



“Right now it’s a full bathtub. After restoration, it will be an empty bathtub.”



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If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car — we've already crossed paths.

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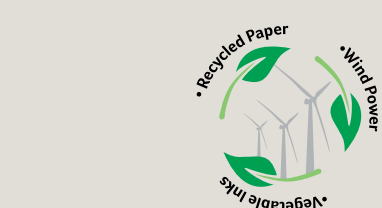
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To protect plants, wildlife and people, Metro does not allow pets at most regional parks and natural areas. Pets can damage sensitive habitat and threaten wildlife the region has worked to protect. In natural areas where pets are not allowed, people see more wildlife and get closer to it. Seeing-eye dogs or other service animals are allowed. Please bring cleanup materials.



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# Share your nature and win!



**Winner: Jon Bachelder, Gresham**

"Slowly walking along Gabbert Butte Trail in Gresham, I noticed beads of dew reflecting the sunlight at just the right angle. When we are unhurried, small things are more easily seen and can enhance our view of this marvelous world."



**Finalist: Eric Johnson, Portland**

"Pre-dawn photo of the setting moon and a mated pair of bald eagles at the Tualatin National Wildlife Refuge."



**Finalist: Charlie Hyman, Sherwood**

"On the Columbia River during an October sunrise, I was struck by the majestic great blue heron posing in the perfect location to allow me to include Mt. Hood in the background."

## Submit your photo

Win an annual parking pass, a full-day picnic shelter reservation at Graham Oaks or Scouters Mountain nature parks, or a choice between a tennis court session or round of golf for four people including cart at Glendoveer Golf and Tennis Center.

To enter, submit a photo taken at a park or natural area in greater Portland — your friends and family, a view of wildlife or a sunset, for example. Include a 50-word description of your experience. Where were you? What were you doing? What captured your attention?

The winner will appear in this space. By submitting a photo, you consent to Metro's future use and publication of your photo. Send your photo and description (including your name and hometown) between April 1 and May 1 to [ourbigbackyard@oregonmetro.gov](mailto:ourbigbackyard@oregonmetro.gov)

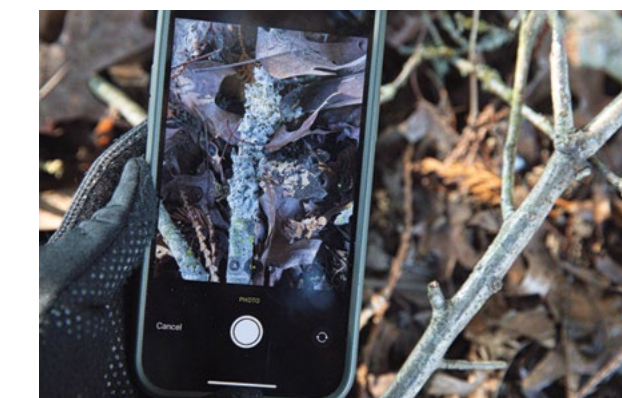
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**On the cover:** Kellogg Lake in Milwaukie isn't actually a lake at all. This human-made reservoir will revert to a healthy creek once a 150-year-old dam is removed.

# Oh snap! Learning how to bioblitz

By Cristle Jose. Photographs by Cristle Jose



A light chilly breeze rustled through the trees as the bright sun cast shadows on a crisp January afternoon at Lone Fir Cemetery.

More than 25 people gathered by the Soldiers Monument for Metro's first bioblitz of the year — a short, intensive survey to map biological diversity. This one focused on the cemetery's diverse lichen population.

Identification guides and magnifying glasses were neatly arranged on a table for everyone to use as they embarked on this self-guided adventure. After a brief introduction on how to participate, the group dispersed throughout the cemetery on their own or in smaller groups in search for lichen and to document their findings on iNaturalist, a free and user-friendly online platform that can help identify plants, animals, fungi and other types of life, including lichen. To use the app, you simply take or upload a photo through the app, fill out the details of the species, and the app will suggest what you may have found.

One of the participants, Sara Walker, came across this event when she was looking for outdoor things to do. "I'm recovering from an injury so I was looking for something slow-paced," she said.

It was Walker's first time at Lone Fir Cemetery, but she's used iNaturalist for years.

"When I first started using the app, there weren't a lot of things like it," she said. "It

**Clockwise from top:** Sara Walker and Janice Choy-Weber examine lichen during a bioblitz at Lone Fir Cemetery; Sara Walker examines a lichen under a microscope; when bioblitzers snap photos of species and upload them to iNaturalist, they are helping to document the biodiversity of a particular area.

was one of those things where [there are] experts or people [who] have a great interest in certain species. They identify things later. They'll explain to you how to tell the difference between one species and another, like, with the small details."

She partnered up with Janice Choy-Weber, who was using the app for the first time.

"It does a lot more than I thought it did at first glance," Choy-Weber said. While she preferred a guided experience, she appreciated wandering around the cemetery to get to know the site more.

Some participants stayed for the entire event while others left early, taking advantage of the drop-in format. Participants were given until the next day to upload their observations via the app or desktop.

As long as observations were uploaded within the given parameters — at Lone Fir Cemetery, between Jan. 25 and 26, identified as some sort of lichen — they were automatically added in the "Lone Fir Lichen BioBlitz 2025" project. In iNaturalist, a "project" is an inventory of species within a specific time frame and geographic area.

In the end, this project included 30 observers making nearly 200 observations that identified 48 species.

Metro's community education and stewardship team began hosting bioblitzes, also known as ecoblitzes, in 2023. Stewardship programs lead Jessica Rojas started incorporating bioblitzes to engage younger people who enjoyed being

## Beginner's bioblitz: 4 tips for success

- 1. Come prepared.** Some locations may have poor cell service. Download the iNaturalist app on your mobile device and create an account before you head out.
- 2. Get digital in nature.** Whether you use your phone or a camera, be ready to capture photos of your observations in the field.
- 3. Work all the angles.** Taking multiple shots from different angles (the underside of the leaf, the top and bottom of the flower, the stem) can help better distinguish a plant from similar species.
- 4. Choose your own adventure.** Metro-led bioblitzes can be guided or self-guided, as participants prefer. When adding an observation to the app, it will automatically be added to any relevant projects if it matches its parameters.

Interested in participating in a bioblitz? Turn to page 8 of this issue to find opportunities for this and other activities in our Get Involved listings. Or visit [oregonmetro.gov/GuidedActivities](http://oregonmetro.gov/GuidedActivities)

outdoors but also spend time on their phones. "It's like a social media for plant nerds," Rojas explained.

But the app does more than just identify plants. iNaturalist is an open-source platform that, unless users choose to hide their location, provides valuable data that helps scientists and other users better understand biodiversity.

Metro Parks and Nature scientist Adrienne St. Clair uses the app to track what community members are discovering at Metro's parks and natural areas.

"As a botanist, I'll look at peoples' observations in our parks to help Metro understand the bigger picture of what's happening in our areas," she said. "I will hopefully be using iNaturalist data to help me build that list of what plants we have on what Metro properties in the future."

This year, Metro is participating in the City Nature Challenge, an international effort to document plants and wildlife. It's a friendly competition to see which cities can log the most observations. To support work being done by the Pacific Northwest Oak Alliance, Metro-led bioblitzes for the challenge are focusing on nature parks with oak habitats.

The challenge is designed to be flexible, allowing people to participate without needing to attend a guided program. Plus, Metro's bioblitzes may include identification guides, magnifying glasses to borrow, refreshments, and staff on hand to assist with the app.

"My goal is to take down the barrier of science and have a one-on-one interaction with people who just love the space that we live in," St. Clair added. "It's fun to look at things together and try to identify things together."

## Save the dates:

**City Nature Challenge:** April 25-28

**Upload observations** to the app by May 4.

**Results announced** on May 5.



# Kellogg Creek is getting its flow back

By Alex Hasenstab



For years, people in Milwaukie have been working to solve a more than 150-year-old issue plaguing the creek that runs through its downtown. Now, thanks to funding through Metro's Large-Scale Community Visions Program, the project can move toward completion over the next several years.

In December, Metro Council unanimously approved \$10 million of grant funding for the Kellogg Creek Restoration and Community Enhancement Project.

"This project has been 20 years in the making," said Metro Councilor Christine Lewis, who represents District 2 where the project is located. "I used to live in an apartment just up the street from the creek, and we would all talk about it even then."

"I went to my first meeting on this in 2008, I think," said Milwaukie mayor Lisa Batey. "It started out being about fish passage. But over the years it's evolved and now it's about connectivity. Fish will have access to miles of stream, and people will be able to safely connect to the Springwater Trail and Willamette River from downtown Milwaukie."

The restoration project centers around removal of the obsolete Kellogg Dam and replacement of the Kellogg Bridge on Highway 99E. Removing the dam will provide fish access to 17 miles of habitat and will restore the currently muddy, shallow and algae-filled area behind the dam, while the replaced bridge will allow for multiuse paths to and along the Willamette River.

"Willamette River salmon, steelhead, as well as Pacific lamprey will have access to vital rearing and migration habitat," said Neil Schulman,



executive director of the North Clackamas Watersheds Council, one of the organizations leading the project. People who live, work and go to school in Milwaukie will have a healthy stream in their downtown.

Funding from the Large-Scale Community Visions Program can go to capital projects that devote at least \$2 million to habitat restoration and that include communities that historically have been left out of government planning, among other requirements.

The grant program's director, Linda Bartolini Venegas, said, "The project's intersection of nature with transportation improvements aligns with the vision of the Large-Scale Community Visions Program of a transformative, regional-scale project that will strengthen climate resilience."

The Large-Scale Community Visions grant offers a unique opportunity for additional funding, as agencies working on Kellogg Creek can leverage the \$10 million awarded by Metro to access additional funding from other sources to pay the rest of the project's estimated \$75 million cost.



**Clockwise from top:** Currently, water from Kellogg Creek collects behind a dam where it can stagnate and breed algae; the restoration project includes a multiuse path that will pass below Highway 99E, closing a gap between the Springwater and Trolley trails; the Kellogg Creek Restoration Project requires collaboration between multiple agencies. Seen here in front of the Kellogg Creek dam are, left to right, Councilor Christine Lewis (Metro), Amy van Riessen (North Clackamas Watersheds Council), Oregon Department of Transportation area manager Shelli Romero (Oregon Department of Transportation), Neil Schulman (NCWC), Mayor Lisa Batey (City of Milwaukie), and April McEwen (American Rivers).

"We are making an investment as a region, but more than that, we're giving the local community what they need to draw support from the federal government," Lewis said.

The multifaceted Kellogg Creek restoration project will be a collaborative effort between North Clackamas Watersheds Council, the City of Milwaukie, Oregon Department of Transportation and American Rivers. This collaboration is a crucial component of the project's success, says April McEwen, a program director with American Rivers and the restoration project manager.



**Above:** Built in the 1840s to power a long-since demolished flour mill, the Kellogg Creek dam is a near-total barrier to fish passage. *Lower photo* Courtesy of North Clackamas Watersheds Council.

Prior to Metro's award, the project had already secured \$17 million in funding from other sources. "Transformational river restoration and infrastructure improvement projects require an extremely coordinated approach, with strong partnerships between the entities that can deliver the project," McEwen said.

This project is also a priority for local tribes, including the Confederated Tribes of Warm Springs and the Confederated Tribes of Grand Ronde. Both tribes participate on the Kellogg Creek project's technical advisory committee.

The tribes submitted testimony in support of the project's funding, as it benefits culturally significant fish species.

"Kellogg Dam has blocked these streams since Statehood and has served no purpose since the 1890s. The time to remove this important barrier is now," read the final line of both statements.

Kellogg Dam was originally built in the 1840s for a flour mill that ceased functioning in the 1890s. It is a near-total barrier to local spawning fish and to rearing-and-resting habitat for threatened and endangered salmon and steelhead populations.

In addition to benefiting fish habitat, this work will restore a 14-acre reservoir created behind the dam into healthier riverside habitat. It will also benefit people living nearby by restoring the floodplain and reducing the risk of flooding. (See sidebar.)

During restoration, the reservoir will be drained and contaminated sediment will be removed. This offers a rare opportunity for the Confederated Tribes of the Umatilla Indian Reservation to monitor and propagate new populations of a native freshwater

mussel known as the Oregon floater, currently inhabiting the creek upstream of the dam. These important freshwater mussels are facing population decline.

The project will also replace the 91-year-old Kellogg Creek Bridge on Highway 99E, as the dam forms part of the bridge's foundation. Replacing the bridge will increase pedestrian safety and create a more earthquake-safe bridge.

"The Kellogg Project is a fantastic opportunity to upgrade aging transportation infrastructure," said Oregon Department of Transportation engineer Jonathan Horowitz.

The projects calls for an underpass below the Highway 99E bridge that will directly connect downtown Milwaukie to the parks and natural areas along the Lower Willamette River. Currently, pedestrians must cross the highway to reach the river from downtown.

"Trying to cross Highway 99 is not fun, it has high capacity and fast speeds," said Shelli Romero, area manager for the ODOT.

This work will also create a safe passage for students at local schools who participate in an outdoor education program run by the watersheds council called the Kellogg Creek Student Macroinvertebrate Monitoring Program.

Once the reservoir and floodplain are restored, the area near Kellogg Creek will become a prime environment for outdoor recreation.

The City of Milwaukie will develop a new, 14-acre natural area along the stream that connects to nearby trails and parks. Currently, it's not pleasant to enter the reservoir's stagnant, muddy water. Once the project is complete, people will be able to recreate in and around the cleaner, free-flowing stream.

"Removing Kellogg Dam, restoring the creek and creating the undercrossing is a rare opportunity to restore nature as a defining element of Milwaukie's downtown, and connect to affordable housing," said Joseph Briglio, the City of Milwaukie's assistant city manager.

The City of Milwaukie plans to develop a natural area along the stream that connects to nearby trails.

Current plans have construction starting in 2028 with completion in 2030.



## More mud, less flood

By Hannah Erickson

It can seem counterintuitive to say that allowing water to flow freely will help reduce flooding. But removing dams, artificial channels and impermeable walls can help keep water from reaching homes and businesses.

In their natural states, rivers and streams meander through landscapes like wetlands and wet prairies. Some of their water filters into these areas, where it is held by plant roots and porous ground. During rainstorms, this floodplain habitat acts as a living sponge — soaking up water that can be slowly released back into streams.

Since colonial times, people have straightened stream paths, built walls and dams to control streams' flow, and drained soggy land to use for agriculture or building. During heavy rainfall, water accumulates in these streams so quickly that it often spills over the tops of banks, dams or other control devices. Meanwhile, the surrounding land has been developed in ways that leave it too dense or hard to absorb such a rush of water. The result: flooding.

This is why, whenever Metro Parks and Nature acquires a new natural area, one of the first things staff scientists do is study its hydrology (water movement) and find ways to restore things to a more natural state.

"This is a common misunderstanding we encounter during restoration work," said Metro Parks and Nature conservation program director Dan Moeller. "Often, we remove artificial waterways that may have been around for decades, which were draining water from the surrounding land. From the outside, it can look like we're taking a beloved grassy meadow with a stream running through it and turning it into a muddy swamp. But wetlands are crucial habitat for wildlife, and they're also an important piece of protecting the surrounding area from flooding."

The area around Kellogg Creek in Milwaukie has experienced its share of flooding over the years, with major events in 1996 and 2015. During heavy rains, creek water collects behind the dam in what is locally called Kellogg Lake, even though it is not a natural lake but a manmade reservoir. Eventually, the water spills into surrounding neighborhoods.

"Right now, it's a full bathtub," North Clackamas Watershed Council executive director Neil Schulman said of the reservoir. "After the dam removal and restoration, it will be an empty bathtub. The creek will flow down to the Willamette, and the restored wetlands will catch floodwaters before they make it into someone's basement."



# Hopping to it

By Jonathan Soll and Katy Weil



## NEW WILDLIFE TUNNEL MOVES ANIMALS UNDERNEATH BUSY HIGHWAY 30

Amphibians in northwest Portland have a big problem, and it's called U.S. Highway 30. Twice a year, frogs and salamanders must cross the busy four-lane roadway that separates their upland forest habitat from their wetland breeding grounds. Many of them don't make it.

A recent effort led by the Columbia River Estuary Study Taskforce (CREST) and supported by Metro took one big step — or maybe we should say “hop” — toward solving this problem.

In December, construction was completed on a new wildlife underpass that allows amphibians and other small animals to safely travel between the breeding ponds of the Oregon Department of Fish and Wildlife-managed Palensky Wildlife Area and the forests of Metro's Burlington Creek Forest Natural Area.

Constructed in 2024 over the course of about six months, the project was the result of years of conversation and design work involving engineers, wildlife biologists and road experts. To help make the project happen, Metro contributed just under \$500,000 of the \$3.4 million budget, with most funding coming from the Bonneville Power Administration and the Oregon Department of Fish and Wildlife, along with grants from the Oregon Watershed Enhancement Board and Oregon Wildlife Foundation. Metro's contribution came from the voter-approved 2019 parks and nature bond.

The tunnel might look like just another storm culvert to passersby. But closer inspection reveals some differences. At more than 4 feet in diameter, it's large

enough to allow small mammals to pass through it. The bottom is lined with dirt and sticks to duplicate the kind of terrain amphibians are used to traveling across. And the tunnel includes gentle lighting and grates that function like skylights, as many amphibians avoid dark caves and tunnels.

The opening is flanked by “wing walls,” barriers that direct wildlife to the underpass. Trail cameras can monitor which species are using the tunnel, and how often. This, in turn, will help inform future projects like this. The tunnel is Oregon's first wildlife crossing designed specifically for amphibians, so there's a lot to learn.

The goal is to help protect species like the northern red-legged frog, which is designated a sensitive species in Oregon. A significant population of these frogs live in the forests of the Tualatin Mountains, which include Portland's Forest Park as well as more than 1,400 acres of natural areas protected by Metro.

Every winter, these frogs wait for wet evenings to move from the forests to their breeding ponds, and then later, move back to their terrestrial habitat for the remainder of the year. So twice a year, they are forced to cross U.S. Highway 30, which separates a 7-mile stretch of wetlands and floodplain along Multnomah Channel from the Tualatin forests.

For years, volunteers have collected frogs in buckets near the Portland General Electric-owned Harborton Wetlands, a few miles south of the new underpass. But that solution is far from ideal: It depends on a large group of volunteers working at night near the highway, and wildlife can often find even gentle handling by humans traumatizing and harmful.



**From top:** Red-legged frogs need to travel from forests to wetlands and back again in order to breed; the underpass looks a lot like a regular storm drain. Lower photo courtesy of Columbia River Estuary Study Taskforce.

A safe crossing that animals can use without assistance is a much better option. The information gathered from the Palensky underpass could eventually help find a solution for the Harborton frogs. It could also help inform plans to improve the current crossing to the Metro-owned North Multnomah Channel Marsh, which is a few miles to the north of the new underpass.

Just like humans, wildlife needs connection to thrive — though in the case of wildlife, those connections are often literal ones between habitat areas. Even modest connectivity between habitat patches creates more robust populations, better able to find high-quality habitat, withstand wildfire or disease outbreaks, and adapt to a changing climate. Our community has made remarkable investments in conserving nature close to home in the greater Portland area, but human infrastructure (the roads, homes and businesses we rely on for modern life) often isolates otherwise high-quality habitat, limiting its value.



**From top:** One of the first frogs to use the underpass gets ready to make history; a trailcam documents amphibian crossings to gauge the underpass design's success. Upper photo by Jim Holley. Trailcam photos courtesy of Oregon Department of Fish and Wildlife.

A regional habitat connectivity working group is helping to tackle the issue across the region. Metro is one participant. The group is exploring not just projects like the Palensky underpass, but also ideas like acquiring land that connects large natural areas owned by different agencies, re-foresting currently paved areas, and improving regional transportation projects to minimize conflict between humans and wildlife.

Projects like this require significant funding from public agencies and nonprofits, as well as coordination between multiple organizations. That's only possible when voters agree to invest in nature stewardship. So the next time you hear frogs chorusing in the evening, listen closely: Maybe you'll hear a “thanks, everyone!” in their call.

Jonathan Soll is Metro Parks and Nature's science manager. Katy Weil is a senior natural resource scientist with Metro Parks and Nature.

## Meet your neighbors

By Katy Weil

The Palensky underpass was designed to help pond-breeding amphibians. What, you ask, is a “pond-breeding” amphibian?

Amphibians are animals that divide their lifespan between time spent in water and time spent on land. A pond-breeding amphibian is a species that lays its eggs in small water bodies, typically attaching an “egg mass” to a branch of a submerged shrub or clump of grass. All pond-breeding amphibians

in our region use terrestrial habitats such as forests, woodlands and shrubby natural areas for the rest of their life cycles.

The greater Portland region is home to five species of native pond-breeding amphibians. Get to know them through the descriptions below — but please, not by trying to pick them up. Not only is it stressful to them, their sensitive skin can be harmed by whatever is on our hands — and a few of the local species can secrete mild toxins through their skin, so it could be stressful for you, too.

### Northern red-legged frog

These medium-sized frogs have long legs, smooth skin, and are greenish-gray to reddish-brown overall with dark flecks on the back, sides and legs. Their name might seem misplaced until you see their underside — from below, their hind legs are indeed bright red. These frogs breed in mid-late winter, attaching egg masses with 500 to 1,000 embryos to submerged vegetation. Photo by Eric Kolb.



### Pacific chorus frog

Once called “Pacific tree frogs,” these frogs are about 2 inches long and can change color to match their background, with a palette that ranges from bright green to brown, reddish or gray — even blue sometimes! They have a dark mark that goes from their nostrils to their shoulders and looks like a mask. Some have dark stripes and spots on their backs. These frogs breed in late winter/early spring, producing egg masses the size of a half dollar in shallow ponded areas. Photo by Bridget Spencer.



### Northwestern salamander

A large, thickly built brown salamander with a rounded snout. They breed in late winter, attaching thick, grapefruit-sized egg masses to sturdy vegetation. Photo by Liam Hopkins.



### Long-toed salamander

These smaller salamanders are named for the extremely long toes on their hind feet. Adults have black or brown skin that is smooth and moist with a yellow ragged-edged stripe running from head to tail. It is speckled with white or silver dots along its sides and underside. They breed the earliest of the pond-breeders, laying egg masses similar in size to the chorus frog's as early as December. The embryos can delay their development until conditions are optimal. Photo by Connor Long.



### Rough-skinned newt

Unlike most salamanders, this species has dry, bumpy skin. They can grow to almost 8 inches in length and should not be handled as they release a toxin when disturbed. These colorful amphibians lay their eggs in ponded areas as well as in streams, ditches, and shallow lakes, normally under single leaves of vegetation.







# Get involved

CLASSES AND EVENTS

Unless otherwise noted, all events require pre-registration, which can be done online at [oregonmetro.gov/calendar](https://oregonmetro.gov/calendar) or by phone at 503-220-2782. When you register, you'll receive an email with additional information about the event, as well as notification if an event is canceled.

Children must be accompanied by adults.

If you have a disability and need accommodations, call 503-220-2781, or call Metro's TDD line at 503-797-1804. If you require a sign language interpreter, call at least 48 hours in advance. Activities marked with this symbol are wheelchair accessible: ♿

Bus and MAX information 503-238-RIDE (7433) or [trimet.org](https://trimet.org)

SAT. APRIL 5

## Stewardship day at Scouters

Join us at Scouters Mountain. Participants will assist with any leftover planting needs, spreading mulch and removing any invasive plants. All tools, supplies and snacks/refreshments provided.

Scouters Mountain Nature Park  
10:30 a.m. to 1:30 p.m.  
Free. Parking: free  
All ages  
Difficulty: moderate

SUN. APRIL 6

SUN. MAY 4

SUN. JUNE 8

## Attuning to place with the seasons

Join place-based educators Juliet McGraw and Ridhi D'cruz for a nature walk that deepens our sense of place and presence. We will begin by welcoming in the spring season with intentionality. Develop your relationship and reciprocity with the land and each other.

**Sun. April 6** Oxbow Regional Park  
(Parking: \$5 car/\$7 van or bus)

**Sun. May 4** Blue Lake Regional Park  
(Parking: \$5 car/\$7 van or bus)

**Sun. June 8** Smith and Bybee Wetlands Natural Area (Parking: free)

10 a.m. to noon or 1 to 3 p.m.  
\$6/person, fee waiver available  
All ages  
Difficulty: moderate

FRI. APRIL 11

SUN. APRIL 13

## Mushroom hikes

Discover the fascinating and weird world of mushrooms. Join local mushroom guide Leah Bendlin on a hike to learn about the ecological roles of fungi, their forms, and how they eat and reproduce. Enjoy hands-on exercises and learn how to identify mushrooms. Field guides provided.

**Fri. April 11** Smith and Bybee Wetlands Natural Area (Parking: free)

**Sun. April 13** Oxbow Regional Park (Parking: \$5 car/\$7 van or bus)

9:30 to 11:45 a.m. or 12:30 to 2:45 p.m.  
\$6/person, fee waiver available.  
All ages  
Difficulty: easy

SAT. APRIL 12

## Blackberry tending and papermaking at Glendoveer

Learn how to harvest invasive blackberry canes and process them into paper that can be later used for crafts. All supplies, tools and refreshments provided.

Glendoveer Nature Trail  
10 a.m. to 2:30 p.m.  
Free. Parking: free  
All ages  
Difficulty: easy

SUN. APRIL 13

SUN. APRIL 27

SUN. MAY 18

## Reimagining birding

Nature educator Gladys Ruiz will guide you on a journey to explore the ways we have forged relationships with birds. We'll challenge conventional notions of birding and share stories of birds, migration and community.

**Sun. April 13** Canemah Bluff Nature Park  
**Sun. April 27** Lone Fir Cemetery  
**Sun. May 18** Scouters Mountain Nature Park

10 a.m. to noon  
\$6/person, fee waivers available. Parking: free  
All ages  
Difficulty: easy

SAT. APRIL 19

SAT. APRIL 26

## Tree ID at Lone Fir Cemetery

Biologist and educator Anna Le will lead a nature walk at Portland's second-largest arboretum. Participants will learn to identify tree species and partake in tree bingo to test their knowledge as they explore this historic site.

Lone Fir Cemetery  
1 to 3 p.m.  
\$6/person, fee waiver available  
All ages  
Difficulty: easy



FRI. APRIL 25

SAT. APRIL 26

## City Nature Challenge bioblitzes

Participants will use the free phone app iNaturalist to survey and identify species at our sites as a part of the City Nature Challenge. No experience needed but participants will need to download the app and make an account in advance.

**Fri. April 25** Wildflowers at Cooper Mountain Nature Park

**Fri. April 25** Galls and wildflowers at Graham Oaks Nature Park

**Sat. April 26** Wildflowers at Canemah Bluff Nature Park

10:30 a.m. to 1:30 p.m.  
Free. Parking: free  
All ages  
Difficulty: easy

FRI. MAY 2

## Cemetery tending at Lone Fir

Join Metro staff in cleaning headstones and picking up litter and sticks. Participants will learn about headstone symbols and site history. All supplies, tools and refreshments provided.

Lone Fir Cemetery  
10 a.m. to 2 p.m.  
Free. Parking: free  
All ages  
Difficulty: easy

SAT. MAY 3

SAT. JUNE 7

## Forest bathing walk

"Forest bathing" is a way to connect deeply with nature through mindful walking, sensory activities and reflective sharing. A certified forest therapist will guide walkers. Move at your own pace and embrace the wisdom of the land.

Newell Creek Canyon Nature Park  
10 a.m. to noon or 1 to 3 p.m.  
\$6/person, fee waiver available. Parking: free  
Ages: 10+  
Difficulty: easy



SAT. APRIL 19

SAT. MAY 24

¡BILINGÜE!

## Pigmentos naturales: Azul maya | Natural pigments: Maya blue

Este taller de acuarela combina técnicas artísticas con una profunda conexión con la cultura y la tierra. Los participantes explorarán prácticas artísticas sostenibles aprendiendo a crear colores vibrantes a partir de plantas, mientras cultivan una apreciación por la Madre Tierra.

This watercolor workshop combines artistic techniques with a profound connection to culture and land. Participants will explore sustainable and organic artistic practices to create vibrant colors from plants while nurturing an appreciation for Mother Earth.

Chehalem Ridge Nature Park  
10 a.m. a mediodía o 1 a 3 p.m. | 10 a.m. to noon or 1 to 3 p.m.  
\$6/persona, pago opcional. Parqueo gratis. | \$6/person, fee waivers available. Parking: free  
Todas las edades | All ages  
Dificultad: fácil | Difficulty: easy

## Free Parking Days

Get out and explore nature this spring! Enjoy free parking at Oxbow and Blue Lake regional parks, Broughton Beach, M. James Gleason Memorial Boat Ramp and Chinook Landing Marine Park on April 17, May 15 and June 19.

Parking at all other Metro parks and boat ramps is free year-round.

SUN. MAY 11

## Mother's Day wildflower walk

Join biologist Anna Le for a wildflower outing. Learn species identification, habitat, ethics and mindfulness, while deepening your connection to nature and conservation. A perfect opportunity to appreciate and respect the beauty of spring's wildflowers.

Canemah Bluff Nature Park  
10 a.m. to noon or 1 to 3 p.m.  
\$6/person, fee waiver available. Parking: free  
All ages  
Difficulty: moderate

FRI. MAY 16

## Stewardship day at Howell Territorial Park

Join Metro staff at Howell Territorial Park to remove blackberry canes, weed the prairie and harvest blackberry leaf for tea. Participants will learn about this site's food-gathering opportunities. All tools, supplies and refreshments provided.

Howell Territorial Park  
10 a.m. to 2 p.m.  
Free. Parking: free  
All ages  
Difficulty: moderate

SAT. JUNE 7

## Haiku in nature

Join this workshop to explore classical haiku poetry and write your own, inspired by the beauty of spring. Experience nature, learn the haiku formula and create meaningful poems. Bring your own writing materials (notebook, pen, etc.).

Chehalem Ridge Nature Park  
10 a.m. to noon  
\$6/person, fee waivers available. Parking: free  
Ages: 16+  
Difficulty: easy

SAT. JUNE 14

## Fly-fishing clinic

Join biologist and educator Anna Le for an introductory fly-fishing workshop. Learn fly casting, knot tying, rod setup, trout behavior and ethical harvesting. Discussions will relate to freshwater insect ecology, fostering conservation and connection to aquatic ecosystems through streams, lakes, rivers, fish and insects. Materials provided.

Blue Lake Regional Park  
10 a.m. to noon or 1 to 3 p.m.  
\$6/person, fee waiver available. Parking: \$5 car/\$7 van or bus  
Ages: 7+  
Difficulty: easy



# Field guide

GLENDOVEER GOLF COURSE AND NATURE TRAIL



Story by Nicole Lewis  
Photography by Cristle Jose

Opened to the public in 1926, the Glendoveer Golf and Tennis property continues to serve as a center of community in northeast Portland.

Since time immemorial, the area where Glendoveer and greater Portland now sit has been home to the Multnomah, Wasco, Cowitz, Kathlamet, Clackamas, bands of Chinook, Tualatin Kalapuya, Molalla and many other tribes who make their homes along the Columbia and Willamette rivers.

Today, this cherished resource attracts more than 250,000 visitors annually, and offers new and fun ways to experience a place that reaches a far broader community than the golf and tennis crowd alone.

Year-round, visitors of all ages enjoy a quiet walk or run along Glendoveer's 2.2 mile nature trail around the site. This wood-chipped path provides a safe place to exercise and experience nature close to home. Lose yourself among the sequoias, big-leaf maples, cedars and Douglas firs, including a heritage tree that started growing when the U.S. became a nation.

Free community events attracted nearly 6,000 people last year. Glendoveer hosts and sponsors blood and clothing drives, charity tournaments, community events, and golf programs that integrate life skills, mentoring and support for local children in foster care.

Since 2014, Glendoveer has hosted the prestigious Nike Cross Nationals, where the top high school cross-country runners compete for the national title. The event also includes a community run open to the public.

**Glendoveer Golf Course and Nature Trail**

**ADDRESS**  
14015 NE Glisan St., Portland

**DIRECTIONS**  
TriMet buses 25 and 77 stop by Glendoveer. MAX Blue Line stops at NE 122nd or NE 148th avenues are a mile away.

**KNOW WHEN YOU GO**  
Glendoveer trail open sunrise to sunset. No pets, please. Pro shop and tennis facility open daily 6:30 a.m. to 9:45 p.m. year-round. Available tee times for golf vary by season. For golf, FootGolf and tennis reservations: 503-253-7507

**AMENITIES**  
Two 18-hole golf courses, driving range, indoor tennis, pro shop. Two-mile, wood-chipped loop trail with restrooms, picnic table, drinking fountain. Von Ebert Brewing.

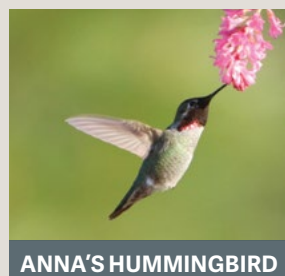
[oregonmetro.gov/glendoveer](http://oregonmetro.gov/glendoveer)

**In the neighborhood** Grab lunch or a local brew at Von Ebert Brewing, located at Glendoveer. Nadaka Nature Park at NE 176th Avenue and NE Glisan Street features a nature play area, meadow and short loop trail. Visit Ventura Park at SE 115th and SE Stark Street, where bicyclists can practice their skills at the pump track built and maintained by the Northwest Trail Alliance. Metro's Blue Lake Regional Park and Chinook Landing Marine Park are just a 15-minute drive away. For more information, visit [playglendoveer.com](http://playglendoveer.com)

From wildlife habitat to solar energy, Metro's commitment to a healthy environment comes to life across the property, which has been recognized by the Environmental Leaders in Golf Awards. Glendoveer's lush greenery serves as an island oasis of nature among the busy city streets.

For more details about all Metro Parks and Nature destinations, visit [oregonmetro.gov/parks](http://oregonmetro.gov/parks)

## Be on the lookout!



ANNA'S HUMMINGBIRD



DOUGLAS SQUIRREL



GOLDEN-CROWNED KINGLET



TRILLIUM

## Season-by-season highlights

**WINTER:** Donating to the on-site holiday charity drives is a fulfilling and accessible way to support the community. For those who go stir crazy during the winter, don't forget: the four tennis courts are indoors and the driving range is covered and — more importantly — the latter is partially heated.

**SPRING:** Look for the beautiful, white trillium blossoms along the trail, and rufous hummingbirds in early spring. If you're out at dusk, you may see a western screech owl. Free kids golf and tennis clinics are offered winter and spring.

**SUMMER:** Play a round of golf on one of Glendoveer's two 18-hole courses, try out disc golf or enjoy the cool shade along the nature

trail. Tour the course on a GolfBoard and see what it's like to "skateboard" over the grass. Sign up the kids for weeklong golf and tennis camps. Enjoy family movie night with "Big Screen on the Green" and learn about the constellations at Star Party. Be on the lookout for twilight walks with a naturalist — explore the natural side of Glendoveer at a unique time of day.

**FALL:** Every Halloween, Glendoveer transforms into a "Haunted Forest," providing a safe, fun and dry place for trick-or-treating. Fall-themed tennis and golf events are a fun way to enjoy the last of the nice weather. Enjoy a stroll around the nature trail and soak in the vibrant colors. You'll see vine maple, western hazel and red huckleberry, among others.

# Tools for living

BATTERY BASICS



By Kayla Scheafer

Batteries can be found in many things in your household. Everything from smoke alarms to flashlights and from remote controls to electric toothbrushes have batteries in them. It can be tempting to toss batteries in the garbage, but many batteries contain heavy metals and can cause fires in our region's garbage and recycling system.

## Common types of batteries

### Single-use batteries

Alkaline batteries used to contain mercury, but today that is no longer the case. According to the Environmental Protection Agency, the Battery Act of 1996 helped phase out the use mercury in many types of household batteries. Alkaline batteries that are mercury-free are now commonplace for standard household sizes such as AA, AAA and D batteries.

Button-cell or coin batteries are used in items like hearing aids, watches, toys or other small electronic devices. These batteries have historically contained trace amounts of mercury and other heavy metals in them.

These heavy metals can leak out of the battery into the environment if it's thrown in the garbage or not recycled. Many button-cell batteries made today use lithium metal, which is not considered a heavy metal and can be recycled.

Another battery commonly referred to as a household battery is the lithium single-use battery. These batteries are used in items around the house in the same way that people use alkaline batteries. They may also have a unique shape specific to the item it's used for, like cameras or vape pens.

### Rechargeable batteries

Another common household battery is the rechargeable battery. These come in many shapes and sizes and are often used in power tools, laptops, smart phones and other electronic devices. A few different types

For other battery disposal options, call Metro's Recycling Information Center at 503-234-3000. They're available by phone Monday through Friday, 8:30 a.m. to 5 p.m. You can also leave a question for them online at: [oregonmetro.gov/AskMetro](http://oregonmetro.gov/AskMetro)



of rechargeable batteries are Lithium-ion (Li-ion), Nickel Cadmium (Ni-Cd) and Nickel-Zinc (Ni-Zn).

## Best practices for sorting single-use and rechargeable batteries

- Any battery not labeled "alkaline" should be taped at both ends.
- Use clear tape only; shipping tape works best.
- Store taped batteries in a 1-quart ziplock bag.

## Safety tips for all types of batteries

- Store all batteries away from children, pets, and potential sources of heat.
- For a battery that is damaged, swollen or leaking, place in a hard plastic container with an absorbent material like cat litter or sand.

## How to dispose of batteries

Many jurisdictions offer curbside battery disposal options for some types of batteries. Check with your local jurisdictions for availability and disposal instructions.

Sometimes items have batteries that are embedded and not easily removed. In those cases, it's recommended to bring the entire item to a Metro household hazardous waste disposal facility or a neighborhood collection event. You can also check with [Call2Recycle.org](http://Call2Recycle.org) to see if there are any drop-off options close by.



## Why batteries cause fires

Fires due to batteries have become increasingly common in trash bins, garbage trucks and transfer stations. When people throw batteries in the trash, the batteries are often damaged in transit or when crushed at the dump.

Lithium-ion (Li-ion) batteries are the main culprit in fires due to their chemistry. These high-energy batteries unleash a chain reaction when they are damaged, releasing extreme heat, which often results in a fire. These batteries pose a safety risk for anyone who encounters them. To keep yourself, neighbors, and waste and recycling workers safe, keep all batteries out of your trash.



# Color and discover!



## Mountain beavers

Humans rarely see the elusive and often-misunderstood mountain beaver. These small, stubby-tailed rodents seldom leave their underground burrows during daylight. Not actually beavers at all, they are sometimes called “living fossils” because they have existed in their current form since the Miocene Epoch, more than 5 million years ago. But these hardy survivors are facing new challenges: Their inefficient kidneys require them to consume a third of their weight in water every day, something that’s harder to do with more frequent droughts due to climate change.

For more fun facts, follow @OregonMetro on Instagram and Facebook or visit [oregonmetro.gov/parks](https://oregonmetro.gov/parks)

