

Citizen Science: Everyday folks fueling conservation

Lisa Friend

Teams and pairs of citizen scientist volunteers will be visiting Whatcom Land Trust conserved sites this spring and summer looking for salamander eggs, breeding birds and intertidal critters. They're among dozens of trained volunteers that come to WLT-protected forests, wetlands and shorelines to track the health of local plant and animal species.

Kim Clarkin is a Volunteer Land Steward who monitors two WLT preserves on the South Fork of the Nooksack. She is also a member of the Cherry Point Aquatic Reserve Citizens' Stewardship Committee and is typical of a citizen scientist with little directly relevant field training: A former freshwater hydrologist, Kim lights up when she talks about tide pools. She says she was interested in the Cherry Point biological community and wanted to know more

Whatcom County Amphibian
Monitoring Project volunteers count
egg masses at WLT's Samish River
Headwaters Preserve. From left, Anna
Boost, Lyn Jackson, Monique Brewer,
project leader Vikki Jackson,
and Chris Brown.

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The mission of Whatcom Land Trust is to preserve and protect wildlife habitat, scenic, agricultural and open space lands in Whatcom County for future generations by securing interests in land and promoting land stewardship.

about marine life: "I was glad to get to learn something about intertidal biota, which I knew nothing about," she says.

The Whatcom County Amphibian Monitoring Project is another program that engages citizen scientists on WLT properties. WCAMP, as the project is known, conducts amphibian egg mass surveys at several sites and is especially involved at sites where the endangered Oregon spotted frog has been found.

A third group documenting wildlife observations on WLT properties is the North Cascades Audubon Society, which has begun to create "baseline" species lists on key lands. They all praise WLT for helping to make the properties accessible to citizen groups for study.

Why Citizen Scientists?

Vikki Jackson of NW Ecological Services says she could never do the survey work she needs without volunteer assistance. Vikki started WCAMP four years ago with Dr. Stephen Nyman and now coordinates a group of some 60 volunteers that document native amphibian species in Whatcom County. They send their data to the Washington Fish and Wildlife Department every year. As a professional wetland biologist, Vikki was noticing amphibians in the field "all the time . . . I got obsessed with the little guys," she says, and decided to create baseline information and species maps for amphibian habitats.

As a result of WCAMP's work, the endangered Oregon spotted frog has been documented in Whatcom County and is now protected in its breeding spots. "Citizen science makes it possible for some of the projects to actually happen," Vikki says. To hire professional staff, "the funding dollars would be immense."

Bob Lemon, WLT's Volunteer Land Steward at Wildcat Reach, is also a trained biologist who provides scientific expertise to the Cherry Point Aquatic Reserve intertidal studies. Bob agrees that citizen science volunteers are crucial to completing the annual surveys before the tide comes in. When too few volunteers are available, he says, each crew "really has to hustle."

Above the shoreline, about 20 volunteers from the North Cascades Audubon Society are tracking the birds that breed on WLT properties. Steven Harper, Volunteer Land Steward at WLT's Ladies of the Lake on Lake Whatcom, proposed the surveys when he joined the local Audubon board a few years

back. He felt the Land Trust needed baseline information about the birds that visit and nest on WLT properties. Plus, "birders are always looking for new places to go birding," he notes.

Mary Blackstone, an Audubon member conducting bird surveys at Maple Creek Reach, agrees: "I love getting out birding—and a friend and I are doing it together—so it's a nice opportunity for us to do something together and do something useful." Mary recalls encountering a WLT restoration team on one autumn visit, and the team led her to the nearby confluence of Maple Creek and the Nooksack River: "It was just full of salmon," she says, smiling at the recollection: "It was so neat."

Data collected by Steven's teams supplement "breeding bird" records maintained by the US Fish and Wildlife Service. Right now, data are collected only in the spring and summer. Steven says he might add a winter survey to help track swans and waterfowl that migrate to Whatcom County in the colder months.

How Scientific is Citizen Science?

When it comes to citizen science, Vikki Jackson of WCAMP says a well-designed protocol is essential to securing quality data: "Your observations need to be something that the lay person can actually take," she says, noting that she designed her study to focus on amphibian eggs, rather than living frogs: "Egg masses sit in one place," she says. "They don't move around."

Birds don't sit still, however, so Steven Harper relies on experienced birders for the breeding bird surveys. Many of his volunteers have been studying birds for years and participating in the annual "Christmas Bird Count" ("one of the oldest citizen science programs out there," Vikki notes).

As a second measure of accuracy, Steven encourages his volunteers to enter their data in eBird, a web-based database developed by the Cornell Lab of Ornithology and the National Audubon Society that collects bird observations from everyday citizens around the world. Electronic filters note if a bird is reported outside its usual range, and local experts are then dispatched to confirm the sighting. As Steven says, "Different people have different expertise." The birding community, and citizen scientists in general, highly value accurate identification and reporting.

The Cherry Point Aquatic Reserve Citizen Stewardship Committee engages some 20 volunteers each year to survey beach critters during the lowest tides of summer. To ensure consistency with previous studies conducted in the '70s and '80s by Western Washington University, volunteers lay out 1-meter grids at -1 tides, 0 tides and +1 tides every summer, striving to work in the same locations as did the 20th century surveyors.

The survey regimen tracks species from Neptune Beach northwards to Point Whitehorn; about 6 miles of shoreline. The area is accessed via the Point Whitehorn Marine Reserve,



which Whatcom Land Trust protected in the fall of 2008. The group also studies marine bird populations with help from North Cascades Audubon. The wildlife surveys support the Washington Department of Natural Resources' management plan for the Marine Reserve. The primary goal of the surveys is to provide baseline information in case of oil spills, so that damage assessors will know what species are affected.

Lyle Anderson is a volunteer who helps coordinate the seabird survey side of the monitoring program. Lyle says he has visited the Cherry Point Aquatic Reserve for decades but before the survey work began, "I knew nothing about biology. I was so far away from the natural world." He says he and his fellow citizen scientists receive special training to help them record types of clams, "sand fleas" (not actually fleas), sea stars and more, without needing to "key out" particular species.

Bob Lemon agrees that analysis at the species level is often not possible for citizen scientists. He says there are hundreds of amphipod (sand flea) species living in our area. Differentiating between those tiny organisms is not practical work for the average person on the beach. "If you want to be more thorough, it would be very, very time consuming and require lab work," he says.

Citizen science does not claim to answer all questions. When you get hundreds of people out in the field, people will always get different results, and no person's result will be perfect. But you are getting hundreds of people out in the field, and each is contributing to the enlarged, experiential awareness that good conservation requires. "Counting the actual number of flowers on a goatsbeard plant is harder than you think," writes Rob Rich, a WLT volunteer who has tracked bumblebee pollination

phenology with the Koma Kulshan Native Plant Society. "But when I dare to try, I am reminded of the myriad reasons we have to love this world."

What might the future hold?

Steven suggests that bird data on WLT properties will show how species distribution is changing - and might change with the climate. Another consideration is how restoration projects on WLT lands might affect bird populations. On some properties, WLT is restoring wetlands, and on others volunteers are planting trees and shrubs along waterways to improve conditions for salmon. Birds that breed in open areas and fallow fields are unlikely to nest in willow thickets once wetlands have been restored.

"The birds that like willow habitat are going to thrive there," Mary points out, which works for the Land Trust's goal to expand habitat for wetland birds such as the willow flycatcher. Nevertheless, the quandary, wherein management practices for one species are undesirable for another, can be an ongoing tension in conservation work. At times, the government resolves the matter by designating a species as threatened or endangered. But what to do when two threatened or endangered species with incompatible needs struggle to survive in the same place?

Eric Carabba, WLT's Director of Stewardship acknowledges that reconciling competing values is at the core of our work as stewards. Eric's approach relies upon the inherent integrity of natural systems. "As a land manager," Eric says, "I believe WLT needs to focus on restoring habitat-forming processes and then trust those processes to do what they've successfully done for millennia." With few exceptions, WLT's stewardship plans are not prescriptive. Rather, they are designed to restore the conditions that will allow native species and organic





those dynamics develop, by documenting the factors in play and measuring the outcomes.

Become a Citizen Scientist

There are a great many ways you can participate in citizen science. You can join a number of local organizations that suit your interests, or just report your observations. You can get your kids and grandkids outdoors with a field guide and encourage them to enjoy exploration and discovery. And, while perhaps not conventionally acknowledged as citizen science, artists who select subjects from nature contribute to species conservation in an increasingly vital way: They remind us to cherish the natural world.

Local Organizations Conducting Citizen Science in the Field

Cherry Point Aquatic Reserve Citizen

Stewardship Committee

Coastal Observation and Seabird Survey Team

Conservation Northwest

Falcon Research Group

North Cascades Institute

North Puget Sound Licheneers

North Sound Baykeeper Team

Whatcom County Amphibian Monitoring Project

HawkWatch International Koma Kulshan Chapter of the Washington Native Plant Society

North Cascades Audubon Society

Northwest Mushroomers Association

Not much of a joiner?

Submit your independent observations online to:

Cascades Butterfly Project

Great Backyard Bird Count Nature's Notebook

Pacific Northwest Moths Trumpeter Swan Society Washington Invasive Species Council

LEARN MORE about using eBird at WLT's May 19 Conservation Conversation: eBird Basics with Tom Bancroft. Reserve your seat on the Events page at www.whatcomlandtrust.org

LEARN MORE about the natural history of the Cherry Point Aquatic Reserve at What's the Point?, a naturalist event at Point Whitehorn Marine reserve, co-sponsored by WLT. Naturalists will be on hand to discuss birds, native plants, geology, and of course, the intertidal life. Watch the WLT website for details, or subscribe to our e-newsletter to stay informed.

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A MESSAGE FROM RICH BOWERS: WHY WE CONSERVE LAND

Land means many things to many people. For some it means home, for others work and livelihood; for some recreation, and for others it means the wealth bestowed by nature including mountains, lakes, streams, and coastal areas. There is no disagreement, however, that our supply of land cannot be increased. This is one especially critical reason to conserve what we have.

Conserving land in Whatcom County is where WLT's story began. In 1984, community members got together in Lynden to discuss how best to protect farmland, and out of that effort this organization was formed. Today ,WLT continues to target farmland protection because it makes Whatcom County distinctive, and, among other benefits, provides food for our communities. Since that first meeting, our mission has grown to include other lands that make our home special—lands that provide clean water, good health, places to play and explore, to exercise and recharge our systems, and to find beauty and inspiration.

Whatcom County is blessed with an abundance of lands that provide an incredible, and perhaps unmatched, standard of living. Those lands are not intact by accident. WLT's founders understood that protecting land for the long-term takes vision and determination as well as the ability to work across boundaries, perspectives and often political and cultural differences. WLT has helped the people of Whatcom County protect more than 20,000 acres of park land, fish and wildlife habitat and farmland by working with willing sellers and property owners who wish to establish permanent protections on their land. WLT also offers naturalist events, educational programs, tours, and work parties to enhance the connection between people and nature. WLT's story, actions and mission are rooted in the land.

Looking toward the future, conserving land is more important than ever. If you are in tune with the land, you know it is changing! WLT is preparing for this change. Our bounty of forests, farmland and other natural habitats are our best bet to absorb greenhouse gases and support species resilience as changes continue. WLT conserves land toward our promise that in 100 years the wild and special places here in our county will still exist, and the quality of life they represent will remain forever.

Land and conservation, past, present and future, promise life to all of those who live, work in and visit Whatcom County.

-Rich, Extension 103



Rich Bowers moved to Bellingham from the East Coast in 2001. An avid kayaker, hiker, skier, photographer, and river advocate, Rich moved with his family to live more closely with the outdoors— the combination of the Cascades and the Salish Sea were just too hard to pass up! Rich started as a volunteer with Whatcom Land Trust soon after arriving, served on the Board of Directors, and has served as Executive Director since October 2015.



Northwest Neoplastic Salmon Mantra, Ken Speer

April Art Walk

Join us on Art Walk Friday, April 1st, from 5:30-7:30 for an exhibition by Ken Speer, titled **Tree Connection**. this exhibit will feature paintings that are meditations inspired by Buddhist teachings, Piet Mondrian's neoplastic art movement and Ken's devotion to trees, the landscapes they inhabit and the beings that rely upon and wander among them. Ken is offering special pricing for this show and is donating 50% of sales to Whatcom Land Trust.

"Realizing our interconnectedness with all things is what inspires us and calls us to our best actions."

-Ken Speer

TRIBUTE GIFTS

Robert Jack, in honor of Zoe Jack Macdonald and her Grandpa Rand Kathryn Hanowell & Tim McMurray, in honor of Cindy Klein Linda Gaines, in honor of Judy Jensen Lyle & Peggy Vander Yacht, in honor of the ancestors Pam Sankey, in honor of Susan Moen, Nancy Kramis, Billie Emert and all the great walks together Jillian Froebe & Elizabeth Kerwin, in honor of Bill Baroch and Chama Archimede John & Debra Frey, in memory of Andrew Perkins Salvatore & Judy Russo, in memory of their parents Theresa Nester, in memory of Jim Nester Frederic & Maureen Braun, in memory of their son, Eric Carol & Jeffrey Arvin, in memory of Charles Arvin Thomas & Stacy Fawell, in memory of June Fawell Craig Lee, in memory of Tony Lee Rodd Pemble, in memory of Jim Pemble Enid and Larry Wood, in memory of Esther Wood In memory of Harriet Spanel, gifts have been made by Diane & B.K. Smith, Patricia Karlberg & Robert Keller, Joanne & Timothy Douglas, Mary & Michael Brunt, Jane Beckel, Dar & David New, Loch & Susan Trimingham, Phyllis Graham, Mary & Robert Hanell.

Senator Harriet Spanel's integrity, intelligence, courage and leadership were guiding lights for the local conservation community. She was integral to the success of several WLT projects—the land exchange that created the North Chuckanut Recreation Area, Canyon Lake Community Forest, Nesset Farm, Kenny Creek Eagle Night Roost and the Lake Whatcom watershed reconveyance. We were blessed with her wisdom, equanimity, and commitment to our community and we will miss her.

WHATCOM PHOTOGRAPHERS AND NATURE ENTHUSIASTS!

You may notice that many of the photos in this issue were sourced from Flickr's Creative Commons. WLT would prefer to use images by local photographers—professionals and amateurs, alike. If you would like to help us celebrate Whatcom nature with your photos, please email Natalie@whatcomlandtrust.org



Photot: FlickrCC.JansCanon

NO MORTAFLUFFY MARCHABOUT TODAY!

Gullycall opens orbviewers, Flap-layering digital dream, When my beatery realizes meltingly That there's no mortafluffy marchabout today!

The jinglepot saltspands whalebone tea And my roostershell holds pilkabubble from the pepperlick, Smoofering last night's grapewrath.

On the seapath, oarflop and duckflack outcall the rippletrill, Where yesterday's scorcherpeak and buzzcatch Gave vorterlift to flyride.

Loomlens sweeps kayascape While windkeeper brushairs shelfart seawide And medullathon setsenders clawplat, then do-waterunder.

~Nancy Grayum

Bequests to Whatcom Land Trust

make an enduring difference for the Whatcom landscape.

Talk with your estate planner, or give us a call at

(360) 650-9470. Ask for Rich.



photo: Alan Fritzberg

Kelly Ravet and Ben Otten plant trees along Landingstrip Creek.

WLT LOVES VOLUNTEERS

This newsletter contains contributions by two of WLT's highly valuable volunteers: **Lisa Friend** and **Nancy Grayum**. They are very different people, yet we find that both are steadfast, cheerful, skilled, and flexible. Thank you, Lisa. Thank you, Nancy. And thanks to the many others who return week after week or month after month to affirm WLT's longtime commitment to Whatcom conservation by the community, for the community.

Volunteer Positions Available Now

Contact Dennis@whatcomlandtrust.org

Conservation Conversation or Art Walk Set-Up Crew-

We're looking for an individual, couple or small team to take on this monthly or quarterly task. It includes preparing very simple snacks, setting up chairs, making sure the safety considerations are in place and generally creating a functional, welcoming space for our event guests.

Houseplant Caretaker—we only have a few, but they suffer for legions. We would love to have our plants attended-to by someone with the know-how and dedication they deserve. We soak them now and then, but nearly all need new pots. All of them need some food and invigorating conversation.

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Recreation Lands Updates:

Lake Whatcom Parks

The Whatcom County Council's Natural Resources Committee recently reviewed the draft Lookout Mountain Park and Lake Whatcom Park Recreational Trail Plan. These parks are the result of the "reconveyance"-the 8,844 acres of land transferred from Washington's Department of Natural Resources to Whatcom County in January 2014 through the diligent efforts of Whatcom Land Trust, Whatcom County Parks, Conservation Northwest, Whatcom Mountain Bike Coalition and many other conservation and recreation partners. The plan attempts to balance muscle-powered recreation with watershed and habitat protection. According to the Bellingham Herald, proposals for both parks include 98 total miles of trails "...concentrated near existing high-disturbance areas such as the Bonneville Power Administration electrical transmission corridor and the Wickersham Truck Trail road." Connectivity between existing trailheads and trail junctions is a priority. You can review the draft plan on the Whatcom County website's document center, or email info@whatcomlandtrust.org to receive a digital copy.

Galbraith Mountain

Like many of WLT's larger projects over the years, the task of ensuring permanent public access to Galbraith Mountain for non-motorized recreation has been a long and challenging one.

As we have done before, we have kept our sights on our goal and continue to work with the landowner, Whatcom County, City of Bellingham, and recreation interests to find a solution that works for all parties involved. Our work to conserve Galbraith Mountain has been supported by a grant from the Conservation Alliance and recently, with a generous donation from Superfeet Worldwide of Ferndale.

Canyon Lake Community Forest

In January of 2009, Whatcom County experienced what our stewardship director refers to as a "sizeable rain event." The rest of us called it a helluva storm. One result of the storm was extensive damage to the access road to beloved Canyon Lake Community Forest. Since then, Canyon Lake has seen few human visitors. Today, Whatcom County Parks and Recreation is working with Sierra Pacific, the adjacent landowner, and believes they are making progress toward opening a new route as soon as this summer. Stay tuned! We will be sure to mark the occasion when it arrives!

SUPERfeet

MEETTHE STAFF



Photo: Hannah Clark

There have been a lot of changes at Whatcom Land Trust over the last few years, including faces and programs. Here, we introduce the staff as they introduce **Whatcom Field Journal**.

From left: Eric Carabba,
Gabe Epperson, Kaitie Hammond,
Morgan Bender-deMoll, Natalie
Whitman, Karen Parker, Rich Bowers.
Not shown: Dennis Conner

Whatcom Field Journal

is a multi-faceted program comprised of a blog, naturalist tours, and Conservation Conversations. The program will celebrate the reasons we protect the land by following the species who rely upon it, through a full year's cycle. Our 2016 focus species are dragonfly, beaver, salmonberry, coho, toad and wood duck.



Dragonfly

I couldn't imagine a world without dragonflies, mostly because I really dislike mosquitoes. What do dragonflies have to do with mosquitoes? As nymphs and adults, dragonflies love to eat them. An adult dragonfly can eat several hundred mosquitoes a day.

There are over 5,000 species of dragonfly worldwide and they all love mosquitoes. They live in wetlands, ponds, and lakes

where the water is relatively calm. As nymphs (juveniles) they live for up to two years in the water, eating—you guessed it—mosquito larvae, and also other insect larvae, small tadpoles, and even fish.

Have you ever looked closely at a dragonfly? Almost 85% of their head is made up of their eyes. They can see all directions except a narrow spot directly behind them. They can move forward, backward, sideways, up and down, and can hover. As adults, they capture their prey with their legs, forming an almost inescapable basket. Their success rate when targeting prey is around 90%. Considering that Cooper's hawks have a success rate as low as 20%, that's pretty impressive.

I always know I'll see mosquito "hawks" when I'm on the lake side trail at Squires Lake during the late spring and summer. They are especially fond of the lily pads. Look for them flying just above the water scouting for their next meal. Another great spot to find them is on the board walk at Tennant Lake or near any of the many wetlands WLT has protected. **Dennis**, Ext. 107

Dennis Conner joined our team as the Volunteer Coordinator a year ago, after working as a Park Ranger for Whatcom County Parks for 38 years. An avid saltwater fisherman, boater, camper and hiker, Dennis spends much of his off-duty time exploring nature, often with one of his six grandkids in tow. He would love to help find a place for you at WLT. Give him a call!



Fallon Parker-McKinney

Beaver

My daughter and I are on a quest to see a beaver in the wild. Along the path near Scudder Pond, we try our luck, peering into the towering cattails where we see ducks and an assortment of birds—but no beavers.

So we try the Stimpson Family Nature Reserve. We find the beaver pond, but no sight of these elusive herbivores. We take the Geneva Pond loop where we see some branches that have been gnawed on. But while we see an incredible array of duck weed, sedges and skunk cabbage, still no beavers!

Next we try Squires Lake, where there is a beaver dam near the southeast corner. We cross a little bridge and the waterfall below before arriving at the edge of the lake. We hear frogs croaking and ducks dabbling among the water lilies. We see the dam, but still no beavers. They must be day sleepers!

While we didn't see a beaver, on our drive home we discuss why they are so important to the ecosystem. These natural engineers of the environment are responsible for returning the land back to its natural state by creating wetlands that provide habitat for plants, fish and birds.

We will continue our quest to encounter one of these awesome creatures, and to remain mindful of their important role in nature. **-Karen** Ext. 100

Karen Parker, Office Manager, lives in Bellingham with her husband and children, including the artist above. Her background is in visual communications. Recently, she and her husband began making movies; they are in the process of editing their second short film.



Flickr CC PeterStevens

Salmonberry

When he was a little guy, my son loved to spot emerging Indian plum leaves before I did. "First to see the first sign of spring!" he'd yell and brag. My groaning loser act gratified him, but it was an act. Indian plum is nice, but salmonberry-now that's a herald of spring! The buds break in March, followed in April by pink crepe paper blossoms sprawled around the thickets like a happily drunk bridal party. The berries are semi translucent, varied in color from yellow to pomegranate, gemlike, and juicy. While not exactly delicious ,they are worth reaching for and I do, every May, again and again. Best of all, those berries call the Swainson's thrushes back from their Latin American wintering grounds. Cousin to the warbly robins of summer and the off-key but flashy varied thrushes of winter, the drab and hidey Swainson's thrush has a song like no other in western Whatcom County. The reedy notes rise from the forest floor in spiraling surges, here, there—over there—a multitude of sound geysers. When the salmonberries are ripe, take an early morning walk on the North Chuckanut trails or poke around Racehorse Creek, pluck your breakfast, and listen to the thrushes celebrate being back in their summer homes.-Nat, Ext. 102

Natalie (Nat) Whitman, Director of Communications and Outreach, grew up in the Willapa Hills of southwest Washington playing with salamanders and crawdads in the Chehalis River, and milking goats. Nat's a birder, gardener, reader, day-hiker, and eclectic futzer. You'll catch her on her bike, or at WLT events.

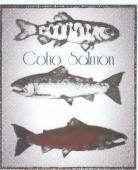


Image: Vicki Jackson

Coho

Coho salmon are a species I can relate to. Like many of us who were born and grew up here in the Northwest, Coho spend their early years (well, 18 months) getting to intimately know their home waters before venturing out (to sea) to explore the

wider world for a while. Eventually (usually three years later) the lure of their home waters grows stronger, drawing them home to settle down (or rather to spawn and die).

Like me, Coho require sufficient clean, cool water, shorelines, and estuaries to grow up in. We require unobstructed access to many small streams, tributaries, and (gravel) bars to live out the remainder of our lives upon returning from our explorations. In early winter we gather at the mouth of small streams waiting for the first real rains to come, raising water levels and opening access to our playgrounds. If we can avoid the lure of shiny objects vying for our attention and the obstacles blocking our paths we now have a greater chance to find happiness in those wild natural places protected and restored by Whatcom Land Trust, its partners, and its supporters. -Morgan, Ext. 108

Morgan Bender-deMoll, WLT's Conservation Specialist, hails from the Oregon Coast, where he spent every possible minute in the ocean, rivers, and forests of the Coast Range before earning a degree in ecology and continuing play outdoors as a wilderness ranger, adventure guide, and environmental educator. Morgan manages WLT's conservation easements.



Photo: WLT

Western Toad

Anaxyrus boreas

Hazelnut catkins, pussy willows, Indian plum, skunk cabbage, and those singing amphibians: It's those northwest signs of spring I look forward to each year. A springtime favorite of mine, the Western toad, is two to five inches in length and has rough drab skin in browns, grays, and greens with a cream dorsal strip. It occupies riparian forests, bogs and meadows from Alaska to Baja, and amazingly from lowlands to 10,000 feet. Like salmon, Western toads return to their natal waters to breed. Human homes and the roads leading to them are hazardous to toads on that journey, so they have become rare in the westernmost portion of Whatcom County. But as I've walked our Nooksack River gravel bars and foothill wetland sites each spring, it's always a surprise to see the little western toadlets hopping about, sometimes so densely, it's hard not to step on them. Breeding in wet areas from February through April, females lay some 17,000 eggs. Holy toad! -Eric, Ext. 105

Eric Carabba, Director of Stewardship, grew up exploring the backwoods, swamps and swimming holes of Whatcom County's foothills. In search of adventure, Eric served in the US Army as Airborne Ranger Infantryman. He attended WCC, then WWU for a BA in Geography - Environmental & Resource Management. Eric started at WLT in 2006 as a Property Steward, then served as Conservation Director from 2008 - 2015.



Wood Ducks

I love taking my family to bird refuges throughout the PNW. Waterfowl are particularly popular with my kids, Peter (2 ½) and Jane (4). Over the years, I've developed a fondness for wood ducks because of their size, appearance and the surprise of finding them in unexpected places while hiking in the woods (they're called wood ducks for a reason), as they're common in wetlands and swampy-wet areas in forested areas of Whatcom County. I recently visited Patricia Otto, one of Whatcom Land Trust's long-time supporters and partners. She's a dedicated conservationist and has numerous wood duck nesting boxes on her 100-acre forest preserve in the north Lake Whatcom area. I was fascinated to learn that wood ducks are "cavitydwellers," building their nests in the cavities of old rotting trees, sometimes high off the ground. Sometimes, they will take turns sharing nesting cavities with screech owls (pretty cool!). You can readily find wood ducks at the Stimpson Family Nature Reserve along the South Fork at Saxon (Edfro Creek trail), and many other WLT properties throughout the county. -Gabe, Ext. 109

Gabe Epperson, Director of Conservation, has a background in urban planning and large-scale environmental planning with a focus on public outreach. He was the Planning Director at Envision Utah for five years before relocating to Bellingham. Gabe has two little kids and loves taking them on outdoor adventures in beautiful Whatcom County.



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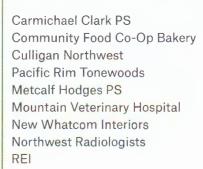
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