

# AMPHIBIAN MONITORING COMMUNITY SCIENCE PROGRAM 2025 REPORT

#### AMPHIBIAN MONITORING COMMUNITY SCIENCE PROGRAM

Launched in 2012, Woodland Park Zoo's (WPZ) Amphibian Monitoring Community Science Program provides much-needed data on amphibian populations for Washington Department of Fish and Wildlife (WDFW) and other land managers across King and Snohomish counties. To protect Pacific Northwest amphibians—frogs, toads, salamanders, and newts—wildlife managers need to understand where their populations are and how they are doing, which is one reason why we have enlisted community volunteers to gather critical data on amphibian presence and breeding activity in Puget Sound's urban and suburban landscapes.



Photo by Elaine Chuang, project volunteer

Volunteers are organized into teams and visit their wetland site to conduct monthly surveys from late January through mid-summer. The program focuses on eight species of frogs, toads, and salamanders. Volunteers record details, take photos and submit data on any egg masses or other life stages of focal amphibian species they encounter. Participants are trained and equipped with hip waders, GPS units, aquascopes, and other monitoring tools that help them find, document and identify egg masses of different amphibian species in a way that's safe for people, wildlife and habitats.

#### **VOLUNTEER TRAINING**

Woodland Park Zoo staff and experienced Amphibian Monitoring volunteer team leaders conduct the training for the volunteers. After registering, volunteers complete a self-paced, interactive learning module in Discovery Den, an online learning platform where the zoo provides program training, protocols, and supporting resources for volunteers. Additionally, all volunteers attend a live, online training session to review the data collection protocol, learn about updates, and to connect team members with their team leader for each site. This session is followed by an optional in-person, field demonstration session at a local park in Seattle.

#### **DATA MANAGEMENT PROCESS**

All amphibian observations for this project are entered into iNaturalist with photos, georeference (latitude and longitude) and additional fields (weather, site conditions, etc.) as directed by the protocol. In iNaturalist, an observation can be entered with or without an initial species identification by the observer. Observations can then be validated or identified by project identifiers (project volunteers with expertise in amphibian identification who are recruited to assist with species identifications) and by the general iNaturalist online community. iNaturalist observations become "Research Grade" when the iNaturalist community agrees on an identification.

More information on data validation in iNaturalist can be found in this article: Boone, M.E. & Basille, M. 2019. *Using iNaturalist to contribute your nature observations to science*. Retrieved from https://doi.org/10.32473/edis-uw458-2019.



**Amphibians of Washington project page:** 

https://www.inaturalist.org/projects/amphibians-of-washington/

Based on the Site Visit reports submitted by volunteer teams, site visits dates on which no species were observed are added into the full dataset. These reports also provide information on survey effort (total time spent surveying) and volunteer hours.

After each monitoring season, the data collected by community scientists is synthesized into this summary report; site-specific data is also summarized and provided to each land manager. Data are also openly available to the public on the iNaturalist platform. The project maintains a Complete Site List of every site monitored since 2012, which years each site was monitored, and whether amphibians were or were not found each year. If you are interested in accessing the project's full dataset, please email <a href="maintoring@zoo.org">monitoring@zoo.org</a> with your request and a summary of what you plan to do with the dataset.



# Amphibian Monitoring 2025 Year At a Glance



www.zoo.org/amphibianmonitoring www.inaturalist.org/projects/amphibians-of-washington

## **Team Stats**

#Teams: 19 # Sites: 19

· #Volunteers: 128

#Volunteer Hours: 1,420+

# Observations: 606

As of November 13, 2025

# Research Grade Observations: 419 (69%)

As of November 13, 2025

# Site Superlatives



First Amphibian Sighting of the Season: CARKEEK PARK (2/8/2025)



First Team Out to Monitor: TUB LAKE (1/30/2025)



Most Verified Species Observed: BIG FINN HILL PARK (5) CRESCENT LAKE (5)



No Amphibians Observed: GREEN LAKE MEADOWBROOK POND

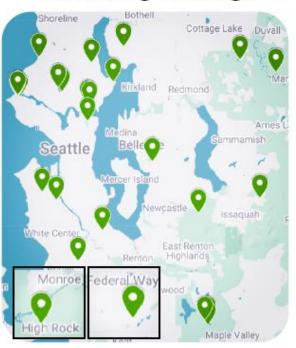


New Site this Season:
BIG FINN HILL PARK
MEADOWBROOK POND
NUGGET LAKE
TUB LAKE

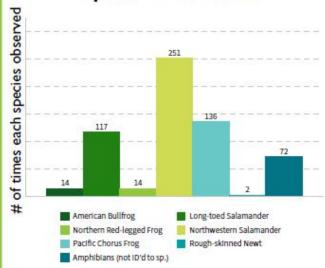


Most iNaturalist Observations ID'd: hawnzd (554) christiecaldwell (425)

# **Monitoring Coverage**



# **Species Observed**



No Oregon Spotted Frog or Western Toad observed.

#### SITES - 2025 SEASON

This year, the zoo again held an advisory meeting with local land management agencies and/or interested non-profit organizations to consider regional needs for annual site selection. Participants included municipal and state agencies, such as Bellevue Parks, Seattle Parks and Washington Department of Fish and Wildlife, as well as the Oxbow Farm and Conservation Center and City of Issaguah.

The site selection advisory group discussed a site selection process that considers the following:

- The principal goals of the project: 1) to detect if common species are staying common and to look for presence of rare species, and 2) to contribute data to help detect long-term trends, including distribution of breeding sites across the urban landscape and shifting phenology of breeding periods.
- Volunteer accessibility and interest—strive to make science and conservation
  accessible, especially to populations who may be underrepresented in science and
  conservation; allow volunteers to choose the location(s) they want to monitor.
- The geographic distribution of sites—include locations across a broad area throughout King and Snohomish counties.
- Sites of interest to the project's land manager collaborators.
- Sites with known beaver activity (given new research about the influences of beaver activity on amphibians).

In 2025, 19 teams monitored a total of 19 sites (some sites contain subsites—ponds separated from one another) with several new sites this year, including Big Finn Hill Park, Meadowbrook Pond, Nugget Lake, and Tub Lake. The Friends of Green Lake non-profit organization continued their collaboration with WPZ this year so they could survey Green Lake as a potential reintroduction site for Pacific chorus frogs. We also worked with the next generation of conservationists through a partnership with two Washington Conservation Corps teams serving with the City of Redmond and Cities of SeaTac, Tukwila, and Burien. Our friends with Green Issaquah joined us again this year to learn how amphibians are doing in nearby Issaquah wetlands. Oxbow Farm & Conservation Center staff continued montering multiple subsites to track the impacts of their conservation efforts using the zoo's protocol. Two of our 2025 sites were selected to assist ongoing research with a Washington Department of Fish and Wildlife grant-funded Stormwater Pond Biodiversity study (on which WPZ is a partner). This study aims to determine which stormwater pond conditions promote species diversity and abundance, whether stormwater ponds are equitably distributed and managed across socioeconomic strata, and if community scientists could assist with ongoing stormwater pond monitoring. These data are still being analyzed.

This year in addition to our Snohomish and King County monitoring efforts, Woodland Park Zoo staff mentored land managers at Skagit Land Trust and a coalition on Bainbridge Island

(consisting of staff from <u>Bainbridge Island Land Trust</u>, <u>Bloedel Reserve</u>, and IslandWood) to lead and coordinate their own amphibian monitoring efforts using our training materials and protocol on their own properties and with their own volunteers. All of these data are pooled in iNaturalist, expanding the geographic reach of our amphibain monitoring. Both efforts garnered local media attention as well: <u>BI Nonprofits Conduct Amphibian Surveys</u> and <u>Skagit Land Trust Volunteers Amphibian Monitoring at Barney Lake</u>

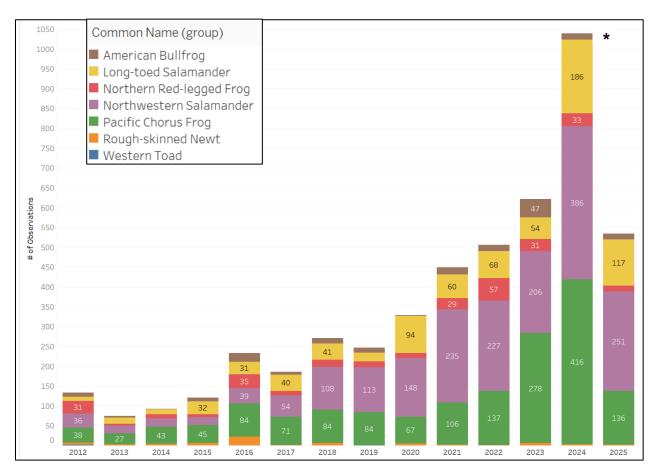
| SITE                             | SUBSITES        | LAND MANAGER                                    |
|----------------------------------|-----------------|---|
| Big Finn Hill Park               |                 | King County Dept. of Natural Resources & Parks  |
| Camp Long                        |                 | Seattle Parks & Recreation                      |
| Carkeek Park                     |                 | Seattle Parks & Recreation                      |
| Crescent Lake                    |                 | WDFW in Snohomish County                        |
| Discovery Park                   | Wolf Tree Ponds | Seattle Parks & Recreation                      |
| Green Lake                       | West Cattails   | Seattle Parks & Recreation                      |
| Magnuson Park                    | Ola Wetlands    | Seattle Parks & Recreation                      |
| Meadowbrook Pond                 | Multiple Ponds  | Seattle Parks & Recreation                      |
| Mercer Slough Nature Park        |                 | Bellevue Parks                                  |
| Nugget Lake                      |                 | City of Issaquah, Public<br>Works               |
| Oxbow Farm & Conservation Center | Multiple Ponds  | Oxbow Farm and<br>Conservation Center           |
| Puget Park                       |                 | Seattle Parks & Recreation                      |
| Redmond Watershed<br>Preserve    | Karis Bog       | City of Redmond - Parks & Recreation            |
| Rhododendron Park Pond           |                 | Rhododendron Garden                             |
| Shadow Lake Nature<br>Preserve   | Multiple Ponds  | SHADOW Lake Nature<br>Preserve                  |
| Sky Country Trailhead            | Klondike South  | King County Dept. of Natural Resources & Parks  |
| Tub Lake                         |                 | City of SeaTac                                  |
| Union Bay Natural Area           | Multiple Ponds  | Seattle Parks & Recreation / UW Botanic Gardens |
| Washington Park Arboretum        | Woodland Ponds  | Seattle Parks & Recreation / UW Botanic Gardens |

### **OBSERVATIONS - 2025 SEASON**



L to R: Pacific chorus frog (Claire Farr), Pacific chorus frog egg mass (Anne Sherwood), Rough-skinned newt (Devon Elton),

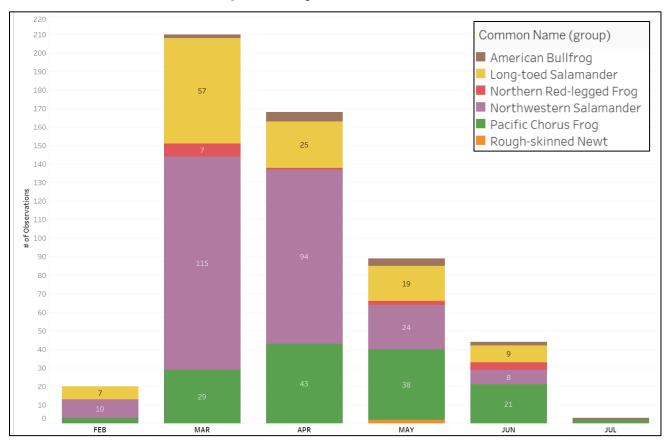
# 2012-2025 - Observations per Year\*



<sup>\*</sup> only includes observations identified to species; number of observations represents the number of times each species was encountered in any life stage (not a count of egg masses or individuals). In 2025, Bloedel Reserve

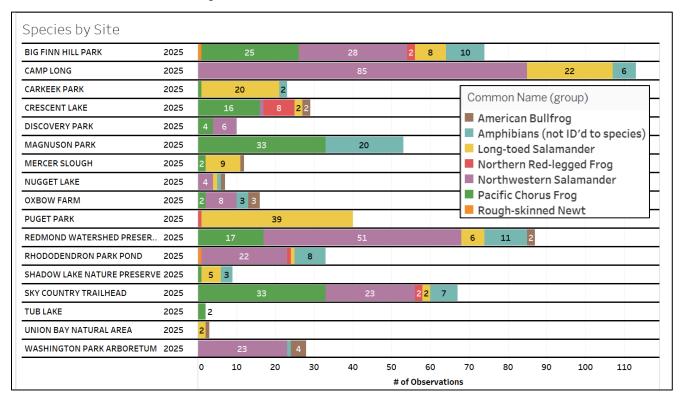
began managing their own Amphibian Monitoring data and it is no longer included in our totals; in 2024 there were nearly 200 observations at Bloedel Reserve, which contributed to the high number of observations that year.

# 2025 - Observations of Species by Month\*



<sup>\*</sup> only includes observations identified to species; number of observations represents the number of times each species was encountered in any life stage (not a count of egg masses or individuals)

# 2025 – Observations by Site\*



<sup>\*</sup> observations grouped by Site (all Subsites, if any, combined); only includes observations identified to species; number of observations represents the number of times each species was encountered in any life stage (not a count of egg masses or individuals)

The following sites were monitored during the 2025 season, but no amphibians were observed:

- Green Lake
- Meadowbrook Pond

#### **ACKNOWLEDGMENTS**

The lands that we monitor are the lands of the Tribal signatories of the Treaty of Point Elliott (1855), whose stewardship of the waters, plants, land and animal relatives in the Northwest has continued since time immemorial. Woodland Park Zoo acknowledges this stewardship, the sovereign rights of the Tribal signatories, and our responsibility to join with these Tribes to inspire and advance the restoration of relationships between humans and the living world around us.

In 2023-2026, this program is supported by the Puget Sound National Estuary Program's Habitat Strategic Initiative Lead (EPA Puget Sound Funds) in partnership with Washington Department of Fish and Wildlife (WDFW). WPZ is assisting WDFW with a study focused on amphibian, bird, and beaver presence in stormwater ponds and natural wetlands around Puget Sound. Woodland Park Zoo would also like to thank the many organizations, agencies and people who make this program possible!

- All of our Amphibian Monitoring volunteer team leaders, volunteer team members, site selection advisors and iNaturalist project identifiers!
- Bellevue Parks & Community Services
- City of Issaquah
- City of Redmond
- Friends of Green Lake
- King County Department of Parks and Natural Resources
- Microsoft
- Oxbow Farm & Conservation Center
- Rhododendron Species Botanical Garden
- SHADOW Lake Nature Preserve
- Seattle Parks & Recreation
- University of Washington Botanic Gardens
- Washington Department of Fish and Wildlife
- Washington Conservation Corps

And congratulations to our satellite project partners on their amphibian monitoring efforts this year!

- Bainbridge Island Land Trust
- Bloedel Reserve
- IslandWood
- Skagit Land Trust