Crossing Paths

WITH WILDLIFE IN WASHINGTON TOWNS AND CITIES

Spring 2005

Celebrate our 20 years of Backyard Wildlife Sanctuaries

by Dr. Jeff Koenings, WDFW Director

This year marks the 20th anniversary of the creation of the Washington Department of Fish and Wildlife's (WDFW) Backyard Wildlife Sanctuary program.

It's no surprise to me that this outreach program has not only survived, but thrived, for two decades.

Wildlife viewing has continued to grow in popularity over the past 20 years. Over 2.5 million adults enjoy wildlife-watching activities here in Washington, according to a national survey by the U.S. Fish and Wildlife Service. Two-thirds of those people pursue wildlife watching close to home and over half a million maintain plantings or natural areas for wildlife around their own homes.

Recognizing that interest early on was Steve Penland, one of WDFW's first urban wildlife biologists. While stationed in our North Puget Sound office, Steve started the Backyard Wildlife Sanctuary program in 1985 and developed much of the material in the program packet.

In that first year, Steve certified 63 backyards in the Seattle area as wildlife sanctuaries. By the next year there were 127

(Continued on page 4)

Hummers are on bug patrol

It's bug season.

And with an extremely mild winter across Washington this year, the spring and summer crop of gnats, mosquitoes, flies and other pesky insects may be greater than usual. Drought conditions could keep those populations in check, but they could also make birdbaths and other water sources a magnet for thirsty bugs.

As a Backyard Wildlife Sanctuary manager you know that some of the birds attracted to your landscape will feed on many of those insects. That's why you celebrate the return of swallows and install nest boxes to encourage their temporary residency.

But did you know that **hummingbirds** are also de-bugging your place?

Those dainty little nectar-drinkers are major insectivores. Tiny as they are, those high-energy bodies can't exist on carbohydrates alone. They need protein to build muscle and replace feathers.

Research has shown that hummingbirds consume aphids, gnats, mosquitoes, spiders, and other small insects or insect larvae. Their long tongues have brushy tips to trap insects they find on flowering plants or on the wing.

They've been known to pluck insects, or spiders themselves, right out of spider webs, taking some of that web silk with them to their nests. They've also been observed hovering

over streams or other water sources in the midst of insect clouds, snatching high-protein meals left and right.

Obviously hummingbird tongues, inside those long slender bills, are built for extracting nectar from tubular flowers. To eat and drink, a hummingbird's tongue is divided at the end into two rolled, muscular halves. These halves act like a double trough to soak up nectar and water, while the tips trap insects. Most hummingbirds drink nectar from flowers for the instant energy that carbohydrates and sugars provide. These birds expend more energy for their weight than any other animal in the world, mostly in helicopter-like flying and keeping their tiny, heat-radiating bodies warm.

Hummers meet their high energy demand by eating more than half their weight in food and drinking up to eight times their body weight in water every day. They convert some carbs into fats that burn efficiently longer, but they also need nitrogen to make protein.

After glucose, fructose, and sucrose, the most common chemicals in flower nectar are nitrogen-rich amino acids. And there's protein in the pollen inadvertently picked up while drinking nectar from flowers. But scientists think hummers evolved as insectivores to develop a more complete diet.

Bugs are tremendous sources of fat, protein, nitrogen, and amino acids — the very things hummingbirds need to make baby hummingbirds, build strong bodies, and zip to far-off tropical areas to spend the winter.

(Continued on page 4)

Crossing Paths is a twice-yearly newsletter for Washington residents enrolled in the Backyard Wildlife Sanctuary Program.

Westside: 16018 Mill Creek Blvd., Mill Creek, WA 98012 / 425-775-1311
Eastside: N. 8702 Division St., Spokane, WA 99218 / 509-456-4082

www.wa.gov/wdfw

Crossing Paths Newsletter

Writer/Editor: *Madonna Luers*
Contributing Wildlife Biologists: *Russell Link, Patricia Thompson (Seattle-Mill Creek), Howard Ferguson (Spokane), Michelle Tirhi (Tacoma).* ***Printing and Graphics:*** *WDFW Print Shop and the Washington State Printer Graphics Office.*

Washington Department of FISH and WILDLIFE

Living with Washington's Wildlife: Robins

Editor's note: This edition's excerpt from WDFW biologist Russell Link's book, "Living with Wildlife in the Pacific Northwest," covers some facts about one of our most common backyard birds, the American robin. To order the book, see http://wdfw.wa.gov/wlm/books_link.htm.

The American robin *(Turdus migratorius)* is one of the most familiar and widely distributed songbirds in Washington. It is equally at home in city parks and gardens, rural farms, woodland edges, and subalpine meadows.

Robins remain in the same area year-round, or migrate short distances in the spring and fall. Often the robins you see in winter come from their northern breeding grounds, which may be 300 miles away.

Breeding activity begins in early spring in lowland areas, later at higher elevations. Robins' first nests are often placed in evergreens for protection, since deciduous trees and shrubs may not yet have leafed out. Nests are often in the same area year after year with first-clutch nests sometimes built on top of nests from the previous year.

Females select the nest site and do the majority of nest building over a two- to six-day period. The nest is a bulky structure of twigs, weed and grass stems, and sometimes string or cloth. It contains a smooth inner cup of mud, with a thin lining of fine grasses. You can supplement the birds' supply of nest mud during this dry spring by keeping open ground areas wet.

When you see a robin perched or flying with a wad of mud or grass in its beak, it's a sign of nest building. Another sign of nest building is a line of mud across the female's breast—she works mud into place with her feet and bill, molding it with her body. When foraging on a lawn, if a robin doesn't eat a worm or other prey immediately, but flies off with food in its beak, you can be fairly sure that it has young in a nearby nest.

The female incubates three to four glossy, light blue eggs for 12 to 14 days. The young leave the nest 14 to 16 days after hatching and continue to be cared for by the parents for up to four weeks.

Robins have two and sometimes three clutches of eggs each year. First-clutch nests may be used again or new ones built in now leafed-out deciduous trees or shrubs, often in the crotch of branches. Robins will also build mud and grass nests in locations safe from predators — under bridges, on windowsills, ledges or nesting platforms you provide.

Territory

The size of a robin's territory ranges from one-third of an acre to several acres. The breeding pair spends most of their time there, on the nest or searching for food.

The male actively defends the territory through all clutches. If another male intrudes, he will fly at the intruder to try to scare him away. If that fails, he will dive-bomb the intruder and try to hit him chest to chest. This behavior is also seen when a male robin mistakes his image in a window for an opponent and beats himself silly against the glass, under the impression that he is attacking another robin.

You know you are in a robin's territory when a bird of either sex sounds its alarm call at your approach. Robins are particularly protective of their nest sites when young are in their nests. Nest predators, such as crows, will be mobbed by several robins in an area where there are a number of robin nests.

If you watch robins in the spring, you are likely to see several different displays and calls associated with courtship and territorial behavior. The male's song is a series of rich caroling notes, rising and falling in pitch: *cheer-up, cheerily, cheer-up, cheerily.* It is sung early and late in the day during the breeding season and is often confused with the song of the black-headed grosbeak.

The *teeek teeek* or *tuk tuk tuk* call is given by either sex as an alarm call and in situations of possible danger. It is often accompanied by a tail-flick display in which the robin lowers its head, raises its tail to a 45-degree angle, and repeatedly flicks its tail sharply.

The wing-droop display occurs just before or after an aggressive encounter. The wingtips are lowered so they droop below the level of the tail, and the breast feathers may be puffed out.

Male robins stop singing after the breeding season and, except for a brief time when the shortness of daylight fools them into thinking it is time to breed again, do not sing again until the following spring. Alarm calls continue throughout the year. Female robins do not sing, but give alarm notes during the breeding season.

Food

During the breeding season robins mostly eat animal material, including earthworms, beetles, grasshoppers, ants, caterpillars, spiders, and snails. Robins hunt on lawns, pastures, fields, and meadows, standing still with their heads cocked to one side as though listening for their prey, but actually discovering it by sight.

With the decrease of available insects in fall and winter, robins feed on ripe fruits and berries in trees and shrubs. You can offer them currants, raisins, small pieces of dates, and other dried or fresh fruits on a platform feeder.

Conflicts

Home gardens, commercial farms, vineyards, and orchards often attract migrating robins. A small flock can quickly ruin or remove the year's fruit or young vegetable crop.

Protect fruit crops with flexible bird netting, available at garden and hardware stores and bird-control companies over the Internet. Secure the base of the shrub or the tree to prevent robins from gaining access from below. Individual small branches containing fruit can be protected with an onion sack or similar mesh covering.

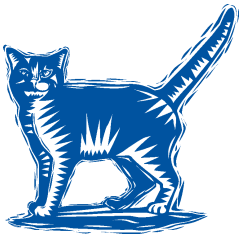
Row crops, such as strawberries, can be completely covered during the fruiting season. If the netting is to be used for several harvest seasons, it may be worth the extra effort to construct a frame to support the netting.

Scare devices, such as pie tins and Mylar balloons or Mylar scare tape, are known to provide temporary protection. Suspend balloons at least 3 feet above trees or bushes, or from lines between posts. Use tethers at least 3 feet long. Attach special red and silver bird-scare tape to stakes and stretch it 18 inches above the areas that need protection, such as newly seeded or planted garden beds. Twist the tape several times before attaching it to stakes so that the visible interval of red/silver is 16 inches. The tape should move freely, so that when a slight breeze blows it will flash in the sun. The space between tapes will have to be no more than 5 feet to be effective.

Because most robins will fly into a strawberry patch, land on the ground between

(Continued on page 6)

Letting kitty out but keeping wildlife safe



You're not the only one hoping to get outdoors these days as the weather warms.

Many cat owners find their cats pining away at the back door or window waiting for their chance to escape into the sunshine and greening grass.

Those who care about wildlife know that domestic cats allowed to roam freely outdoors kill hundreds of millions of birds and small mammals every year. These cats are also exposed to hazards such as cars, attacks by other animals, diseases, poisons, extreme weather, and other causes of injury or death.

For many of us, kitty's demands and our own desire to have our pet in fresh air overcome our concern for wildlife, and in the end, out goes the cat.

But there is an alternative: an outdoor covered enclosure or run. Such a facility gives your cat some of the advantages of being outside while minimizing the dangers to both wildlife and the cat itself. You can build your own using available designs, or you can purchase pre-built enclosure kits. See www.cdpets.com, www.midnightpass.com, or www.just4cats.com for both.

Cat enclosures can be accessed through a window or pet door. You can make the enclosure interesting and appealing by adding objects for the cat to explore, such as tree limbs, multilevel cat condos, tires, toys hanging from branches, and boxes in which the cat can curl up or hide.

Another approach to containing cats is the Kitty Klips Cat Containment System using fixtures you can make on existing fences and walls. For more information see http://www.corporatevideo.com/klips/index.htm.

A cat enclosure can be your pet's safe escape to the great outdoors.

National Community Wildlife Habitat certification available free through Washingtons BWS

The National Wildlife Federation has agreed to accept the Washington Department of Fish and Wildlife's (WDFW) Backyard Wildlife Sanctuary (BWS) program certifications in Washington communities working toward Community Wildlife Habitat (CWH) certification.

CWH certification is part of the Federation's Backyard Wildlife Habitat™ program, which is very similar to Washington's BWS program. It takes the basics of providing food, water, cover, and places where wildlife can raise their young from the individual backyard to multiple locations throughout the community.

The goal is to create sustainable and beautiful landscapes throughout a community that are healthier for both people and wildlife. CWH projects include backyards, schoolyards, corporate properties, community gardens, parkland and other spaces. They also incorporate community projects such as stream cleanups, invasive plant removals, and plant and wildlife rescues.

The program is designed to allow communities of all sizes to participate. The certification system is points-based and allows flexibility in creating and completing certification goals. Certification of individual properties in the Federation's Backyard Wildlife Habitat program is one step.

Usually the Federation collects a $15 fee from homeowners seeking that certification, but they will waive that fee for those who are certified in Washington's BWS program, and provide their full benefits (yard sign, certificate, newsletter and one-year Federation membership.)

If your community is interested, WDFW will send copies of all BWS certifications involved to the Federation. Participants certified through this partnership will count towards CWH certification goals equally with those who certify directly through the Federation.

See http://www.nwf.org/backyardwildlifehabitat/ for more information about creating community-wide wildlife habitat.

Plant a tree on Arbor Day

The last Friday in April marks the 133rd anniversary of National Arbor Day, the tree-planting holiday founded by J. Sterling Morton in Nebraska. The state of Washington celebrates Arbor Day on the second Wednesday of the month, April 13 this year. Pick your best date this month to add a tree to your landscape.

See the new BWS photo gallery

A new WDFW Internet Image Gallery (http://wdfw.wa.gov/gallery/) now includes images of Backyard Wildlife Sanctuaries from around the state.

We hope the gallery becomes a way for sanctuary managers across the state to be inspired by what others are doing and get ideas for their own properties.

If you'd like to post an image, contact WDFW biologist Russell Link at 16018 Mill Creek Blvd., Mill Creek, WA 98012, 425-775-1311 Ext. 110, or at linkrl@dfw.wa.gov.

Wildlife rehabilitators can help you help wildlife

Professional wildlife rehabilitators permitted by the Washington Department of Fish and Wildlife are a link in the statewide network of people and agencies working to help wildlife, including Backyard Wildlife Sanctuary managers.

Wildlife rehabilitation involves caring for injured, ill, displaced, and orphaned wild animals—from bats to wolves to eagles to woodpeckers—with the goal of releasing physically fit and psychologically sound animals back into their natural habitat. Each animal is examined, diagnosed, and treated through a program of veterinary care, hospital care, feeding, medicating, physical therapy, exercising, and pre-release conditioning.

Successful rehabilitation means released animals are able to again function as wild animals. This includes being able to recognize and obtain appropriate food, select mates of their own species and reproduce, and show fear of potential dangers (people, cars, dogs, etc.).

(Continued on page 5)

Celebrate our 20 years of Backyard Wildife Sanctuaries *(continued from page 2)*

properties in the program. By the time the program expanded to Washington's eastern urban center of Spokane in 1988, it broke the 1,000 mark. In 1992, when we launched this "Crossing Paths" newsletter, there were over 3,000 backyard sanctuaries across the state.

To date the program has enrolled nearly 7,000 homeowners, and reached at least 35,000 people with the basic information packets.

Steve long since moved on to our habitat management program where today he serves as our environmental services division manager in Olympia headquarters. But he still maintains his own Backyard Wildlife Sanctuary at home, and continues to take satisfaction and pride in sharing his love for wildlife.

Like Steve, I think the reason this program has been so successful is because it helps each of us do something measurable for wildlife, with our own hands, on our own property.

When we read or hear news on large-scale environmental problems it's easy to feel overwhelmed. But stepping into the backyard to plant native shrubs or fill the birdbath is a way to take matters into your own hands. As the bumper sticker states, think globally, act locally.

When I became director of this department in 1999, one of my top priorities was providing more information and opportunity for citizens who enjoy wildlife, but who don't fish or hunt. Although the Department was facing a budget crisis at that time, I was committed to maintaining the Backyard Wildlife Sanctuary program. I remain committed to this effort, as we continue to seek long-term funding for this and many other programs important to fish and wildlife and the people who enjoy them.

One of those potential long-term funding sources is the State Wildlife Grants program, established by Congress in 2001, that I referenced in last fall's newsletter. These new funds, which focus on the conservation of species and habitats that have not received adequate (or any) federal funding in the past, are currently paying for eight Ecoregional Assessments by WDFW, The Nature Conservancy and Washington Department of Natural Resources. We're also working on a Comprehensive Wildlife Conservation Strategy (CWCS), which will lay out our state's conservation priorities for future dollars provided by Congress. A copy of our draft CWCS should be posted on our website this summer.

Meanwhile, "happy anniversary" to those of you who have been with the Backyard Wildlife Sanctuary program for all 20 years. And my thanks and congratulations to all of you for each year you've worked in your backyards to help wildlife. I hope you'll be enjoying wildlife right at home for another 20 years.

Hummers are on bug patrol

(continued from page 2)

Think of it as surviving in the short term on a high carb diet, but needing more complete and balanced nutrition for the long term goals of reproduction, growth and migration.

So if you have lots of nectar-producing flowers in your garden, provide water, and avoid using insecticides, you're likely to draw hummers looking for a healthy lifestyle.

Your clean hummingbird feeders with properly-prepared sugar water (four parts boiled water to one part sugar, without additives like food coloring) supplements the natural flower nectar supply.

If your sugar solution attracts ants, bees or wasps, don't count on the hummers being insectivore-enough to take care of the intruders, though. Rather than using insect repellents that could hurt the birds, try applying petroleum jelly around the openings of the feeders and on the wire from which it hangs. Or spray the feeder with a fine mist of water to both chase away the insects for a while and provide a hummer shower.

The main benefit of feeders, of course, is drawing those little jewels close for your observing pleasure. Next time you're watching, see if you can catch a glimpse of them also providing you with a little bug control.

Festivals celebrate wildlife

When you want to enjoy wildife beyond your backyard this spring and summer, or learn more about managing your sanctuary, check out these wildlife festivals:

GRAYS HARBOR SHOREBIRD FESTIVAL, May 6-8, Grays Harbor National Wildlife Refuge, Bowerman Basin near Hoquiam. Shorebird viewing, extended field trips, lectures, food, exhibits. U.S. Fish and Wildlife Service, Grays Harbor National Wildlife Refuge 360-753-9467 http://www.shorebirdfestival.com/

LEAVENWORTH SPRING BIRD FEST, May 6-8, Leavenworth. Birding, geology, wildflowers and conservation. Registration at Leavenworth Chamber of Commerce, 509-548-5807 http://www.leavenworthspringbirdfest.com/

GET INTIMATE WITH SHRUB-STEPPE, May 7-8, Ellensburg. Guided nature hikes, hands-on science projects, art, interactive exhibits, educational games. Kittitas Environmental Education Network 509-962-1520 or http://www.kittitasee.net/pages/5/index.htm or keen@KittitasEE.net

KETTLE VALLEY SONGBIRD FESTIVAL, May 14, Republic, on Hwy 20 between Tonasket and Kettle Falls. Birding, lectures, field tours, nature walks other activities. 509-775-0441 http://www.ferrycounty.com/KettleValleySongBirdFestival/index.html

BACKYARD WILDLIFE FAIR, May 14, Tukwila (Seattle Metro area). Workshops on gardening and landscaping for wildlife, wildlife garden tours, community-wide wildlife habitat efforts, kids' activities, arts and crafts booths, food, music. 206-285-8707, ext. 109. http://www.backyardwildlifefair.org

SAN JUAN ISLAND ORCA FESTIVAL, May . Celebration of water and wildlife. San Juan Islands Visitors Bureau. http://www.guidetosanjuans.com/calendar.html

PRAIRIE APPRECIATION DAYS, May, Glacial Heritage Preserve, Rochester. Self-guided nature trails in prairie, oak-woodland, other habitats; butterflies, wildflowers, geology, history, prairie restoration. The Nature Conservancy 206-343-4344. http://nature.org/wherewework/northamerica/states/washington/press/press1395.html

BACKYARD WILDLIFE, BIRD & PLANT FAIR, June 4-5, Firwood Wholesale Nursery 8403 W. Burroughs Rd, Deer Park (12 miles north of Spokane). Plants, materials and information available for all backyard wildlife needs. Sponsored by WDFW and Spokane County Extension. 509-456-4082.

Drink shade-grown coffee to help your summer birds

Those rufous hummingbirds you love to see at your honeysuckle bush or sugar water feeders every summer are counting on you to make the right coffee choice every morning.

It's not whether you have a latte or a mocha that matters. However you drink your coffee, make it "shade-grown" to help many of your summer birds.

Shade-grown coffee is coffee grown in the traditional way, under the shade or canopy of tropical rainforests. In contrast, modern sun plantations are monocultures of coffee bean trees with virtually no other vegetation. The difference for birds is significant: sun plantations are used by 20 – 50 species of birds while shade plantations host up to 150 species!

Shade-coffee farms are often the last refuge for "neotropical migrants" — birds of the Western Hemisphere that migrate from wintering grounds in the New World Tropics ("neotropics") to breeding grounds in North America. These include western wood peewee, Swainson's thrush, red-eyed vireo, yellow warbler, Wilson's warbler, rufous hummingbird, band-tailed pigeon, Townsend's warbler, MacGillivrays warbler and western tanager. The Wilson's warbler often reaches its highest local abundance in shade coffee habitats.

Of course we have to take responsibility for changes in these birds' summer or breeding grounds, too. Urbanization and fragmentation of North American habitat has put nearly 1/3 of Washington bird species at risk.

But while conservation efforts are needed on all fronts, many scientists contend that wintering habitat loss is particularly important in neotropical migrant bird decline. With most of North American migrants wintering in Mexico, Central America and South America, supporting land practices that preserve native habitat and diversity – like buying shade-grown coffee – helps.

If you're not convinced that your coffee-buying makes a difference, consider that:

- Coffee is second only to oil in dollar amount and legal trade
- Coffee is the third most common import in the U.S. behind oil and steel
- The U.S. consumes about 1/3 of the world's coffee

Eleven million hectares in the neotropics are devoted to coffee plantations. In the southern regions most heavily used by birds, coffee plantation "forests" comprise almost half of the permanent cropland. In southern Mexico, coffee plantations are equivalent to an area over half the size of all the major moist tropical forest reserves, providing critical woodland habitat in mid-elevation areas where virtually no large reserves are found.

The Songbird Foundation www.songbird.org launched the nation's first major sustainable-coffee campaign in 2001 along with Seattle Audubon Society and TransFair USA. The Smithsonian Migratory Bird Center (SMBC) is promoting classification and certification of shade plantations as an attempt to unify the practice and show how they are environmentally friendly and biologically diverse, using far less pesticides, fertilizers, fungicides, herbicides and water than sun-grown coffee plantations.

To be confident of getting real shade grown coffee, consult the Seattle Audubon Society (206 523-0722) www.seattleaudubon.org, or www.seattleaudubon.org/Coffee or your local Audubon chapters. The American Birding Association sponsors Song Bird Coffee (www.songbirdcoffee.com), roasted, blended and distributed by Thanksgiving Coffee Company (www.catalog@thanksgivingcoffee.com; 1-800-648-6491).

Learn more about saving urban habitat

The Urban Habitat Campaign (UHC) helps both private citizens and public entities reverse the loss of urban/suburban habitat by preserving, protecting and creating natural areas with habitat potential.

UHC is a coalition of non-profits and concerned citizens seeking to save the sustainable habitat left in the Greater Seattle Area by helping to preserve our urban forest resources, by developing habitat-friendly back yards, parks, greenbelts, rooftops, school gardens, and by encouraging all to be more environmentally aware of gardening and landscaping practices.

UHC founders note that normally the "environment" is thought of some place "out there"—in the mountains, over the mountains, or some place other than Seattle and King County. Our real environment, however, is the city and the surrounding suburbs and rural lands.

Check out www.UrbanHabitatCampaign.org for more information.

Wildlife rehabilitators can help you help wildlife

(Continued on page 3)

Some animals brought into wildlife rehabilitators, of course, are not releasable. Some of these animals can provide valuable research information and some are suitable as educational aids; others may need to be euthanized.

Some people advocate for "letting nature take its course," indicating that injured, ill, and orphaned wild animals should be allowed to meet their natural fate. However, records indicate that the majority of distressed animals handled by rehabilitators are suffering not because of "natural" occurrences, but because of human intervention. Some of these are accidental, some are intentional, and many are preventable, including those involving motor vehicles, mowers, pets, high-voltage wires, firearms, traps, poisons, and oil spills.

Because most rehabilitators are swamped with injured and orphaned animals during spring and summer months, they sometimes cannot take in animals for care. Most rehabilitators are volunteers and pay expenses out of their own pockets. Typically, their capability (both financial and timewise) is limited and the demand is great.

Many wild animals found do not actually need to be rescued, like deer fawns left alone temporarily to avoid drawing predators to the doe's body scent, or fledgling birds.

You can help by consulting a rehabilitator, delaying intervention if possible, and working toward a solution that avoids or minimizes the handling of a wild animal. Contact your closest WDFW Regional Office to find the name of a rehabilitator in your area.

Are you planting that tree right?

Like so many other things in life that change with increased knowledge, the simple act of planting a tree is new and improved.

It's not just digging a hole and backfilling around tree roots anymore, at least not if you want the tree to prosper.

Now there's not just a "wrong way", but the "old way" and the "proper way", according to experts. Recent research has revealed that planting trees too deeply often leads to failure, with the most frequent cause being the root collar buried by soil or mulch.

Certified arborist Jim Flott of the Washington Department of Natural Resources' Community Forestry Program explains that planting hole depth should be no deeper than the depth of the roots, measured from the root collar to the bottom of the root ball. The root collar is the lowest few inches of the trunk just above its juncture with the roots, typified by a flaring of the trunk at or just above ground level.

The wrong way to plant a tree was long ago recognized as submerging the root collar below several inches of soil or mulch, leaving the roots undisturbed in a balled-and-burlapped form, and digging the hole several inches deeper than the bottom of the root ball.

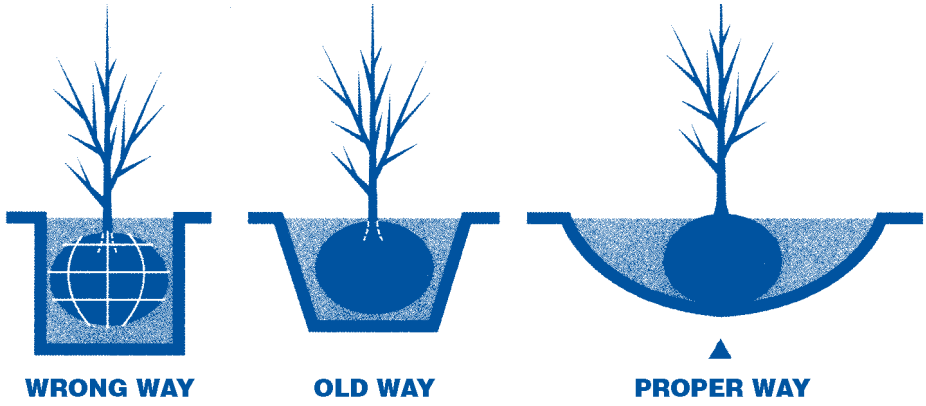
Leaving the root ball undisturbed was a myth, Flott says, because most root balls actually need corrective pruning prior to planting.

So planting methods changed to unwrap and trim the balled-and-burlapped roots and plant a little less deeply. This helped, but it didn't address the root collar problem since most root collars were buried in the soil of a root ball or container. Constant moisture on the root collar tissue inhibits the flow of oxygen and carbon dioxide in and out of the inner bark, weakening roots and their ability to absorb water and nutrients.

Now the proper way to plant a tree is to keep the root collar and top of the root ball at the surface, or even up to four inches above in poorly drained soils. Keep mulch away from the trunk base and root collar. The depth of the planting hole is no deeper than the root ball. The width of the hole is at least three times the root ball diameter in highly compacted soil and at least two times the root ball diameter in other types of soil. Use native soil and no soil amendments to backfill so the tree acclimates to its location.

The root collar problem may start with the condition of the tree at the nursery. Often trees balled-and-burlapped or in containers have their root collars buried to keep the tree upright. If the soil or wind conditions at the planting site are a problem for keeping the tree upright, use two stakes on opposite sides with flexible ties for no more than a year. Flott recommends buying bare root stock, if available, because the root collar is visible.

Symptoms of trees planted too deeply include yellow foliage, early fall color and leaf drop, twig dieback, and branch death in the crown. Eventually opportunistic pests and diseases may kill the tree.



Living with Washingtons Wildlife: Robins *(continued from page 2)*

the plants and eat the ripe strawberries from there, scare devices placed above the patch are not effective. Instead, place the scare tape between the rows. The tape should sag slightly but should not be less than 3 inches or more than 5 inches from the ground.

Scare devices need to be moved weekly (daily if possible) so birds don't become accustomed to them; they are also most successful if put in place before the birds become a problem. Always harvest ripe fruit immediately.

Robins Attacking Windows

Robins may fly into windows for a variety of reasons. Sometimes birds simply don't see the glass and attempt to fly through it at any time of the year. However, window "attacking" birds are more common in spring because they become territorial during the breeding season.

Male robins in particular will drive away intruders with great ferocity. When they see their own reflection in a window, they may attack. Males have attacked red objects, including socks, handkerchiefs, and other items hanging on a clothesline, and ornaments and discarded toys on the lawn. Apparently they mistake the red object for a trespasser.

Although this behavior can be repeated for days or weeks, usually the bird does not injure itself seriously. What seems to be more bothersome is watching these disturbances! Place small paper sacks over the mirrors of parked vehicles or use a protective cover for the entire vehicle. These remedies are generally only necessary during the spring breeding season. After this period of hectic romance, birds usually come to their senses.

A robin that hits a window and falls to the ground may simply be stunned. On warm days, it is best to leave the bird alone as it will likely fly off after a few minutes. However, if the weather is cool or if house cats are in your area, pick the bird up immediately. Stunned birds are subject to hypothermia and many cats recognize the sound of a bird striking a window and will quickly come investigate. Place the bird upright in the palm of your hand, cup your other hand over the bird, and hold it for about five minutes. When the bird starts moving, lift your hand and release it near a tree or large shrub.

Robins have a high mortality rate, with up to 80 percent of the young dying each year (which is why they produce multiple clutches.) Tree squirrels, chipmunks, raccoons, magpies, crows, ravens, and jays eat robin eggs and nestlings. Because robins feed on the ground, young and adult birds are vulnerable to attacks by domestic cats. In winter roosting areas, great horned and barred owls take a toll on adults. Hawks and falcons catch adults in flight. In the 1950s and early 1960s, robins suffered from exposure to the now-banned insecticide DDT because they ate earthworms that accumulated high levels of DDT in their bodies.

PAWS rescues everything from racoons to owls

(Editor's note: The following is excerpted from recent reports by Kevin Mack, a wildlife naturalist with the Progressive Animal Welfare Society (PAWS) Wildlife Center, a WDFW-permitted wildlife rehabilitator in the Seattle area.)

While waiting for a King County park manager to help with a release, I decided to check on my charges to see how well they had weathered their journey so far. I opened the truck canopy door to find three masked faces peering out at me from behind bars. I suddenly felt less like a naturalist and more like a police officer, hauling a gang of captured fugitives around in a paddy wagon.

In addition to the three little bandits that I could see, there were three more in a carrier directly behind them. But none of these six little beings were criminals. Instead, they were all victims. Innocent though they were, they did end up serving time. They had spent the three months leading up to this evening in a rehabilitation program designed to give them the skills they would need to make it on the outside.

Having successfully completed the program, they were now ready to become productive members of their community. I was excited for them, and in just over an hour, I would have the pleasure of giving the little prisoners their freedom.

The six raccoons in the back of the truck had been deprived of their mothers, oprhaned at a very young age. Three were siblings removed from an attic in Tacoma, dropped off at a vet clinic before being transferred to PAWS. Two of the other raccoons were also siblings, found on the steps to an apartment building, and the third was an unrelated raccoon found near a road.

All six had been thin, weak, and dehydrated infants when they arrived at the PAWS Wildlife Center. Now, on the day of their release, they were plump, healthy, and fully capable of fending for themselves. Most importantly, they were still very wary of humans, and the three siblings began to snort and grunt to let me know that they preferred not to be looked at by the likes of me.

The raccoons were to be released on a 1,000-acre piece of King County property along the Green River, crisscrossed with salmon bearing streams and forested wetlands. With abundant food sources, plenty of water, ample large trees for den sites, and no motor vehicle traffic, the site was a raccoon's paradise.

Scott Snyder of King County Parks and I arrived at the release site at dusk. It had begun to rain, and I wasn't sure how the raccoons would react. I wasn't concerned for their well-being because raccoons spend much of their time in water, using their sensitive paws to search for food in the muck of a wetland or stream bottom. Their thick fur provides more than enough insulation. But I wanted to make sure they had the option of staying under cover as long as they wished, so we agreed to leave the carriers for later retrieval if the raccoons were reluctant to leave.

I placed the carrier of the three siblings right next to the stream. After opening the door, I retreated back up the slope to the bridge above. By the time I reached the bridge, the raccoons were already out. Sensitive paws touched everything in sight as the raccoons drank in their new surroundings. One of them approached the stream and dipped his paw into the running water. He quickly retracted the paw as if he was startled, either by the temperature or by the stream's current. He then joined his siblings at a nearby puddle and all three of them made an effort to feel every inch of the muddy bottom.

The second group of raccoons was released along a thickly vegetated section of stream that ran through a large meadow. Two raccoons exited the carrier immediately, headed downstream, and entered a stand of sapling trees. Eager to touch everything they could, the raccoons pawed each trunk that they passed, causing the top of the young trees to sway. It looked as if a very slow moving breeze was moving through the trees and randomly changing direction. The third raccoon left the carrier and headed upstream, quickly disappearing into thick cover.

The rain stopped and obviously none of the raccoons needed nor wanted the carriers so they were retrieved and we departed. As I rounded a corner in my truck, I saw three pairs of eyes reflecting in the headlights. It was the three siblings, and they responded by dashing off the road and back into cover. I smiled at the thought that there were now six masked faces that would never again be seen behind bars.

Not all threats to wildlife are immediately obvious. Kite flying is not likely to jump to the top of the list of dangers to wildlife, but a barred owl was involved in what can best be described as a kite-related incident.

Barred owls frequently hang out in Seattle parks, but most of them only "hang" in the figurative sense. This owl was hanging out in Seattle's Magnuson Park in a very literal sense. He was dangling by his left wing, which was entangled in something that was securely affixed to the branch above him. Magnuson Park is popular among kite flyers.

As is inevitable with kite flying, occasionally someone loses control of their kite and crashes it "Charlie Brown-style" into one of the many kite-eating trees that inhabit the park grounds. The end results usually include a tangle of kite string hanging in the tree – something that birds may have difficulty seeing and, as was the case with the dangling owl, become trapped by.

As the owl struggled in vain to free himself from the kite string, he drew the attention of park visitors. He was cut down from the tree, but his primary feathers were still tightly wound in string. After a quick stop at Seattle Animal Control, he was transported to the PAWS Wildlife Center where he was entered into the database as case number 04-4439.

PAWS wildlife rehabilitators removed the kite string, taking care not to damage the owl's feathers in the process. The bird was slightly dehydrated, and a little sore, but otherwise in good health. The only abnormality that was found during the owl's initial examination was a piece of masking tape with the name "Bob" written on it. The tape was stuck on the bird's foot. Whether this was the name of the person who found the owl, the name of the person who owned the kite, or someone's suggested name for the bird, we will never know. Out of respect for their wildness, we don't name animals under our care, but I must admit "Bob the Barred Owl" had a certain ring to it.

After two days recuperating from a strained wing and two days in a flight pen, barred owl 04-4439 was back to full function and ready for release. I returned him to Magnuson Park at dusk in a stand of trees in a corner of the park with good habitat and no kite flying areas nearby. PAWS Wildlife Volunteer Manager Lauren Glickman opened the transport carrier and the owl burst out, leaving his identity as case #04-4439 or "Bob", behind. He weaved through a thick clump of branches, landed gently on a high branch in an alder tree for a few moments, then confidently flew deeper into the dark patch of woods.

Crossing Paths
WITH WILDLIFE IN WASHINGTON TOWNS AND CITIES
600 Capitol Way N • Olympia WA • 98501-1091

Washington Department of Fish and Wildlife
Backyard Wildlife Sanctuary Program

Westside: 16018 Mill Creek Blvd., Mill Creek, Wa. 98012 / 425-775-1311
Eastside: N. 8702 Division St., Spokane, Wa. 99218 / 509-456-4082

The Washington Department of Fish and Wildlife will provide equal opportunities to all potential and existing employees without regard to race, creed, color, sex, sexual orientation, religion, age, marital status, national origin, disability, or Vietnam Era Veteran's status.

The department receives Federal Aid for fish and wildlife restoration.

The department is subject to Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of race, color, national origin or handicap. If you believe you have been discriminated against in any department program, activity, or facility, or if you want further information about Title VI or Section 504, write to: Office of Equal Opportunity, U.S. Department of Interior, Washington, D.C. 20240, or Washington Department of Fish and Wildlife, 600 Capitol Way N, Olympia WA 98501-1091.

10,000 in 2010

The Backyard Wildlife Sanctuary program is launching the "10,000 in 2010" campaign.

That's our goal for certified sanctuaries in the next five years. Currently there are about 7,000 sanctuaries in the program, so we're hoping to add about 600 new properties each year.

Some of the ways we're hoping to achieve this goal include providing an on-line application form, increasing the number of program presentations we make and promoting BWS at more tradeshows and fairs.

We're also requesting that both new applicants and veteran sanctuary managers talk to their neighbors about getting involved. Are **your** neighbors BWS managers?

Celebrate Birds May 14

International Migratory Bird Day, May 14, is celebrated at these events:

- Seattle Aquarium: Discover Puget Sound area birds in walks, talks, hands-on activities, and demonstrations. http://www.seattleaquarium.org
- Puget Sound Bird Fest in Edmonds: Observe birds, learn urban/suburban habitat restoration, nature walks at Edmonds Marsh, Brackettis Landing North, Marina Beach, Yost Park-Shell Creek Nature Trail, Edmonds Fishing Pier, downtown Edmonds. http://www.ci.edmonds.wa.us
- Nisqually National Wildlife Refuge, Olympia: Guided bird walks, other special activities. http://nisqually.fws.gov/noframes.events.html#migbird