

Bats:

Out of the darkness

This presentation from the BC Bat Edu-kit was adapted for the BC Bat Ambassador Training Program by the BC Community Bat Program.

Target audience: For Bat Ambassadors, educators, school teachers or club leaders, naturalist groups, stewardship groups, interpretive programs, or students in grades K to 12.

Length: About 1.5 hours or it can be broken up into 2 days or adapted as you see fit.

How to use:

1. Get familiar with the PowerPoint presentation.
Make sure to read thru the 'notes' pages as these can be used as speaking notes.
2. Print out the notes page and have it ready for when you do your presentation.
3. Have the props ready so you can use them during the slide show.
4. Do the slide show and follow the 'notes' page.
5. The slide show is divided into 4 sections:
 - Bats are interesting.
 - Bats are important.
 - Bats are in trouble.
 - You can help bats.

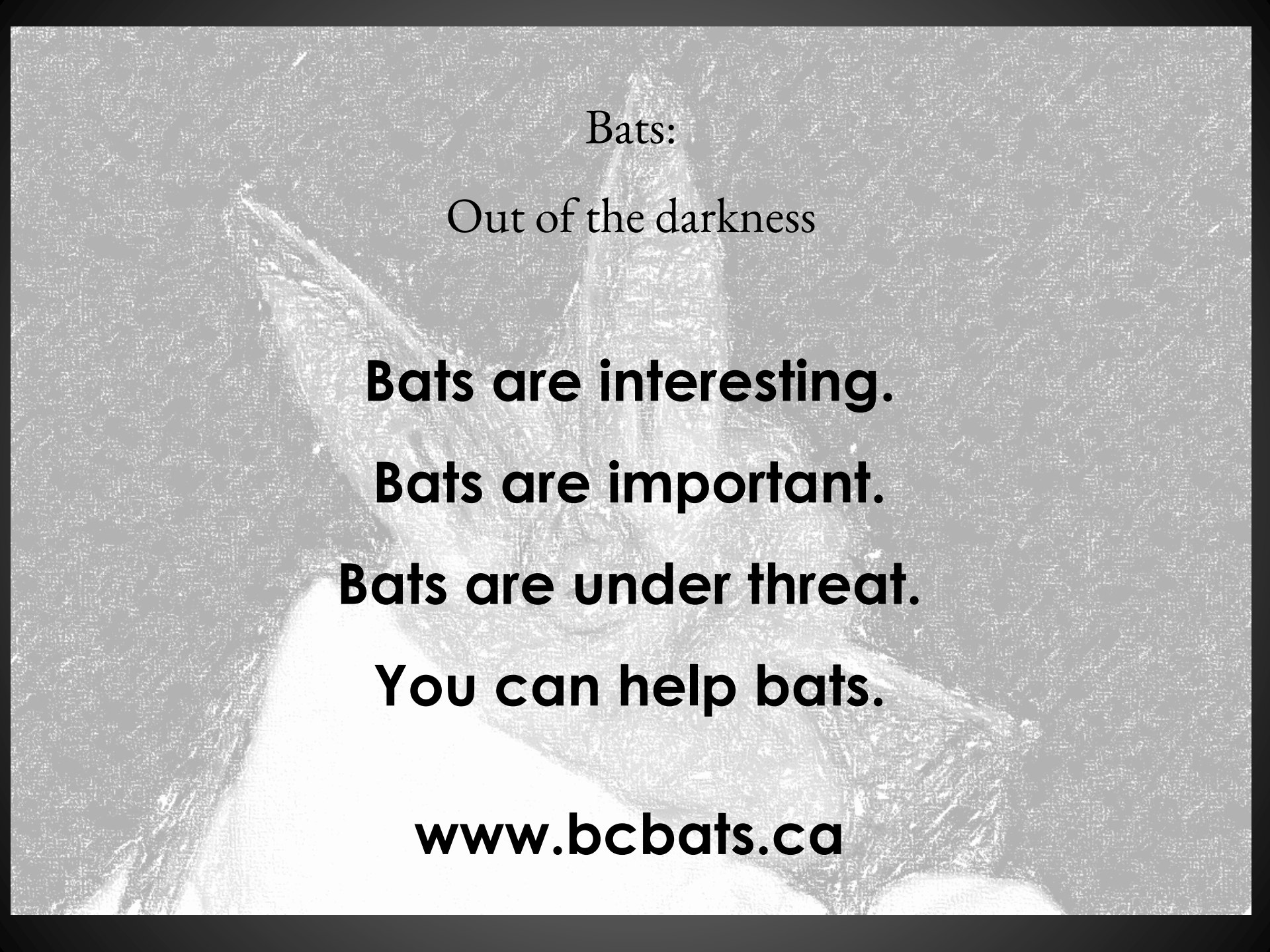
How to adapt for your own presentation:

1. Deliver the entire presentation (original form)
2. Shorten presentation by removing some slides
3. Adapt for your purposes but for educational purposes only. You may not use photos if they are not within this PowerPoint.
4. Use the template power point in “Resources” to create your own presentation

Props that would be useful if available:

- Bat skeleton
- Small bat finger puppet
- Bat skull to show teeth
- Taxidermies of small and large BC bats
- Bat guano
- Bat costume (fur vest, wings, ears)
- Slinky (for echolocation)
- 30cm ruler
- Cdn quarter and 5 loonies

Note that some regions may have prop kits available for sign out.



Bats:

Out of the darkness

Bats are interesting.

Bats are important.

Bats are under threat.

You can help bats.

www.bcbats.ca



Bats are interesting



Photo by Okanagan Community Bat Program

Bats are nocturnal.



Bats are mammals.

Bats are warm-blooded.



By Eduard Kyslynsky

Bats have fur.



Bats give birth to live young
and newborns suckle milk.



Little Brown Myotis female and pup,
by Kaylin Hobza



Baby bats in BC
grow to full size
in 3 to 6 weeks.

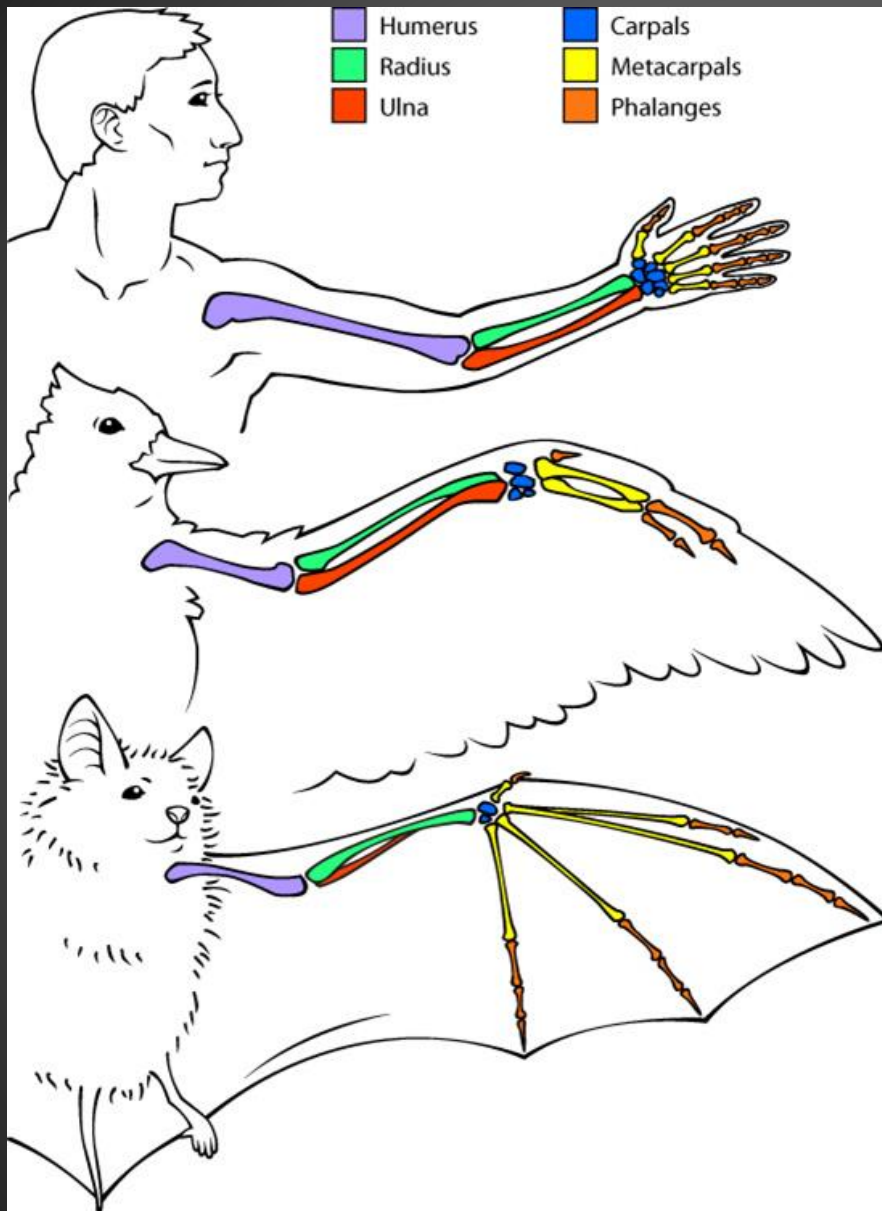
Pups can't fly
but they can
cling to their
mother or the
wall of the roost.

Bats are the only
mammal that can fly.



By Stickpng.com

Order Chiroptera

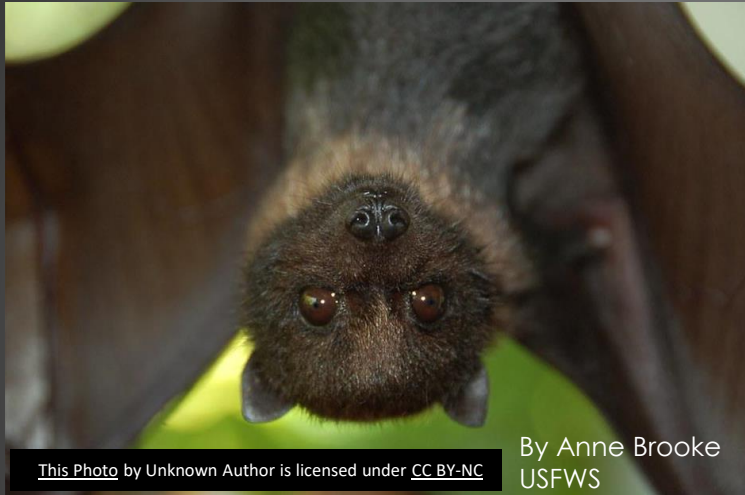


Bats have wings on their hands.

Life Cycle of a BC Bat



How many different kinds of bats live in BC?



Hints:
We don't have fruit bats.



We don't have vampire bats.

**At least 15 species of bats live in BC.
They are all unique in their own ways.**



Silver-haired Bat, by Merlin Tuttle.org ©



Long-legged Bat, by Merlin Tuttle.org ©



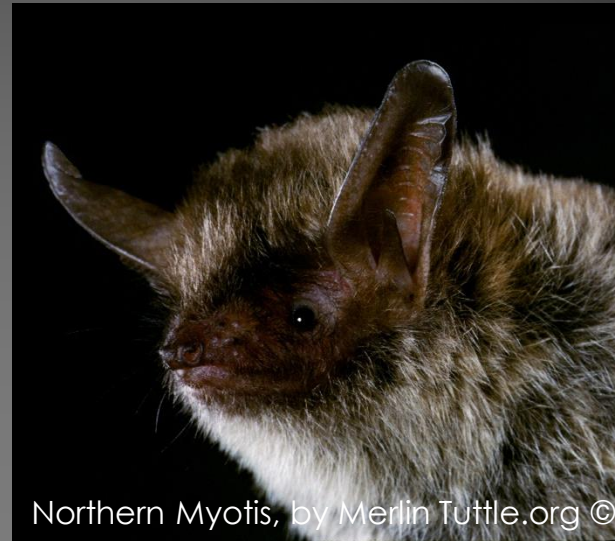
Californian Myotis, by John Saremba



Yuma Myotis, by Daniel Neal



Little Brown Myotis, by Cory Olson



Northern Myotis, by Merlin Tuttle.org ©



Pallid Bat,
by Cory Olson



Spotted Bat, by
Margi Chantler

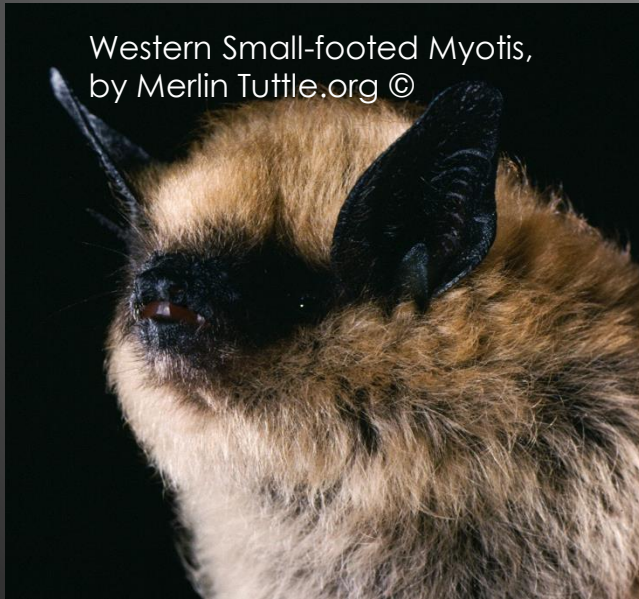
Fringed Myotis, by Merlin Tuttle.org ©



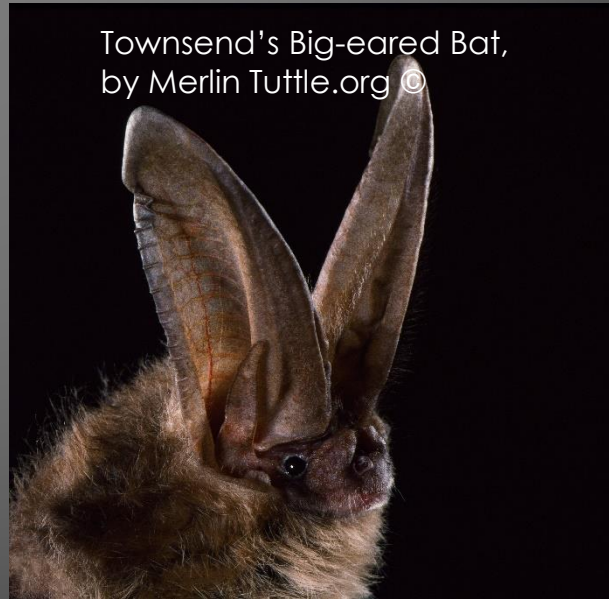
Eastern Red Bat, by Merlin Tuttle.org ©



Western Small-footed Myotis,
by Merlin Tuttle.org ©



Townsend's Big-eared Bat,
by Merlin Tuttle.org ©



Smallest and biggest bat of BC.



Western small footed bat



Hoary bat by
Merlin Tuttle.org ©

A photograph of a bat hanging from a rock crevice at night. The bat is silhouetted against the dark background of the cave. The rock is layered and textured, with some moss visible. The ground is covered in dry leaves and twigs.

Where do bats live?

Bats need food, water, and shelter to survive

Bats live in natural areas.



By Mandy Kellner



Approximately 5.6% of BC is still wetland. However, much of that resource is located in remote areas. The settled areas of BC are far advanced in their loss of critical wetlands

Bats need water



Bats need food. What do BC bats eat?

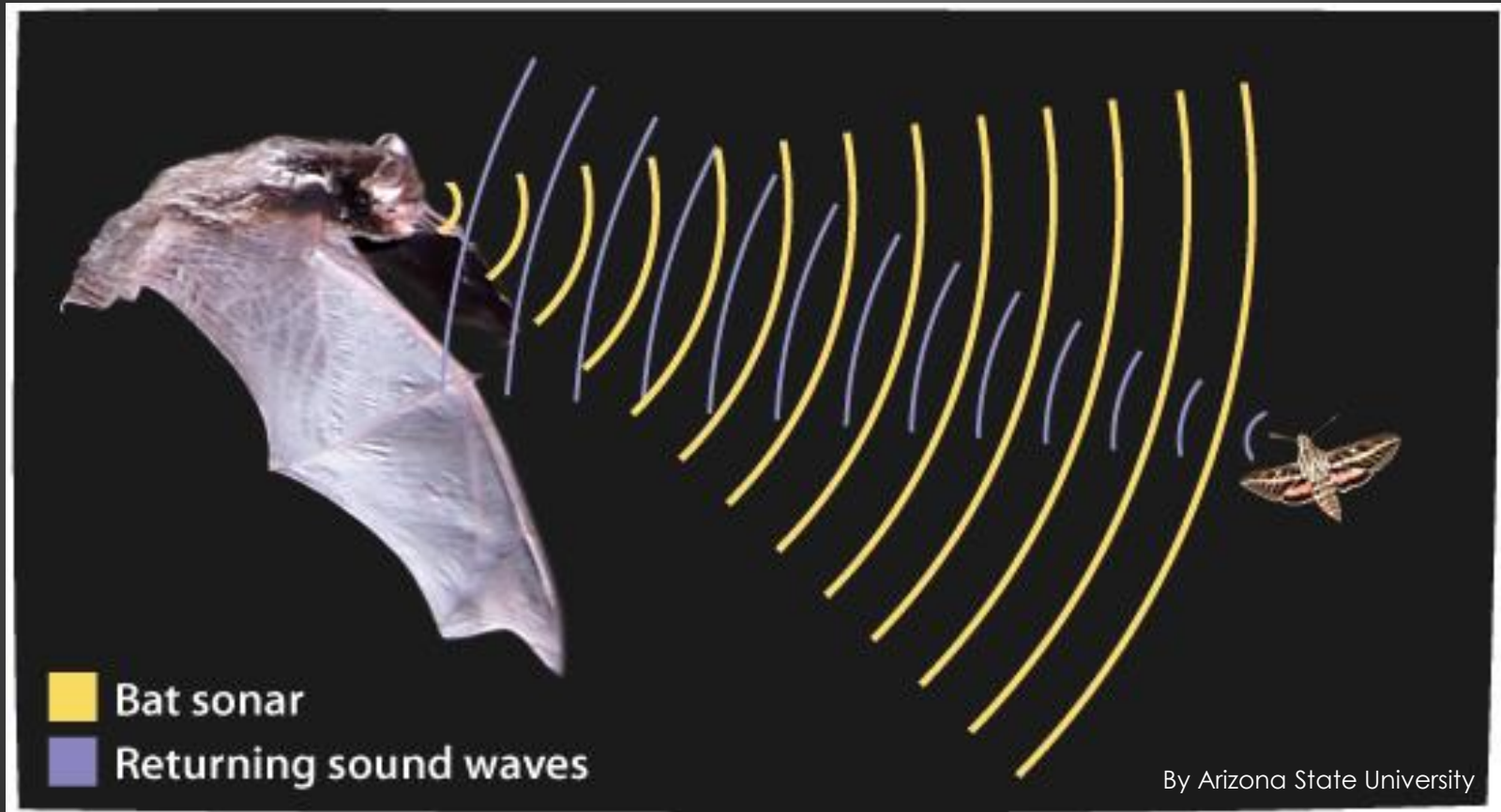


By Jordi Segers

All the bats in BC eat
only insects and arachnids.



How do bats hunt at night?



Bats use echolocation



Play video by passing mouse over photo



Some bats have large ears and can listen for their prey,
as well as being able to echolocate.

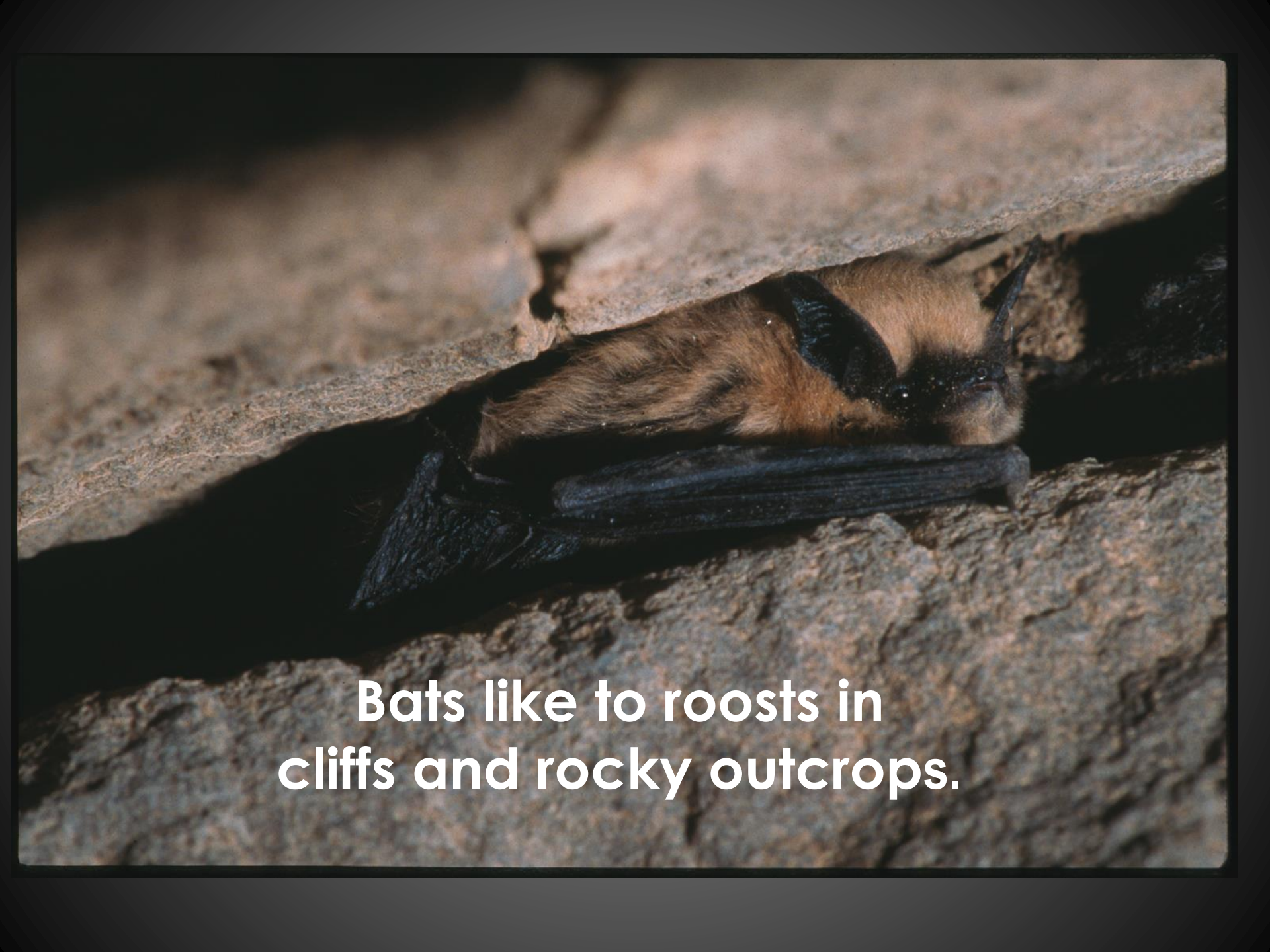
Bats need shelter.
Their shelter is called a roost.





By US National Park Service

Bats like to sleep under the bark of trees.

A close-up photograph of a bat roosting in a rocky crevice. The bat has brown fur on its head and neck, and black fur on its wings and body. It is positioned horizontally, with its head to the right and its wings folded. The background is a rough, textured rock surface.

**Bats like to roosts in
cliffs and rocky outcrops.**

Four bat species commonly roost in buildings!



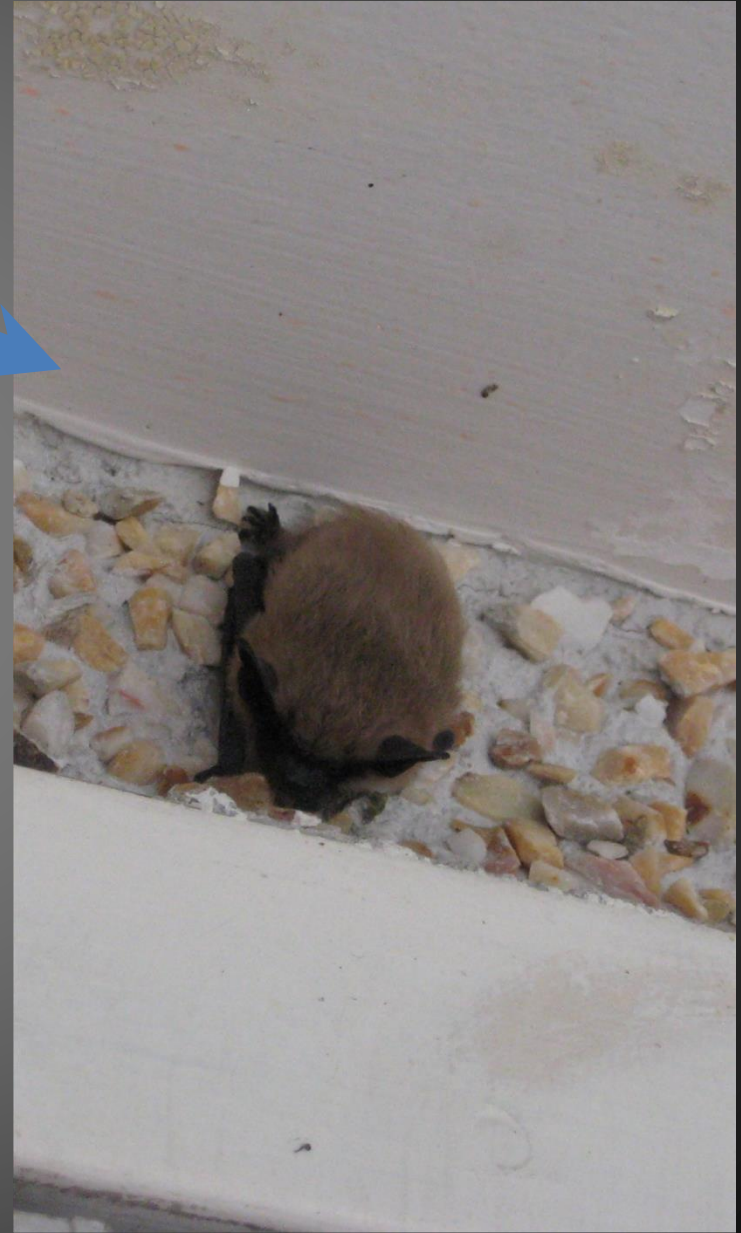
By Juliet Craig



By BEEPS

Example: the Peachland Visitor Centre houses a colony of >2000 Yuma and Little Brown Myotis in the attic.

Male bats often roost by themselves.



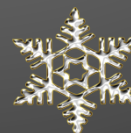
By Paula Rodriguez de la Vega

Only 6 species of BC bats
sometimes use bat boxes to roost.



By BC Community Bat Program

Where do the bats of BC live in winter?



By S. Altenbach, Cabeza Prieta
Natural History Society



By Creative Commons



By Bugwood



Silver-haired bat

Hoary bat

Eastern Red bat

**Three of our 15 bat species
migrate south.**



Bats are important

Bats eat insects like mosquitoes and many farm and forest pests.



Some bats also eat arachnids.

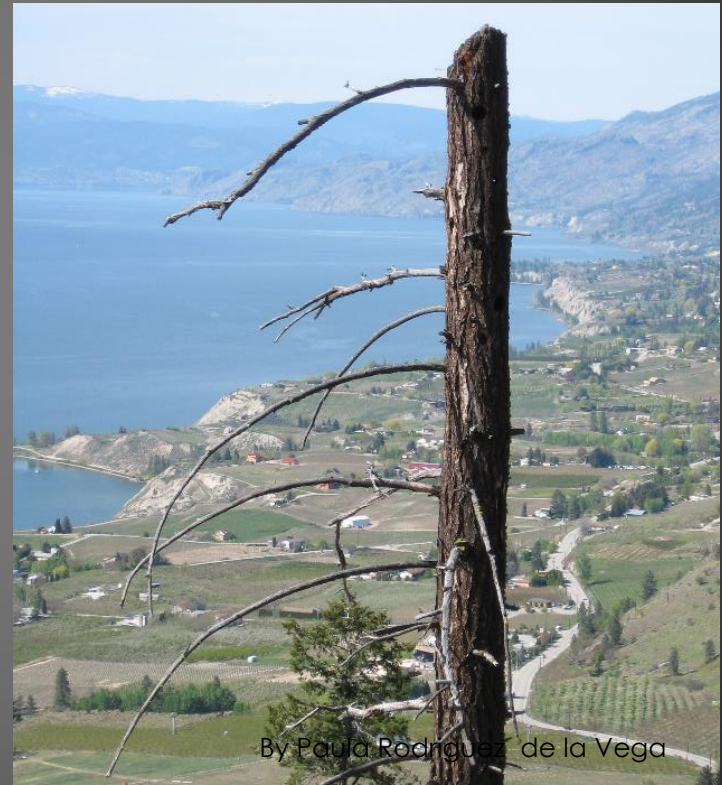


Bats are important part of nature's foodweb.



Bats help with nutrient cycling.

Bat guano, like manure, is a rich fertilizer.

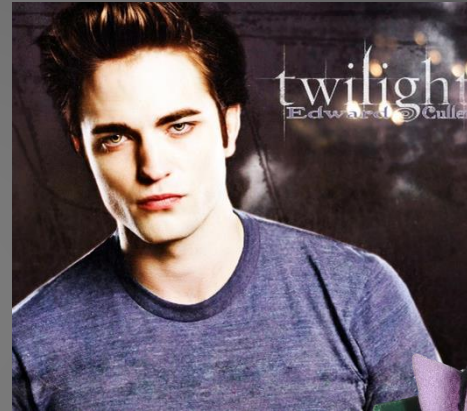
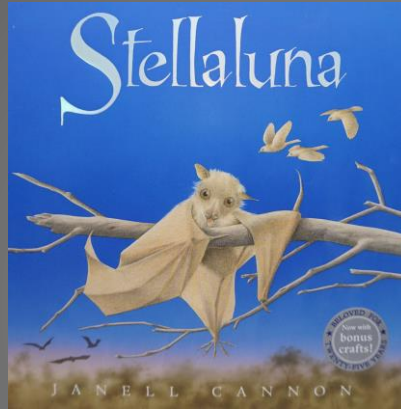


In other parts of the world, bats are important because:

- They pollinate flowers (like bees do).
- They spread seeds of fruit plants that they eat.
- They contribute to medicine.



Bats are part of our world,
tourism economy, and human culture.



The Nsilyxcn name for bat is t'əntanwiya

BAT facts KITANA

- BATS are mammals
- BATS can live as long as 33 years
- They can eat lots of mosquitoes

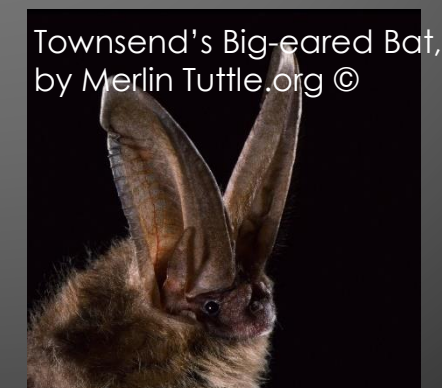
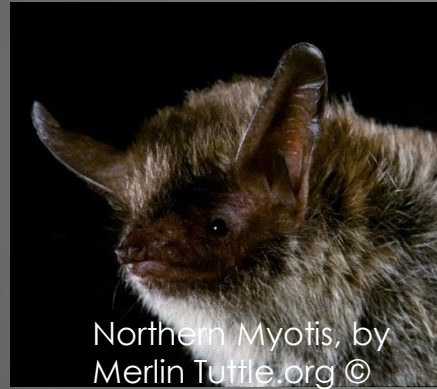
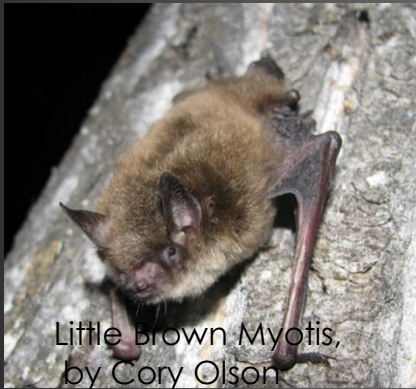


How do bats eat so much mosquitoes?
How do bats live so long?



Bats are in trouble

Seven of BC's bat species are listed as 'at risk' federally or provincially.



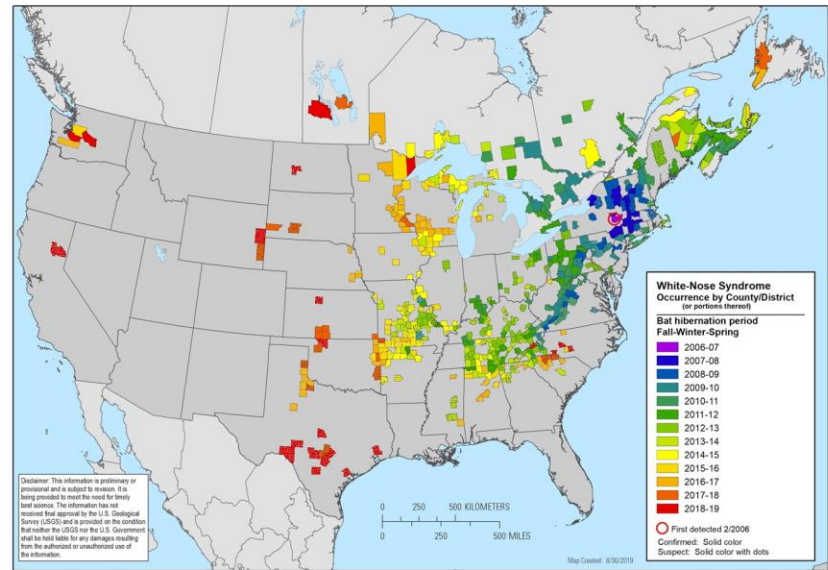


Bats are in trouble

White-nose Syndrome is killing millions of bats.
Report dead bats to www.bcbats.ca.



By PAWS



Citation: White-nose syndrome occurrence map - by year (2019). Data Last Updated: 8/30/2019. Available at: <https://www.whitenosesyndrome.org/latlon-page/wns-spread-maps>.



Bats are in trouble



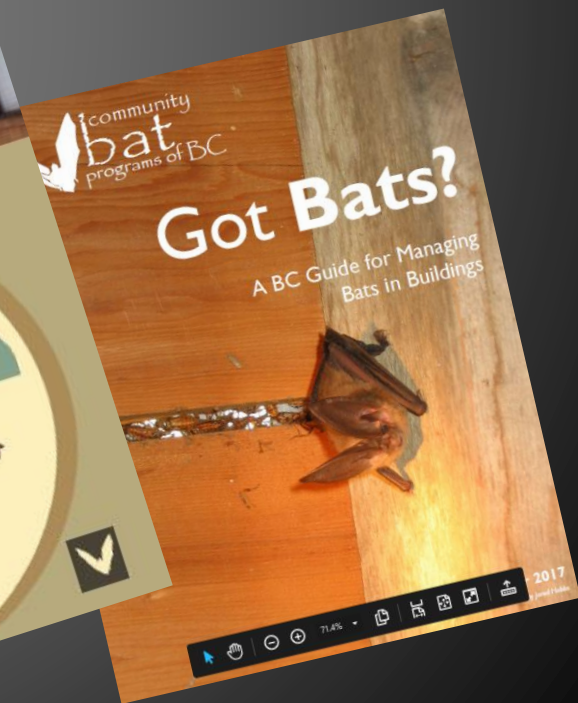
Land clearing
Wetland/lakeside destruction
Urban development
Windfarms
Road kill
Predation by cats





You can help bats

Enjoy bats that visit your home or school.
Leave them alone where safe to do so.





You can help bats

What should you do if you find a bat?



- DO NOT touch bats. Leave it alone.
- Tell an adult.
- Call the BC Community Bat Program
www.bcbats.ca 1-855-922-BATS (2287)



You can help bats

Protect and restore natural habitat.

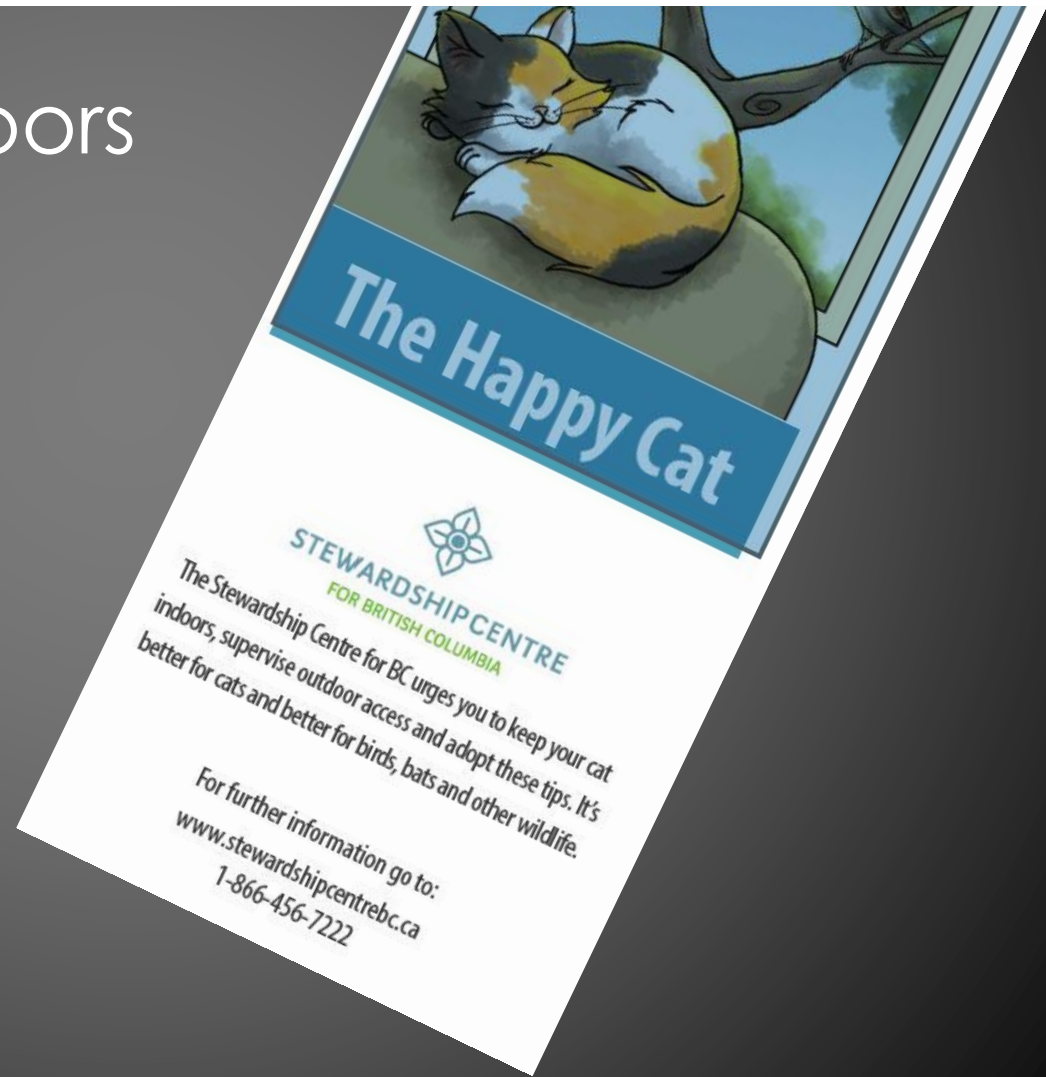


- ✓ Plant trees, especially cottonwoods.
- ✓ Clean up ponds, wetlands, and other waterbodies.



You can help bats

Keep cats indoors



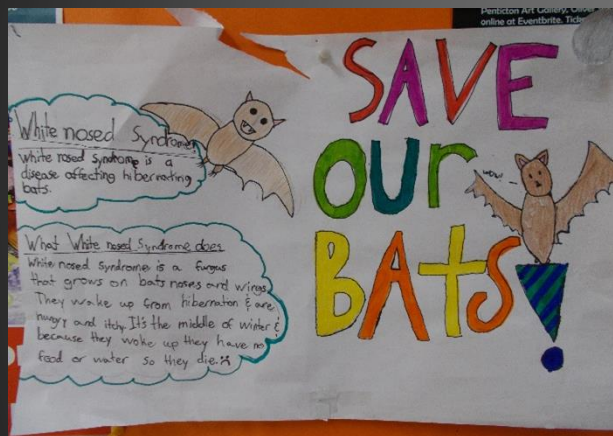


You can help bats

Be a Bat Champion!

Help raise awareness about the importance of bats.

- ✓ Start a bat or nature club.
- ✓ Share that you care. Make a bat poster about why bats are important and put it up at school.
- ✓ Make a video about how wonderful bats are.
- ✓ Ask your teacher to teach about bats.





You can help bats

Be a Bat Champion!



- ✓ Go outside in summer. Look for bats flying in the sky at sunset. See them at work, catching insects.
- ✓ Have a bake sale with treats made with bat-dependent ingredients. Donate funds towards bat conservation.
- ✓ Write a letter to city council and ask them to become a Bat-Friendly Community.



You can help bats



- ✓ Become a Bat Watcher - join the BC Annual Bat Count
- ✓ If doing a bat eviction, put up and monitor bat boxes for mother bats and their pups to live in.



By Cory Olson



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By Creative Commons

Learn more about bats

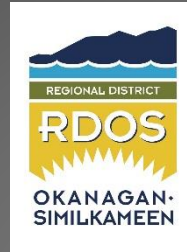
Slideshow
assembled by
Paula Rodriguez
de la Vega



Good night
bats!

Happy
insect
hunting...

This presentation is tied to the BC Bat Edu-Kit.
Thank you to our Bat Edu-kit partners;



This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Recommended bat websites:

- BC Community Bat Programs www.bcbats.ca
- NatureKids BC Bat Citizen Science www.naturekidsbc.ca/be-a-naturekid/stewardship-citizen-science/bat-citizen-science/
- Bat-Friendly Communities www.bcbats.ca/index.php/get-involved/bat-friendly-communities
- Bat Conservation International www.batcon.org
- Bat Week www.batweek.org
- BC Bats: Out of the Darkness www.kelownamuseums.ca

Vampire bats

