

# Bats Northwest

NEWS



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## WNS: Regional Extinctions Likely

Little brown myotis, one of the most common bats in North America, could become virtually extinct in the northeastern United States within two decades because of White-nose Syndrome, according to research by Boston University scientists.

The study by biologists Winifred Frick, Thomas Kunz and D. Scott Reynolds was published in the journal *Science*. Based on previous population trends and extensive computer modeling, the team forecasts that regional populations of little brown myotis will collapse to less than 1 percent of their current numbers in 20 years – even if the WNS mortality rate slows. The long-term survival of remnant populations in these areas would be difficult, since females of most bat species produce a single offspring per year.

“If one of America’s most common bat species can be dealt a deathblow, at least regionally in such a short time, what will happen to less secure species around the continent?” said Nina Fascione, Executive Director of Bat Conservation International. “This could cause great ecological, economic and cultural disruptions and damage.”

“The results of this study are depressing, but not unexpected,” said Mylea Bayless, Bat Conservation International’s WNS Response Coordinator who has been on the front lines of the battle against this devastating disease. “For more than three years now, we have witnessed cave floors covered with dead bats. This study validates our long-felt fears. White-nose Syndrome is a tragedy of incredible proportions.”

The little brown myotis is one of the bats most frequently encountered by humans. Its range includes almost every state and province in the United States and Canada. It has generally adapted to human encroachment and often roosts in old buildings, attics and other manmade structures. Little brown myotis and other species affected by WNS are insect-eating bats with enormous appetites for a wide

range of pests that damage crops and forests and can cause human disease.

Before the discovery of White-nose Syndrome, Fascione said, no one would have predicted such a dire threat to little browns. The IUCN, the international organization that assesses the health of all species around the world, lists the little brown myotis as a “species of least concern” based on a 2008 assessment.

“This disturbing report very clearly demonstrates the urgent need for substantial funding to combat White-nose Syndrome,” Fascione said.

Fascione, with the formal support of nearly 60 other conservation organizations from across the country, urged Congress last May to provide \$5 million for the fight against WNS. Lawmakers will be considering funding for White-nose Syndrome research and monitoring as they go through 2011 budget appropriations.

-Bat Conservation International



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Join our monthly  
BNW Meetings!

Second Tuesday,  
6:30-8:30

Sand Point-  
Magnuson Park  
Building 30  
Conference Room



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Where All are Inspired by the  
Remarkable Attributes and  
Invaluable Contribution of Bats to  
Our Natural Heritage

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## Sign Installation Has Begun



*Intrepid sign installers from the Cascade Grotto and Bats Northwest in front of the entrance to Ape Cave.*










## Bats Are Dying

Over one million bats have died in the United States and Canada from White-nose Syndrome, a fatal condition associated with exposure to the fungus *Geomyces destructans*. Although humans aren't susceptible, we can potentially spread the fungus between caves, mines, and other bat roost sites. Biologists, resource agencies, and concerned citizens are asking for your help to prevent this fungus from infecting bat roosts in North America.

**Please take the following precautions to avoid spreading this devastating fungus:**

 **Do not enter caves, mines, or other structures where bats may roost. Bats are known, or suspected, to roost in the structure beyond this sign.**

 **If you must enter this site, do not bring in ANY item (gear, clothing, boots, etc.) that has been used in caves, mines, or other potential bat roosts from outside of Washington state.**

 **Clean and decontaminate ALL items brought into a cave, mine or other roost structure before entering a different cave, mine or roost.**

This can help prevent the spread of WNS and help protect bats.

*Lab-tested protocol:* Remove sediment (machine wash if possible), then soak clothing & gear for at least 10 minutes in 10% bleach solution, Lysol all-purpose professional cleaner, or Formula 409. Rinse thoroughly. Another washing is advised. Hard gear & electronics should be wiped with Formula 409.

## Please Help Protect Bats

For more information please visit the web sites of the Western Bat Working Group, U.S. Fish and Wildlife Service Northeast Region, National Speleological Society, and Bat Conservation International

Printed: July, 2010 Western Bat Working Group and Washington Department of Fish and Wildlife

Our Mission

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Envisions a Future*

. . .

*Where the  
Essential Role  
of Bats is  
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Informational sign about White Nose Syndrome posted at caves and mines used by bats in Washington state as part of a project sponsored by the Washington Bat Working Group in conjunction with Bats Northwest, Cascade Grotto, the Washington Department of Fish and Wildlife, and numerous private individuals.

Many bat sites on the Web provide worthy information and great photos from around the world.

BATS NORTHWEST is focused on our regional bats, but there is so much to learn about bat conservation worldwide. You may enjoy visiting some of these sites.

[www.batcon.org](http://www.batcon.org)  
[wdfw.wa.gov/wlm/living/bats.htm](http://wdfw.wa.gov/wlm/living/bats.htm)  
[www.batsound.com](http://www.batsound.com)  
[www.tolgabathospital.org/](http://www.tolgabathospital.org/)  
[www.batbox.org](http://www.batbox.org)  
[www.batworld.org](http://www.batworld.org)  
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## Sustainable Prisons Project Constructs Bat Condos

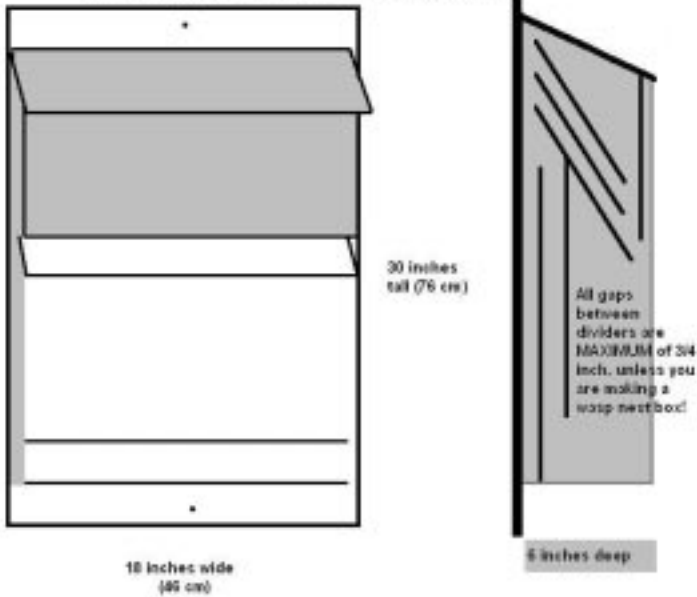
The Nature Conservancy, Fort Lewis Army Installation and Cascadia Research teamed up with the Washington State Department of Corrections through The Evergreen State College's Sustainable Prisons Project, to produce 40 bat houses that are being installed at the army base formerly known as Fort Lewis (now named Joint Base Lewis-McChord). Using a new design that proved successful in a 2-year bat box utilization experiment at Fort Lewis, inmates participating in the Sustainable Prisons Project, a joint effort between some of Washington's corrections centres and The Evergreen State College, have been constructing our "Uncle George" style boxes, or as the inmates call them, "Bat Condos." The Sustainable Prisons Project coordinates alternatives to the traditional furniture and license plate prison industries, and currently inmates are growing native plant starts, hatching Oregon spotted frog eggs for reintroduction projects, and a number of other projects.

So far they have exclusively produced these bat boxes for use at Ft. Lewis, who purchased the materials for the initial construction effort, but partners are looking to engage other not-for-profit entities with a similar arrangement. Construction of these boxes is labour intensive compared to a simple vertical chamber bat box, but their success during initial trials make it worth the effort, considering the labour is free – but of excellent quality. No, we don't currently have locations for the 40 rather large structures (60 cm wide x 20 cm tall), but they keep finding places, and its great to have some on hand. The dual-chambered rocket boxes have also been doing well, being used after more time in the field. A poster on the bat box comparison study, presented at this year's Washington TWS chapter meeting, can be found here:

[http://cascadiaresearch.org/bats/BatBoxPreference\\_screen-view.pdf](http://cascadiaresearch.org/bats/BatBoxPreference_screen-view.pdf)  
 -Sanders Freed, TNC, sfreed@tnc.org



Preliminary Drawings for the new Uncle George Bat Box



We used 3/8 inch T-111 with grooves for the dividers. I recommend exterior or marine plywood for the backing board. Glue and caulk joints. We have built these with various techniques. I think that screwing rails that the dividers rest against might be the way to make this more assembly-friendly. The slanted dividers are not as steep in this drawing as they could be. I weatherproof (stain) only the exposed wood.

The Uncle George Bat Box, 2008-9



Uncle George Batbox -- Side view

*The "Uncle George" bat house, designed by Greg Falxa (Cascadia Research), "Uncle George" Carlson, and Sanders Freed (TNC).*

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## Bothell's Gone Batty

by Suzanne G. Beyer  
Bothell Reporter Columnist

The wetlands at the University of Washington, Bothell and Cascadia Community College campuses serve as a serene place for the public to admire, for ducks, bald eagles and goldfinches to call home, for crows to roost and for salmon and trout to swim. There's also an unseen bat population that Bothell's wildlife biologist, Greg Green, is keeping an eye on ... or an ear to!

Greg monitors bats year-round through an ultrasonic, acoustical detector that extends 10 feet off the ground in the wetland.

He says, "All calling bats that pass within 30 meters of the detector are recorded."

In summer, Greg gets 50 to 75 recorded bat passes each night.

His goal is to determine when bats become most active or return from migration in the spring, when they hibernate and when they move south in the fall. For hibernating bats, Greg records whether they are waking during the winter months and looking for food and water.

Greg identifies the bats according to species using a software program called SonoBat. The program records and identifies each bat's unique call.

"The bats most common at the wetland are the Big Brown Bat and Silver-Haired Bat, followed by the Little Brown Bat," he says.

So why do we care about these little guys?

As bats eat insects, pollinate plants and scatter seeds from fruit trees, they are viable to a healthy ecosystem. What an advantage for us to have these bats eating mosquitoes, termites and other pests! It's their protein and our gain. And, the Silver-Haired Bat even feeds on moths.

"We have a few species of local moths that breed in the winter, which the Silver-Hairs may be waking up to exploit," says Greg.

There's a condition, however, that worries Greg. The disease, called white-nose syndrome, hit Little Brown Bats on the East Coast. This fungus destroys hibernating bat colonies, which Greg says, "May rival the passenger pigeon with respect to individual loss."

As of now, the disease appears to not have affected the more than 15 species of

bats in the Pacific Northwest.

As for their roosts, Big Brown Bats seek out buildings where they hibernate and form maternal colonies. Silver-Haired Bats like trees and roost under bark or in woodpecker cavities. The Silver-Haired Bat generally migrates south for winter.

Greg's detector also found California Myotis and Yuma Myotis, which are tiny "mouse-eared" bats. They, too, roost and hibernate in buildings.

Greg discovered, other than the Silver-Hairs and California Myotis, none of the other bat species became active last year until mid May. Bat activity peaks in July when the pups emerge, with most activity stopping in September.

"All hibernating bats wake up every few weeks to replenish water, which they get by licking the dew off their fur or from the walls of caves," says Greg.

But, a building or tree-hibernating bat may have to venture out in winter to find water.

If you're tempted to go looking for bats, please don't disturb them. In winter hibernation, if they have to suddenly awaken, they'll use a month's supply of fat trying to escape and may starve before spring. We need these gentle little creatures to stick around and stay healthy. They need a safe habitat, as they play a vital role in creating a flourishing environment.

Suzanne G. Beyer is a Bothell resident.





# Latest WNS News

9/20/10: Wisconsin to Act Wednesday on Naming Cave Bats as Threatened; To Set Precedent by naming *Geomyces destructans* as "prohibited invasive species"

9/19/10: Forest Service to Require Decon Nationwide Oct. 1, including Show Caves  
USFS DC Memo; USFS Region 3 Memo; USFS Decon Protocols; USFS Interim WNS Plan

9/16/10: Scientists Sequence Genome of WNS Fungus

9/13/10: National Wildlife Refuge System Closes Caves and Mines Nationwide

9/9/10: USFS Region 2 Responds to NSS

9/1/10: Wyoming's Caribou-Targhee NF Temporarily Closes Caves

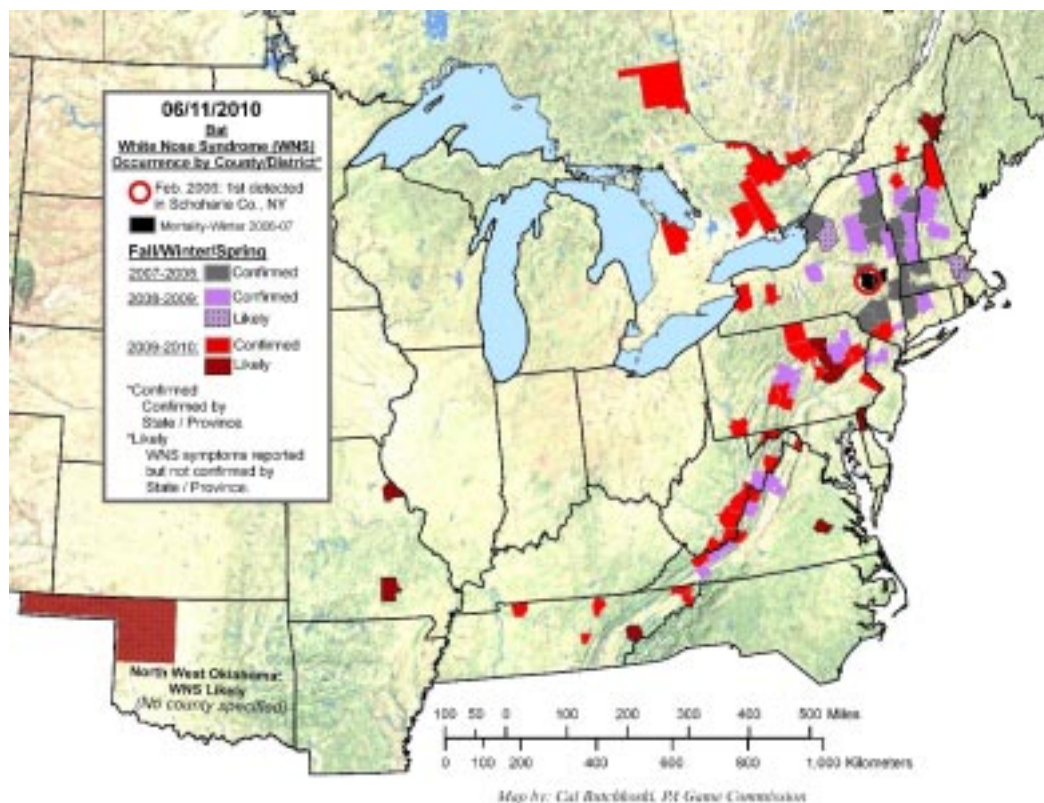
For more details go to: <http://www.caves.org/WNS/>



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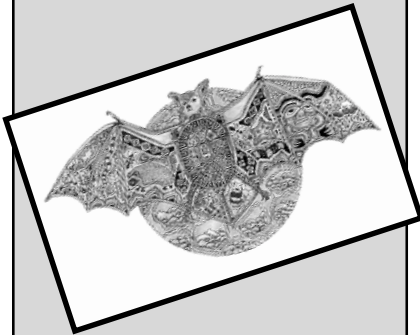




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