# Living With

# **Bats**

# in King County



A Publication of the King County Wildlife Program and Bats Northwest

#### **Learn More About Bats**

Bats are fascinating and beneficial creatures. The key to co-existing with wildlife is understanding them. You can learn more about bats and how to attract them from these books:

America's Neighborhood Bats, Merlin D. Tuttle, University of Texas Press, Austin, TX, 1988.

The Bat: Wings in the Night Sky, M. Brock Fenton, Key Porter Books Limited, Toronto, Ontario, 1998. The Bat House Builder's Handbook, Merlin D. Tuttle and Donna L. Hensley, University of Texas Press, TX, 1997.

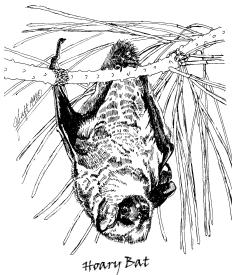
Bats, M. Brock Fenton, Facts on File, NY, 1992.
Bats of America, Roger W. Barbour and Wayne H. Davis, The University Press of Kentucky, 1969.
Bats of British Columbia, David W. Nagorsen and R. Mark Brigham, UBC Press, Vancouver, BC, 1993.

### **Bat Watching 101**

Bats are fascinating to watch as they twist and turn and dash about the sky catching insects. Every summer Bats Northwest leads "Bat Walks" that provide opportunities to see bats and learn basic bat-watching skills. BNW also offers educational programs on bats and has a bat hotline to call for information.

# **Mysterious Creatures**

Bats are one of our most fascinating native animals and of huge importance to many ecosystems. Because they are nocturnal and shrouded in mystery and superstition, most people know very little about them. Bats are the only true flying mammals in the world. Their wings are soft, elastic skin stretched over very long finger bones. All of our Northwest bats eat insects. Bats find insects and navigate in the dark by "echolocation", a type of "radar." They sing out notes, usually far above our range of hearing, and their



exceptionally keen ears pick up differences in the returning echoes that tell the bats what is in front of them. This ability is so refined that bats have no trouble "seeing" tiny insects in total darkness. One bat will eat several hundred insects each night. In one summer, it will eat hundreds of thousands of night-flying pests that might have bitten us or damaged crops or forests. Now, if that bat lives in a colony of 20 to 100 (depending on the species), the colony will eat literally billions of insects! No wonder bats are such good neighbors!

#### **Bat Facts**

- Bats are efficient and natural insect control agents. One Little Brown bat can eat over 600 mosquitoes in an hour.
- There are about 950 bat species. Almost a quarter of all mammal species are bats.
- Some bats, such as the Little Brown bat, can live to be 30 years old.
- Cultures all over the world revere bats. An ancient Chinese symbol commonly used on nobles' clothing shows 5 bats in a circle and means good luck and happiness.
- ♦ Bats have very good eyesight, they're not blind. The old saying "blind as a bat" is a myth.
- In addition to insect control, bats in warmer climates are important pollinators and seed dispersers of many crops like bananas, cashews, dates, and figs. Many ecosystems like the Sonoran desert and the rainforest depend on bats.

about

The smallest bat is the size of a bumblebee, the largest has a six foot wingspan. Bats in King County range from 2-4 inches long with

4 inches long with wingspans of about

#### Where Do Bats Live?

Different species choose different places to live. Nursing females may roost together in large colonies. Bats search for safe places to rest with just the right temperature and humidity. These places include:

- Caves and abandoned mines;
- ◆ Cliffs, rock crevices and wood piles;
- Trees under loose bark and in hollows in dead trees or snags;
- ♦ Under bridges and in old buildings and attics.

### King County Bats

There are at least 8 common species of bats in King County. Other species may have lived here in the past, but with habitat changes it is not known if they still do.

All of King County's bats are relatively small, insect eaters. Some live in colonies, while others are solitary.

- ♦ Hoary bat
- Silver-haired bat
- ♦ Yuma myotis
- ♦ Little Brown bat
- ♦ Keen's myotis
- ♦ California myotis
- ▶ Big Brown bat
- ♦ Long-eared myotis

### **Helping Our Bats**

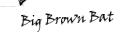
In King County, four species of bats are listed as either a "Species of Special Concern" by the state or a "Candidate Category 2" species by the federal government: the Keen's myotis, the Long-eared myotis, the Long-legged myotis and the Townsend's Big-eared bat. Some are rare because they are very dependent on special environments, such as caves, for both maternity roosts and hibernation sites. Some are easily disturbed by humans. Others are losing their homes as we seal our buildings, cut down old trees and snags, replace old buildings and wooden bridges, and develop wildlands.

All hibernating bats are vulnerable to disturbances. If someone enters their roost, bats come out of hibernation to face the threat. This uses up valuable fat reserves. If the bat is disturbed again, or the winter is long, it may not have enough fat to survive.

Bats also suffer from "bad press." Many people who do not understand bats kill these gentle creatures on sight.

#### What Can You Do?

- ♦ Do not disturb roosting bats.
- Provide habitat when possible. Leave hollow trees and snags standing. Put up bat houses in sunny locations.
- ♦ Protect forested areas, wetlands, and cave systems.
- Minimize your use of pesticides.
- Support bat research by your universities, government agencies and conservation organizations.
- ♦ Learn about bats so you can educate others.
- Support conservation groups working to protect our native northwestern wildlife.
- Report any bat roost you find to Bats Northwest.
   They are working to identify and census bats of the Puget Sound region.

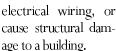


# **Bats Around Your Neighborhood**

#### **Bats in Your House?**

Even though bats are a vital part of the ecosystem, and a great animal to have around the yard for insect control, they do not need to live in your home. Excluding them is not difficult. Just follow these simple steps:

- Wait until late August, after the pups have been weaned and are able to leave the roost on their own. You do not want to seal young animals inside a structure where they would die and lead to other problems for you.
- Identify the exits the bats are using. Watch at dusk to see where they exit. If there are several, seal all
- Create a one-way flap-valve over the remaining exit site by loosely hanging netting (1/4" nylon mesh or smaller) in front of the exit. Tape or tack the top and sides, but leave the bottom open. The bats will be able to leave, but not reenter.
- After a few days, seal up the last exit to assure that the bats can't re-enter. Caulking can be used to seal small holes. Unlike rodents, bats do not gnaw holes in walls, shred material for nests, chew



- ♦ If you prefer, you can wait until late autumn, after the bats have left for their hibernation sites, and seal all of the exits at one time.
- ♦ Think about providing an alternate home for the bats. Bat houses mounted close to the old exit are usually inhabited quickly.

## **Health And** Safety

People are often concerned about bats and rabies, but the scientific reality is that less than 1% of wild bats are infected with the virus. Rabies is a rare and preventable



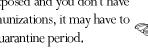
disease. Rabies is spread when the saliva of an infected animal enters the body through a bite wound or contact with mucous membranes. Do not handle, pet or feed any wild mammal since they may bite.

If a bat flies into your home, remain calm and open the doors and windows so that it can find its way out. Close interior doors to keep the bat out of other parts of your house. A "stray" bat may be a juvenile learning to fly, or a bewildered adult that has been excluded from its roost. It is very important to prevent children and pets from coming in contact with it.

If the bat does not leave on its own, you may need to capture it to put it outside. Wearing gloves, gently place it in a container and set it free out of doors. Only handle bats with gloves.

If you think you have been bitten or exposed, you should: 1) wash any wound thoroughly with soap and water, 2) capture or isolate the animal if it is possible without risking further injury, and 3) call your doctor or health department. If your dog or cat has been bitten or exposed, call your veterinarian even if the wound is Stay current on your pet's rabies vaccinations - even if the animal is always kept indoors. If your pet is exposed and you don't have

proof of its immunizations, it may have to endure a long quarantine period.





#### A Year in the Life of a Bat

#### Winter

In winter, insects become very scarce. So our bats must migrate to warmer places or hibernate. Some fly many miles to a good hibernation roost with just the right temperature and humidity. There they will "sleep" for up to six months, living off the fat they built up during the summer. With the onset of spring, insects will again become abundant and the bats emerge from their winter roosts and scatter across the countryside to feast on the new food supply.

#### Spring

In April, female bats seek out maternity roosts. Some species gather in very warm sites to insure the rapid development of their unborn pups. These are usually the bats we find in our attics. The males, on the other hand, shun the heat. Living singly or in small groups, males roost where it is cool, and to save energy they will often drop into "torpor" (a brief hibernation).

#### Summer

Females give birth to a single pup generally between late May and early July. Born hairless and helpless, the babies mature very quickly. Their ears and eyes open within hours and they learn to fly in three to six weeks. This is the time people often find them in unusual places. The young have limited flying skills and little experience, so they can get themselves into places they can't get out of. They only have a few weeks to become efficient hunters and find enough food to build up the fat reserves needed to survive their first winter.

#### Fall

The maternity colonies begin to break up in August. No longer tied to their nursery sites, both females and young can forage over larger areas. In September, most bats are heading for warmer climates or hibernation roosts and this is the time they will mate. By mid-October, bats are either gone from our area or they are deep in hibernation. By the time Halloween arrives and people are thinking about bats, they are all gone for the year. The life cycle begins again.

### Who To Call

BATS NORTHWEST 4742 - 42nd Avenue SW Seattle, WA 98116 (206) 256-0406

King County Wildlife Program

(206) 296-7266

This brochure is available in alternate format upon request. Please call (206) 296-0100 (TDD).

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Townsend's Big Eared Bat