

Crossing Paths



WITH WILDLIFE IN WASHINGTON TOWNS AND CITIES

Winter 2009

Windows near feeders can be deadly

Thump.

Too many of us know the sinking feeling when we hear that unmistakable sound on a window near a bird feeder.

And sometimes the race is on to beat the tuned-in neighborhood cats to an injured or dead bird.

Research shows that one to 10 birds are killed annually for every building in North America – that's from about 98 million to nearly a billion each year.

Although not all bird fatalities from window strikes are feeder-related, a Cornell Lab of Ornithology Project Feeder Watch survey showed a definite correlation between number of strikes and number of birds attracted to feeders near windows.

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Photo by Tobey Gloss

Winter wildlife feeding fuels us more

Believe it or not, feeding birds and other wildlife through the winter fuels our own interests more than the animals consuming our offerings.

Studies show that birds do not depend solely on feeders in their foraging, many obtaining only up to one-fifth of their nutrition at feeders. Only small pockets of bird populations occasionally benefit under extreme and persistent weather conditions. Feeding can't replace natural habitat needed for winter cover and spring nesting and rearing. And poorly maintained feeding stations can actually harm birds by spreading disease.

Research also shows that the most readily-available feed – grains like whole corn and oats or seeds like sunflower and millet – are not easily digested by wild ungulates like deer

or elk. It can take several weeks for deer to adjust to the change from natural browse plants to an artificial diet, and if they don't have enough fat reserves to carry them through the adjustment period, they can die of starvation even with a belly full of undigestible feed.

The best way to help any wild birds or mammals survive a severe winter is to maintain high-quality habitat plantings year-round. Wildlife that goes into the winter in good condition is most able to survive deep snow, ice and cold temperatures. Even in well-functioning natural ecosystems, however, some animals succumb during winter months. The winter season has always kept wildlife populations in balance with available habitat.

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Crossing Paths is a quarterly newsletter for Washington residents enrolled in the Washington Department of Fish and Wildlife Backyard Wildlife Sanctuary Program and others interested in urban/suburban wildlife.



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Rare eastside bat found in downtown Seattle

Bats are not uncommon in urban areas, but finding a rare species that normally lives east of the Cascade Mountains in downtown Seattle is definitely strange.

On November 10, 2008, Seattle Animal Control picked up a spotted bat (*Euderma maculatum*) at South Jackson and Maynard streets and took it to a Washington Department of Fish and Wildlife (WDFW) licensed wildlife rehabilitator, the Progressive Animal Welfare Society (PAWS) in Lynwood.

PAWS wildlife veterinarian John Huckabee determined it was a female bat, presumably an adult, that was dehydrated, slightly lethargic, and had a small contusion on the right wing web. She only weighed 15 grams, but after receiving subcutaneous fluids she readily ate mealworms and waxworms and gained over three grams in a few days.

WDFW wildlife biologist Russell Link and local bat experts guessed that the bat may have stowed away in the cargo of a truck traveling from the east side of the mountains.

The largest known population of spotted bats in Washington is found in the dry cliffs and caves of the Moses Coulee area of Douglas County where The Nature Conservancy (TNC) owns and manages 3,500 acres acquired ten



Photo courtesy of PAWS

years ago specifically for bats. All but one of Washington's 15 bat species can be found in the coulee.

After the rehabilitating bat was successfully test flown in an aviary, and blood and hair samples collected for DNA testing, Huckabee transported her on November 15 to the TNC Moses Coulee property and released her in a rock crevice – a spotted bat's preferred roost.

As a "state monitor" species, the spotted bat is one of the most rare in Washington. Little is known about them because they tend to be loners rather than living in colonies. It is the only bat species whose calls or "clicks" can be heard by human ears, although few people other

than bat researchers would even recognize the sound.

"I think what catches most peoples' attention about this species when they see a picture of one is their large ears," Link said.

Link explained the large ear is used for echolocation. The smaller part of that ear is called the "tragus", which is thought to help fine-tune incoming sonar signals to improve information on a vertical axis.

"We also have a tragus," Link said, "but they are very reduced since we don't echolocate. If you run your finger along the edge of your ear closest to your face, you'll feel a boney protrusion about mid-length on your ear -- that is our tragus."



Elk are fed at Oak Creek Wildlife Area to prevent damage to adjacent private lands

Winter wildlife feeding fuels us more, cont. from page 1

Another way to help wild animals in winter is to avoid disturbing them. Animals must conserve their energy to survive winter conditions, and human disturbance causes them to move about. Keep cats and dogs confined, and slow down when traveling in motor vehicles through deer and elk habitat.

The main benefit of wildlife feeding is that it provides a direct, intimate view of wild animals for more than 50 million Americans who provide backyard feeding stations of some kind.

Experts in Cornell University Lab of Ornithology's Project FeederWatch, which collects winter bird feeder use data from volunteers across the country, say most bird feeding does neither significant good nor significant damage. It's something we do for ourselves, they say, and because it has a lot of educational value, the program continues in its 22nd season with about 15,000 participants.

Up close and personal encounters with wildlife can and do trigger lifelong interest in and compassion for wildlife, desire to learn more, and ultimately the "bigger picture" understanding of the need to maintain and enhance year-round wildlife habitat.

Certainly some of the charter members of the Washington Department of Fish and Wildlife (WDFW) Backyard Wildlife Sanctuary program began with feeding alone and quickly expanded their efforts to landscaping for wildlife.

If you choose to feed birds, please keep the following in mind:

- Use tube feeders for birds to reduce accumulations of droppings that can spread disease; if you use platform feeders, provide only a day's worth of seed at a time.



Photo by Tobey Gloss

- Clean and disinfect feeders at least once a month with a solution of one part bleach to nine parts warm water; dry disinfected feeders thoroughly before re-filling.
 - Pick up spilled food or waste from the ground at least once a week.
 - Discard feed that is wet, looks or smells moldy, has fungus on it or has been contaminated by rodents.
 - Locate feeders where there is no immediate cover for cats to wait in ambush, but close enough to cover to allow birds to escape natural predators like hawks.
- If you think you want to feed deer or other wild ungulates, think first about the following:
- Feeding should start early in the winter season to allow animals' digestive systems to adapt, and continue through March or April when natural browse is again abundant.
 - The best artificial deer feed is a pelleted ration of about 50 percent alfalfa and 50 percent barley and corn; elk are able to transition fairly quickly to alfalfa hay.
 - Once a diet shift has occurred, one white-tailed deer can consume three to four pounds of pelleted feed daily; in just four months, one deer could consume almost 500 pounds of feed.
 - Concentrating deer and elk at a feeder can create problems by making the animals more vulnerable to disease, predation and poaching.
 - If feeding areas draw animals across well-traveled roads, they are more likely to present a safety hazard and be hit by motor vehicles.
 - Deer and elk drawn to artificial feed also can damage nearby agricultural areas, trees, or landscaping, especially if the artificial feed supply is not maintained through the winter.
 - WDFW feeds some deer and elk on public lands only where needed to prevent agricultural damage to adjacent property (ie. Oak Creek) or where natural winter range has been destroyed by wildfires or other natural disasters (ie. Mt. St. Helens).

Windows near feeders can be deadly, cont. from page 1

Homeowners reporting the most window kills in that study had more extensive feeding programs, more bird-friendly vegetation, and therefore more birds nearby.

The number of birds at the feeder and the closeness of the feeder to a window can affect the severity of the strikes. The larger the feeding group, the greater the panic reaction and the faster and more frantic the flight.

Birds fly into windows because they can't see them, either because they see through a set of corner or opposite windows, or the window reflects the surrounding vegetation making it look like open space.

The Project Feeder Watch study showed that the most frequently killed species were usually the most abundant species at the bird feeder. Pine siskins represented the highest percentage of identified window fatalities, but any bird can collide with windows.

Quail, grouse, and sharp-shinned and Cooper's hawks are notorious for crashing into, and even through, windows. The hawks are usually on a high-speed chase to obtain food.

What to do?

There are lots of ways to reduce bird collisions with windows.

For backyard bird feeding enthusiasts, the first step may be a reassessment of feeding itself. If you're feeding year-round, consider reducing to winter only.

Relocate feeders, either much closer to windows, or much further away. When feeders are within three feet of a window, a bird leaving the feeder cannot gain enough momentum to do harm if it strikes the window. If feeders are more

than 30 feet from a window, the birds are less likely to perceive windows as a pathway to other parts of your yard. Even if they do fly towards the window, birds usually get a grip around 10 feet and can veer from a collision.

Since many strikes are caused by panic flights, try to observe the usual path of such flights. For example, there may be a particular tree to which most birds escape. With that in mind, position feeders so that flights occur away from rather than towards windows.

You can make glass windows more visible in a variety of ways.

The best method is to install plastic netting or screening, tautly mounted on frames, over the outside of the window. Think of it as a vertical trampoline off which birds might safely bounce, or preferably see and veer away from before striking. The netting does not block the view from the window, may be removed, and does not alarm birds.

You can also simply drape fine mesh netting over the outside of the window, but it tends to block your view more and doesn't look as tidy.

Attach strands of monofilament (fishing) line about three inches apart on a board and mount the board outside above the window so the strands hang vertically over the window.

Anything stuck on the window as a deterrent needs to be stuck on the outside or it will simply be hidden by the reflection. Hawk silhouettes rarely work. A dark silhouette of anything on a dark reflection is still hard to see. Use lots of bright decals or stickers, keeping them no more than four inches apart.

Moving silhouettes hung from the outside window sill may be more effective. Mobiles, streamers, ribbons, or reflective tape hung on the outside of the window that move in the wind might also work, although they sometimes alarm birds and even discourage them from using nearby feeders.

If the window that the birds usually hit is one used for lighting your home and not for seeing through, such as a high or back window, think about replacing it with etched glass. Try spraying the outside of the window with fake snow, or anything else that will make it translucent rather than transparent.

On a non-reflective corner window, close the curtains on one side to prevent birds from trying to fly through. Collisions may even happen on un-curtained windows directly opposite one another on different sides of the house. Closing curtains on reflective windows helps if the birds can see the curtains from the outside, but depending on the angle of the sun, sometimes this does not work.

Hang a plant outside the window. (A plant inside the window may attract rather than deter birds from hitting the glass.)

Hang wind chimes in front of the window as both a visual and audible attention-getter.

Consider leaving windows near feeders less than shiny clean, at least until you stop feeding.

For more information and suggestions see:

- http://www.audubon.org/bird/at_home/SafeWindows.html.
- <http://www.abcbirds.org/>

Lighting up is hard on wildlife

Of all the things we humans do that create problems for wildlife, did you ever think our affinity for lighting the darkness around us would be one of them?

Light pollution has long been recognized as a problem for stargazers, but recent research shows that too much artificial lighting affects wildlife, particularly migrating birds.

During migration, birds are believed to use the stars for navigation. Studies have shown that millions of birds have become disoriented by the bright lights of buildings and crash into them.

Birds migrating at night are strongly attracted to and even trapped by sources of artificial light, particularly during periods of low cloud cover or inclement weather when stars are obstructed. When they approach lighthouses, floodlit obstacles, ceilometers (light beams generally used at airports to determine the altitude of cloud cover), communication towers, or lighted tall buildings, they become vulnerable to collisions with the structures themselves.

But even if collision is avoided, birds are still at risk of death or injury.

Once inside a beam of light, birds are reluctant to fly out of the lighted area into the dark, and often continue to flap around in the beam of light until they drop to the ground with exhaustion. Secondary threats from their concentration at lighted structures are increased vulnerability to predation and difficulty finding food once trapped in an urban environment.

Other research shows that light pollution directly affects reproduction and feeding patterns of some birds, bats, and other wildlife. Some scientists are even



The Luxor Hotel in Las Vegas, Nevada, USA (2005).

Notice the insect and bird trails.

Photo by Tracy Byrnes

looking into what role light pollution plays in the recent disappearance of fireflies.

To appreciate the magnitude of modern light pollution, consider that when Galileo studied the Milky Way 400 years ago, it was so bright that it cast shadows on the ground. Today most Americans no longer live in a place where they can see it with the naked eye.

As noted in a story on this subject in the November 2008 edition of “National Geographic”: Light pollution is largely the result of bad lighting design, which allows artificial light to shine outward and upward into the sky, where it’s not wanted, instead of focusing it downward, where it is. Ill-designed lighting washes out the darkness of night and radically alters the light levels—and light rhythms—to which many forms of life, including ourselves, have adapted. Wherever human light spills into the natural world, some aspect of life—migration, reproduction, feeding—is affected.

The solutions to this problem are pretty simple: design light fixtures that are hooded so they cast light downward instead of horizontally or upward, and turn off unnecessary lights at night.

These measures, of course, have the added advantage of reducing energy consumption and greenhouse gas emissions that contribute to global warming.

In some cities, like Chicago, New York and Toronto, “Lights Out” programs require dimming or turning off lights twice a year during bird migrations. Some municipalities realize that if some lights are unnecessary at those times, they’re probably unnecessary altogether.

Like so many problems we humans collectively create for wildlife, solutions start with individual actions. So consider:

- Turning off unneeded lights around your home
- Investing in better designed lighting that is less likely to affect wildlife
- Keeping blinds/shades drawn from dusk through dawn to avoid spilling interior light to the outside
- Requesting that your place of business or school take these same steps
- Seeking adoption of “Lights Out” programs in your community

More information about light pollution and its effects on wildlife is available from:

- International Dark-Sky Association at <http://www.darksky.org>
- Fatal Light Awareness Program at <http://www.flap.org>
- American Bird Conservancy at <http://www.abcbirds.org>

Students monitor winter wildlife use of urban snags

A dozen high school seniors are helping the Washington Department of Fish and Wildlife (WDFW) learn more about wildlife use of snags (dead trees) in western Washington urban areas this winter.

The snag project is just the latest of several Senior Culminating Projects in Washington since the 2007-08 school year, when the state started requiring them for high school graduation.

The Pacific Education Institute (PEI), a consortium of private and public educators including WDFW staff, developed a framework for environmental Senior Culminating Projects that enables students to meet their graduation requirements while working on real-world environmental projects.

The snag project involves a dozen high school seniors from four schools in three counties – Capitol and Timberline High Schools in Thurston County, Hoquiam High School in Grays Harbor County, and Sammamish High School in King County.

From January through March the students are monitoring wildlife use of snags in three green spaces in their communities. They visit each site twice a month to record wildlife present in the general location, wildlife specifically using the snags, and human presence and recreation in the area.

WDFW wildlife biologist Chris Anderson, who works with WDFW Senior Culminating Projects Coordinator Breanna Trygg and WDFW Community Outreach and Environmental Education Specialist Janet Pearce on the project, says the student research can contribute to the knowledge base for making land management decisions in urban green spaces.



Photo by Breanna Trygg

High school seniors monitor purple martin colonies on South Puget Sound.

“We want to know what wildlife uses snags in the winter to document the importance of these wildlife trees,” Anderson said.

Trygg, who serves as a student mentor on such projects along with Pearce, relays that the students involved are excited about doing something that, “in their words, ‘will actually be used by professionals’”.

Another student project that Trygg and Pearce worked last year with WDFW wildlife biologist Michelle Tirhi and 10 seniors from Capitol High School was the Purple Martin Study in the Olympia area of South Puget Sound.

The students, who were trained by Tirhi, monitored four purple martin colony sites near man-made cavities along Puget Sound every 10 days from April through July.

“Michelle did not have enough time to monitor all of these locations and came to us for student help,” Trygg explained. “We

thought it would be a good way to increase the students’ appreciation of the natural world and expose them to future careers in the natural resources field.”

The Purple Martin Study students’ own reflections on the project in their final report proved them right.

“At first I was very skeptical of the project,” wrote senior Thao Nguyen, “and believed that it was somewhat ‘nerdy’ to ‘bird watch,’ and that I’m doing this just to complete my Culminating Project. But after this summer, I have come to realize that these birds are beautiful creatures and they need our support in order to keep them from being extinct.”

Senior Courtney Fung wrote “This project makes me want to take a more active role in preserving our environment. I have realized the importance of improving our natural surroundings.”

And senior JesAnne Ramirez wrote “I think that after watching

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Students monitor winter wildlife use of urban snags, cont. from page 7

them [purple martins] I have become a little more interested in birds and it may be something that I will look into during college.”

Other environmental Senior Culminating Projects supported by PEI and WDFW or other partners include:

- creation of an instructional video on NatureMapping the Puget Sound intertidal zone and other near shore habitats;
- study of global, national and local nature tourism and development of specific recommendations for enhancing Olympia’s Capitol Forest as a nature tourism location;

- collection of baseline data on trees at the Tacoma Nature Center to enhance interpretation of past, present and future health of wetland habitat;
- survey of birds using Tumwater’s Pioneer Park to inform current and future habitat enhancement decisions;
- and collection of data to determine the effects of chum salmon gender on the completion of spawning in Swift and McClane creeks in Thurston County.

Trygg and Pearce and PEI staff have to date trained over

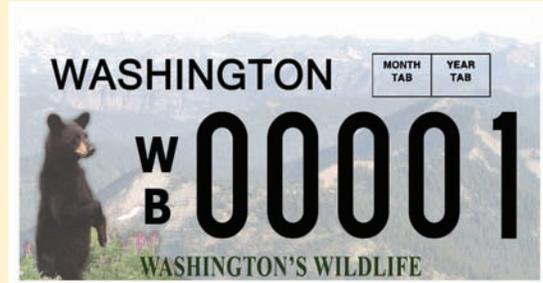
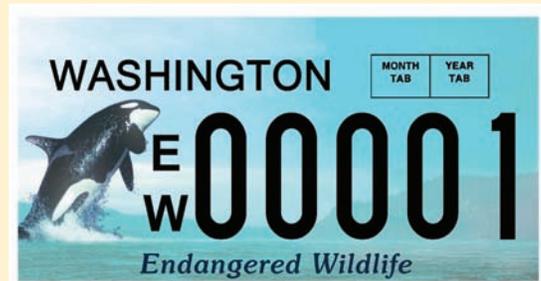
100 community mentors from organizations, agencies and businesses involved in natural resource management to work with students on similar projects.

“We have seven more training sessions scheduled this spring,” Trygg said. Interested groups or individuals can contact her about them at 360-902-2485 or breanna.trygg@dfw.wa.gov.

For more information see the report “Planting the Seeds, A Collection of Senior Culminating Projects,” on PEI’s website at <http://www.pacifieducationinstitute.org>.

Picture one of these on YOUR car, truck, trailer or motorcycle!

Proceeds from the sale of the plates go to improving management for these and other wildlife species as well as improving conservation and recreation programs related to wildlife in Washington.



www.wdfw.wa.gov

New year brings more watchable wildlife projects

Several new watchable wildlife projects are scheduled for completion or phased advancement in 2009, in keeping with the Washington Department of Fish and Wildlife (WDFW) and Community Trade and Economic Development (CTED) ongoing strategic plan for wildlife-related tourism.

One of the target audiences of many of these multiple-partner projects is travelers coming through Washington state on their way to and from the 2010 Winter Olympics in Vancouver, British Columbia.

- A brochure with a map of sites along Puget Sound and the coast where whales and other marine wildlife can be seen from land, and those with significant whale heritage, is being produced for distribution early this year. “Whale Trails” is a three to five year project that will also include interpretive signs and artwork at sites, depending on funding, in partnership with local communities, tribes, NOAA Fisheries, Seattle Aquarium, The Whale Museum, People for Puget Sound, Puget Sound Partnership, The Springer Foundation/ Coast Watch Society, and others.

- Videos of underwater marine life beneath select ferry routes in Puget Sound will be displayed on monitors aboard state ferries this year. The videos are just one part of a project to raise awareness of the unique flora and fauna found



A Skagit Flats snow geese education campaign to promote safe and responsible waterfowl viewing and travel.

in these waters; other products coming this year are a website and saltwater dive map for recreational scuba divers, including information about ethical practices for diver interaction with marine life. Partners include the Department Of Transportation Scenic Byways Program, Still Hope Productions, Washington SCUBA Alliance, Puget Sound Restoration Fund, local divers and charter companies, and others.

- A South Cascades National Geographic Geotourism Map, in both printed and electronic interactive forms, is scheduled for completion and distribution this spring. This project, in concert with Oregon agencies and rural communities from Mt. Rainier to Crater Lake, builds on the Pacific Northwest’s iconic features including the Cascades volcanoes, the Columbia River, native culture, salmon, forests and wildlife. It links with a national effort under the National Geographic brand.

- A Skagit Flats snow geese education campaign to promote safe and responsible waterfowl viewing and travel is underway and is slated to expand this year. Information kiosks have been installed at key locations along the Skagit, and WDFW staff are distributing windshield information cards. Skagitonians for Farmland Preservation are lending the use of their radio frequency for local road announcements. North Cascades Institute hopes to train roving volunteers to interact with public and local residents at peak viewing times and locations.

- The “Farming with Nature” project is designed to demonstrate how agricultural practices can work with natural processes to maintain or restore native wildlife species and provide opportunities to market “crops from the land” as nature tourism attractions. WDFW is teaming with the Department of Agriculture, local conservation districts, and farmers or vintners over multiple years to implement and monitor practices like installing bird and/or bat boxes to control rodent and insect populations; planting hedgerows and native vegetation to support predatory insects and native pollinators; or restoring riparian habitat to address water quality issues and serve as wildlife habitat and movement corridors.

This program receives Federal financial assistance from the U.S. Fish and Wildlife Service. It is the policy of the Washington State Department of Fish and Wildlife (WDFW) to adhere to the following: Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972. The U.S. Department of the Interior and its bureaus prohibit discrimination on the basis of race, color, national origin, age, disability and sex (in educational programs). If you believe that you have been discriminated against in any program, activity or facility, please contact the WDFW ADA Coordinator at 600 Capitol Way North, Olympia, Washington 98501-1091 or write to:



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