with HAT.

# Who's who in our neck of the woods?

(Not an exhaustive list)



AT

**Western Screech Owl\***  
*Megascops kennicottii*

Small owl, often call from February - April



CC

**Northern Saw-whet Owl**  
*Aegolius acadicus*

Short blunt tail, has no ear tufts



AT

**Great Horned Owl**  
*Bubo virginianus*

Large with noticeable feather tufts



AT

**Barn Owl\***  
*Tyto alba*

With a heart-shaped face, slender body, long-legs



LD

**Northern Pygmy Owl\***  
*Glaucidium gnoma*

Two black eye-like spots on the back of its head



**Snowy Owl**  
*Bubo scandiacus*

When arctic prey is scarce they head south



EP

**Barred Owl\*\***  
*Strix varia*

Noteworthy for its "who cooks for you?" call



UM

**Short-eared Owl\***  
*Asio Flammeus*

Occasionally overwinters on Vancouver Island

\*Denotes a federal or provincial listed species at risk

\*\*Denotes recent colonizers of our region

Learn to identify local owls by their calls: [allaboutbirds.org](http://allaboutbirds.org)

# Getting to know Owls: Our feathered friends

by Ann Nightingale



Western Screech Owl in dead tree

TT

**Owls have fascinated humans throughout history.** Despite this, we still know relatively little about them. In many cultures, owls have been seen as bad omens, sometimes even forecasting death. They have been feared and hated, associated with darkness and evil. No wonder people didn't want to spend the time to learn more about them.



Great Horned Owl

**Though there are many similarities among owls, there are also a lot of differences.**

They can be the size of a human hand or almost a meter tall. Some species of owls nest on the ground, while others nest in buildings, in hollow trees, in human-made boxes, or even in desert cacti.

**While most owls will eat rodents** and small birds, some, like the Barred Owl, will also eat earthworms or catch fish. The Great Horned Owl is big enough to catch a cat!

**Most people today are intrigued by these strange birds with the front-facing eyes.** Those eyes are locked in that position, so an owl must turn its whole head to look to the side. Good thing they have a 270° range!

**Owls can also represent wisdom.** A group of owls is called a parliament, though there are few species that group together. They are very good parents, sometimes feeding young several weeks after they leave the nest.

**Owls are not just active at night.** Barred Owls hunt day and night, and others, like Northern Pygmy-Owls are most active during the day. Short-eared Owls are most often seen at dusk and dawn.

**The Northern Saw-whet Owl** is one of the most abundant secretive owls in North America. In fall, there is a large southward movement, not considered a true migration. Thousands of these small owls pass over southern Vancouver Island in September and October.

One of the coolest things that has been recently discovered is that newly grown feathers of this species, and some others, contain a protein that glows under ultra-violet light.

Juvenile Barn Owl



Using UV light to investigate owl flight feathers, biologists can tell a Northern Saw-whet Owl's age

# Helping Owls: It's a hoot!

## You can help owls by preventing predation by cats.

Outdoor cats tend to return home with just a quarter of what they catch, many cat-lovers can't know how much wildlife their pet kills. Cats not only kill roughly 269 million birds in Canada a year, including owls, they also kill owl food (mice and voles). Cat bibs have proven to be an effective solution, yet the most effective solution is to keep your cat indoors or under supervision while outside.



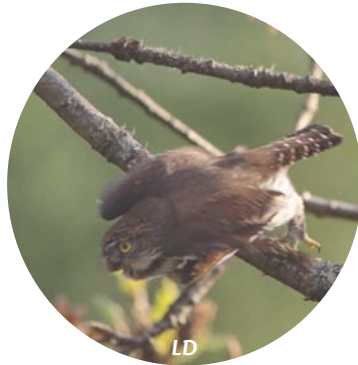
Also for your cat's own safety, hunting wildlife presents diseases your pet may be exposed to. Please Contact BC SPCA Wild Animal Rehabilitation Centre (Wild ARC) at 250-478-9453 if your pet has injured an animal.

Above: Western Screech Owl by Christina Carrieres

## Leave the pest control to the naturals!

Owls are an excellent source of pest control. One Barn Owl pair alone can eat up to 3,000 mice a year.

On the other hand, many poison-based rodent traps use rodenticides, some of which have been recalled and restricted because of their harmful effect on other species. In a study of the impact of rodenticides on owls, 70% of owls studied had residues of at least one of these poisons, and 40% had residues of more than one rodenticide.



Northern Pygmy Owl on the hunt

By using poison you could be harming our owls who are much more efficient and natural rodent hunters. Poison also creates another potential hazard for neighbourhood pets and local wildlife. The more we care for owl populations, the more help we will get in controlling rodents.

**Your kind support and land management with owls in mind means that generations to come can enjoy the haunting voices and wide-eyed spectacle of these magnificent hunters.**



Barn Owl

AT

# Owl Nest Boxes



Not just any old bird house will do for our regal owls. Western Screech Owls need houses of the right dimensions, so they can fit comfortably but predators cannot.

A key component to HAT's Western Screech Owl Project is building and providing nest boxes in their territory. So far the program has provided 36 nest boxes for our owls in need.

The boxes are designed to address two major impacts to these little owls' populations:

1. Loss of suitable nesting cavities, previously found in mature forest on the south coast
2. Attacks by larger Barred Owls

### Let's build an owl box!

Entrance hole diameter	3"
Entrance hole height	12" above floor
Length from floor to ceiling	19"
Mounting Height	10 feet or higher

Ensure your box can be opened for annual removal of nesting material and cleaning with hot water or bleach to kill parasites (Oct-Nov).

If you live in suitable Western Screech Owl habitat, contact HAT for more detailed owl box instructions.



Western Screech Owl using a nest box

TT

**Owl-spotting Tip:** See songbirds swooping, calling and acting agitated? They may be mobbing an owl! A cooperative defense tactic.

# Owls

A Northern Saw-whet Owl



## What can I do to give owls a wing up?

**Dead trees are full of life.** As a general rule: a live tree provides habitat for 10 wildlife, a standing dead tree provides for 100, and a fallen tree provides for a 1000. Due to the removal of older growth forests and human tidiness, there is a problematic declines of available wildlife trees that owls need, further threatening their survival.

If removing a tree for safety reasons, often a tall stump can be retained. Talk to your arborist about keeping dead trees on your property.

### Plant or retain these native trees to provide the ultimate home for a cavity nesting owl:

- Douglas-fir
- Bigleaf maple
- Grand fir
- Garry oak
- Western Redcedar
- Arbutus
- Red alder
- Western Hemlock

**Another way to help** is by leaving grasslands and meadows undisturbed or mowing them very infrequently. Grassy areas and shrubby thickets or hedgerows provide habitat for small mammals that owls eat.

**While most pets are released with good intentions,** domestic animals don't belong in the wild. The release of rabbits outdoors can attract large predatory birds that displace and prey on small owls. We ask that you *please* never release domestic animals into the wild.



### Top 7 Owl Stewardship Actions

1. Conserve areas with trees, dead or alive
2. Install owl nest boxes
3. Advance citizen science by reporting Western Screech Owls and volunteering with HAT
4. Protect wetland areas, rivers, creeks, and lakes from disturbance
5. Provide habitat for small mammals that owls can eat by maintaining native vegetation
6. Manage pest problems without poison
7. Enclose domestic animals (fowl, cats, etc.)

## Stewardship Series #5

**Photo Credits:** AT - Adam Taylor, CC - Christina Carriers (BCSPCA WildARC), MO - Marie O'Shaughnessy, EP - Eric Pittman, LD - Lori James Derry, TT - Tania Tripp, UM - USFWS Mountain-Prairie and Ann Nightingale (flickr.com/photos/usfwsmtnpairie), all other photos by HAT.

**Information Credits:** The Birder's Handbook (Ehrlich et al. 1988), Kyle Elliott (2006), Levesque (2002), Albert et al. (2009), Stewardship Centre BC, Tripp (2004), COSEWIC WSO Status Report, Species at Risk Public Registry.

**Acknowledgements:** A huge thanks to Salia Wilson, Ann Nightingale, and Tania Tripp for their content development assistance.

## Rally behind the calls of our Owls!

Habitat Acquisition Trust is South Vancouver Island and the Gulf Islands' land trust, helping our community care for wildlife and their habitat.

Your support will help provide important habitat to conserve these incredible creatures.



Juvenile Great Horned Owl



**Yes!** I want to honour our owls - to make sure their role in our ecosystems is safe. Here is **my donation** for HAT!

Enclosed is my  Monthly/  One-time donation in the amount of \$ \_\_\_\_\_

\*Monthly donations help us the most!

Please direct my donation towards:

- Where Most Needed
- Species at Risk (Owls)
- Land Protection
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Yes! I would like to be added as a HAT member (free with donation of \$30 or more)

Keep my donation anonymous

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