



# BAT ACTIVITY TRENDS

## COMMUNITY SCIENCE PROGRAM

2025 Full Summary Report



### BAT ACTIVITY TRENDS (BAT) COMMUNITY SCIENCE PROGRAM

Woodland Park Zoo’s Living Northwest Conservation Program advances the conservation of wildlife in the Pacific Northwest through collaborative wildlife research and monitoring, restoring populations of imperiled species, and proactive outreach and engagement to promote human-wildlife coexistence. **Bats Northwest** promotes the conservation and welfare of bats across the Pacific northwest through education, conservation actions, and research. Woodland Park Zoo and Bats Northwest together lead the **Bat Activity Trends Community Science Program**.

The Pacific northwest U.S. (including Washington, Oregon and Idaho) hosts 15 bat species, all of which are impacted by loss of roosting habitat, fatalities due to wind turbines, and/or the effects of white-nose syndrome. Our region lacks a baseline understanding of bat activity levels and population trends.

**The Bat Activity Trends (BAT) Community Science Program was designed to help answer this fundamental question: Where are bats active in our region? By empowering community science participants to gather and submit data on bat activity in their own neighborhoods, we hope to help answer that question and provide baseline activity data to inform future research.**

The Bat Activity Trends program includes a straightforward protocol for conducting visual bat observations that can be used by individuals, families or community groups and organizations. Data is collected in the FieldScope platform which offers user-friendly access to the activity maps generated by the program. Online trainings, participation guides and datasheets are available in English and Spanish.

This community-gathered data creates a baseline map of bat activity across the Pacific Northwest. Trends in the data may indicate problems in need of further study or intervention by allow conservation managers. The data can be used as a jumping off point for further research, such as investigating areas and causes of high and/or low or no bat activity across the region.

### BAT PROGRAM GOALS

COMMUNITY GOALS	SCIENCE GOALS
Raise awareness of the importance of bats in our ecosystem	Better understand the activity levels of bats in different parts of our region
Overcome myths and misconceptions about bats in a way that leads to more positive perception and improved coexistence	Increase awareness of threats to bats including white-nose syndrome and actions people can take to prevent its spread
Introduce people to safe and fun bat observations	Create a baseline for year-to-year comparisons of bat activity
Create an increased connection with nature and community	Better understand the range of local bat species
Encourage further participation and leadership in community science	Share basic information about bat activity with other local bat conservation projects



# Bat Activity Trends 2025 Season Highlights



Bat Activity Trends (BAT) community science data show where bats are (or are not) active during summer evenings across the Pacific Northwest. Bat activity patterns can reveal important habitats for bats and inform conservation actions.



[www.zoo.org/batactivity](http://www.zoo.org/batactivity)  
[www.batsnorthwest.org/community-science](http://www.batsnorthwest.org/community-science)  
<https://bat.fieldscope.org/>

## 2025 Bat Stats As of December 1, 2025

- 11 BAT community science programs
- 455 participants in BAT programs
- 266 project members on FieldScope
- 177 project members who have ever logged observations on FieldScope
- 657 BAT observations logged on FieldScope since program started



## BAT Superlatives



Most volunteer observations submitted to FieldScope:

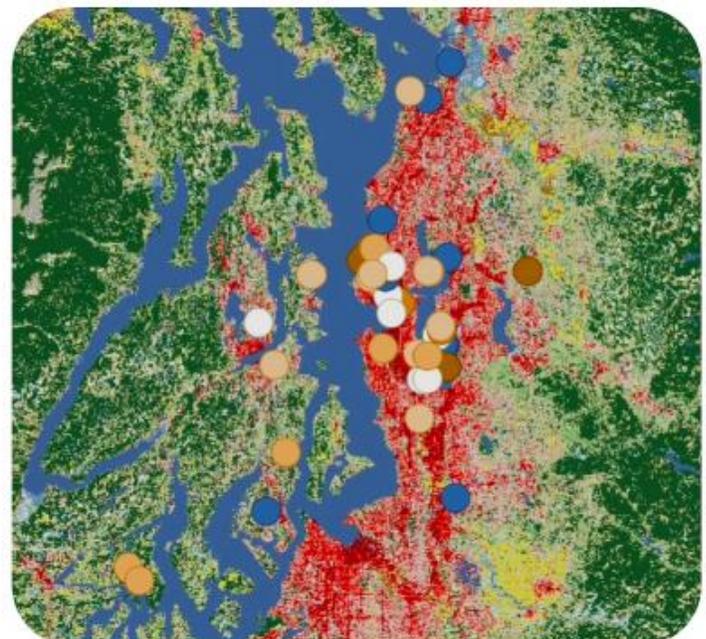
- #1 JackMercerIsle
- #2 varmint
- #3 crowslivebig

Submitted observations during 3 of the 4 program seasons:  
HeatherS

## 2025 BAT Observations by Activity Level Zoomed in to the Seattle-Tacoma area

Bat Activity Level			
	0 No Bat Passes Observed		
	1 Low Activity (1-5 passes)		
	2 Medium Activity (6-20 passes)		
	3 High Activity (21-50 passes)		
	4 Very High Activity (50 + passes)		
	5 Multiple Observations Recorded		
Land Cover Type			
	Water		Forests
	Pasture		Developed Land

For a more detailed break down of land cover type, visit <https://bat.fieldscope.org/>.

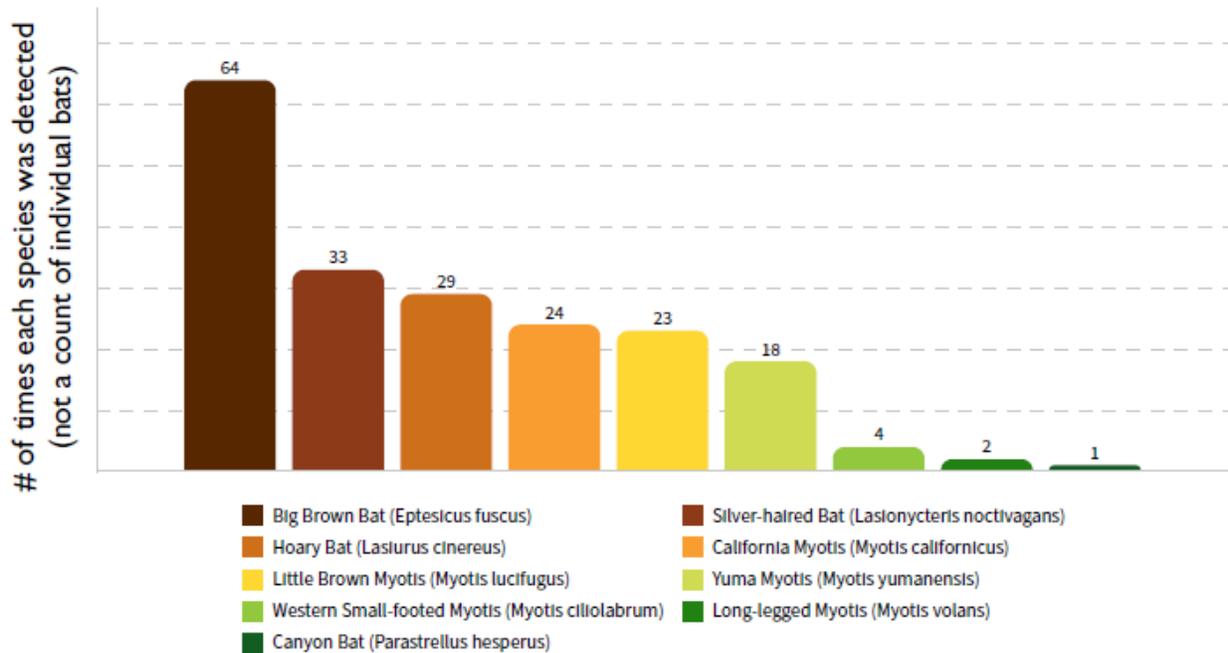




# Bat Activity Trends 2025 Season Highlights



## Bat Species Observed – 2022-2025 Totals



### New Partnerships

Mercer Island Parks – Volunteer Forest Stewards received BAT Leader training and led 6 programs at Mercer Island Parks involving 163 participants!

### Ongoing Partnerships

Seward Park Audubon Center – For the third season, Center volunteers received BAT Leader training and led 5 programs in summer 2025 involving 67 participants.

## BAT Program Firsts



**International Bat Night (August 30, 2025)** rallied community members to do **BAT** observations across the region, garnering **11** **BAT** observations on one night!



**Bats Northwest and WPZ led a BAT workshop AND a field trip at the 2025 Conference for Advancing Participatory Sciences in Portland, OR**

## COMMUNITY EVENTS SUMMARY

### Fourth season 2025: May – September 2025

- Bats Northwest and Woodland Park Zoo **trained “BAT Volunteer Leaders” from Seward Park Audubon and Mercer Island Parks** who led their own BAT programs this summer.
- Received data submissions from our **first sunrise bat observations**.
- BAT program leaders led a **workshop on Engaging Communities in Participatory Science focused on Nocturnal Nature** at the 2025 Conference for Advancing Participatory Sciences.
- BAT program leaders also led a **Bat Activity Trends field trip program for the 2025 Conference for Advancing Participatory Sciences’ attendees** at a park in Portland.
- Collaborated with the **Indigenous Creative to celebrate International Bat Night** on Aug 30th.
- Piloted a **bat-blitz challenge for International Bat Night** (Aug 30) encouraging participants to do special observation aimed to get as much data on a single night as possible.
- Woodland Park Zoo and Bats Northwest **co-led 11 programs reaching 455 participants** around western Washington over this summer. BAT observation data was submitted to FieldScope online bringing the total observations of bat activity up to 657!

### Third season 2024: May – September 2024

- Woodland Park Zoo hosted a UW Doris Duke Conservation Scholar, Madeleine Diaz, for the summer to work with us on the Bat Activity Trends program. Madeleine co-hosted several BAT programs with community partners as part of her program activities during the summer.
- Community programs were again offered in collaboration with program partners this year (Bats Northwest, Washington Department of Fish and Wildlife), which increased the reach of Bat Activity Trends programs
- With Seward Park Audubon Center, we continued the BAT Leader training, preparing community volunteers to lead BAT programs. These BAT Leaders led bat walks at Seward Park once every two weeks throughout the summer.
- Held our first community BAT night event with ASL interpretation at Rainier Beach Urban Farms and Wetlands.
- **A total of 26 programs were offered at 13 different locations hosted by 10 different community partners**, including new locations and hosts such as Pigeon Point Park in Seattle with Delridge Neighborhood Development Association, Meadowbrook Pond in Seattle with Beavers Northwest and Schafer State Park near Elma with Washington State Parks.
- **More than 900 program participants** joined us to learn about local bats, participate in bat observations and submit bat activity observations

### Second season 2023: May – September 2023

- Two virtual trainings in May/June – one for people interested in leading and/or hosting BAT programs and one for people interested in participating in BAT observations
- Community programs were offered in collaboration with program partners (Bats Northwest, Washington Department of Fish and Wildlife), which increased the reach of Bat Activity Trends programs
- Programs were well attended by participants of all ages; people learned about programs from social media (Instagram and Facebook), a press calendar advisory, a “Things To Do in Seattle” list published for tourist lodgings, and word-of-mouth among other avenues. Attendees

demonstrated great interest and curiosity about bats; most programs had at least a couple of very knowledgeable bat aficionados (often youth)

- Two Bat Trivia Nights (new for 2023) held in a south Seattle pub and a north Seattle pub
- Also new in 2023, upon request from Seward Park Audubon Center, we piloted a BAT Leader training to prepare community volunteers to lead BAT programs. These BAT Leaders led bat walks at Seward Park once a week throughout the summer. This was a very successful model, and we plan to look for other sites who wish to run a similar model of volunteer-led BAT programs at their sites in future seasons
- **A total of 35 programs were offered at 18 different locations (plus virtually) hosted by 14 different community partners**
- **More than 800 program participants** joined us to learn about local bats, participate in bat observations and submit bat activity observations

**First season 2022: May (pilot), June – September 2022**

- Two training webinars for individuals in late July 2022 to learn how to participate in the program
- **12 programs at 10 different locations in collaboration with nine community partners**
- **More than 300 participants** joined us to learn about local bats, participate in bat observations and submit bat activity observations

**2025 BAT Events led by Bats Northwest and Woodland Park Zoo**

**Summary (Location / Co-Host)**

1	Bloedel Reserve (Bainbridge Island)
2	Carkeek Park / Beavers Northwest
3	Project 9 Brewing / Bats Northwest and Woodland Park Zoo
4	Green Lake Park / Bats Northwest
5	Woodland Park Zoo – Bear Parking Lot (for Amphibian Monitoring volunteers)
6	Pigeon Point Park / Delridge Neighborhood Development Association
7	Seward Park Audubon Center / Seward Park Audubon and Mercer Island Parks
8	Rainier Beach Urban Farm & Wetlands / Tilth Alliance
9	Tukwila Community Center / Green Tukwila
10	Schafer State Park / Washington State Parks
11	Laurelhurst Park in Portland, OR / Conference for Advancing Participatory Sciences



## PROGRAM PARTNER AND PARTICIPANT HIGHLIGHTS

“2025 marked our fourth annual BAT night event at Rainier Beach Urban Farms and Wetlands. This event is always a lot of fun as the Farm goes all in, inviting the local community to join us for bat-themed snacks, educational talks, and a sunset bat observation. This year, one family of bat-lovers joined us for their fourth year in a row. These young bat scientists were experts, showing the new folks exactly where to go to spot the most bats, clearly calling out observations for our data collectors, and asking great questions about what they needed to do to become bat biologists one day. We hope all bat observation nights lead to such passion!” - *Niki Desautels, Bats Northwest Volunteer and Board Member*

“The most surprising thing was my initial morning observations at Rotary Park. On my first evening observation I counted over 200 bat passes and I thought that was impressive. I got up early the next morning, and I counted in my head over a thousand bat crossings during my observation. I couldn’t believe it and thought I must have miscalculated the numbers, so I went out and bought a small mechanical counter. The next morning, I used it to count bat passes and I got over 850 passes on the counter, so I knew that that initial morning count wasn’t far off. It was impressive seeing up to five bats at a time flying in the sky, and how close they would come to you before they veered away. It was an exhilarating experience. I never imagined such a thing was out there in the early sky in a small city park across the street from my house.” - *Jack S., Mercer Island Volunteer Forest Steward and BAT Leader*

## OBSERVATIONS SUMMARY

Observers count “bat passes” – how many times they saw a bat pass by (regardless of whether or not they were different individual bats). As it is impossible to distinguish and count individual bats when conducting these types of observations, we use number of “bat passes” as an indicator of bat activity (foraging or traveling) level.

All BAT program observations are logged in the BAT program on FieldScope:

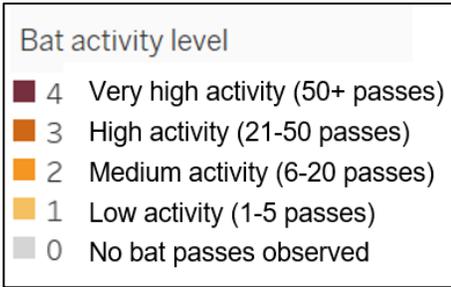
<https://bat.fieldscope.org/observations>

<b>Time Period</b>	<b>Observations</b>	<b>Project Members (new individuals who joined the project on FieldScope)</b>	<b>Active Observers (project members who added one or more observations on FieldScope in that year)</b>
<b>May - October 2022</b>	181	48	25
<b>May - October 2023</b>	136	70	42
<b>May - October 2024</b>	121	57	29
<b>May - October 2025</b>	219	91	45
<b>Totals 2022-2025</b>	<b>657</b> observations logged on FieldScope	<b>266</b> total project members on FieldScope	<b>117</b> unique individuals who have logged observations on FieldScope

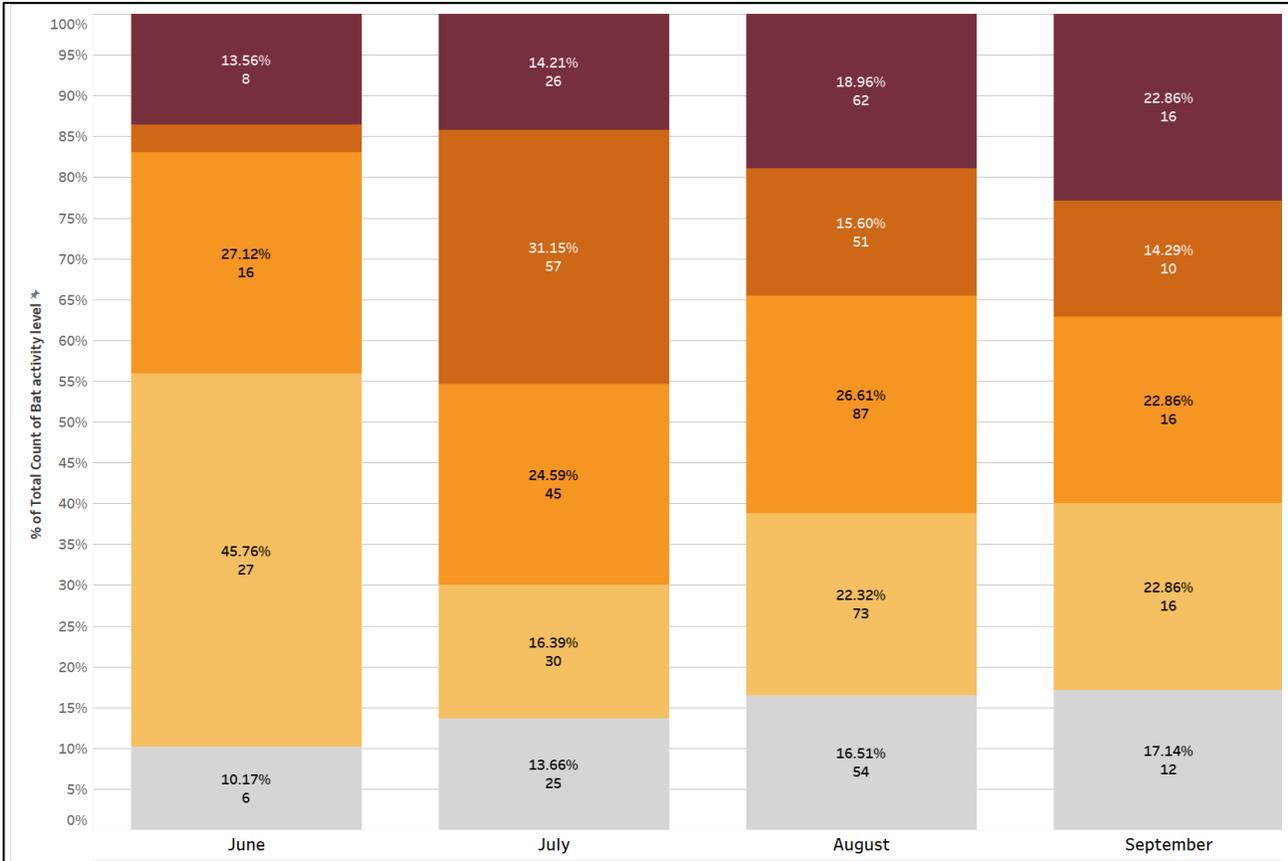
## 2022 – 2025 OBSERVATIONS of BAT ACTIVITY

### Activity Level – Total and Percent of Total in each month (2022-2025)

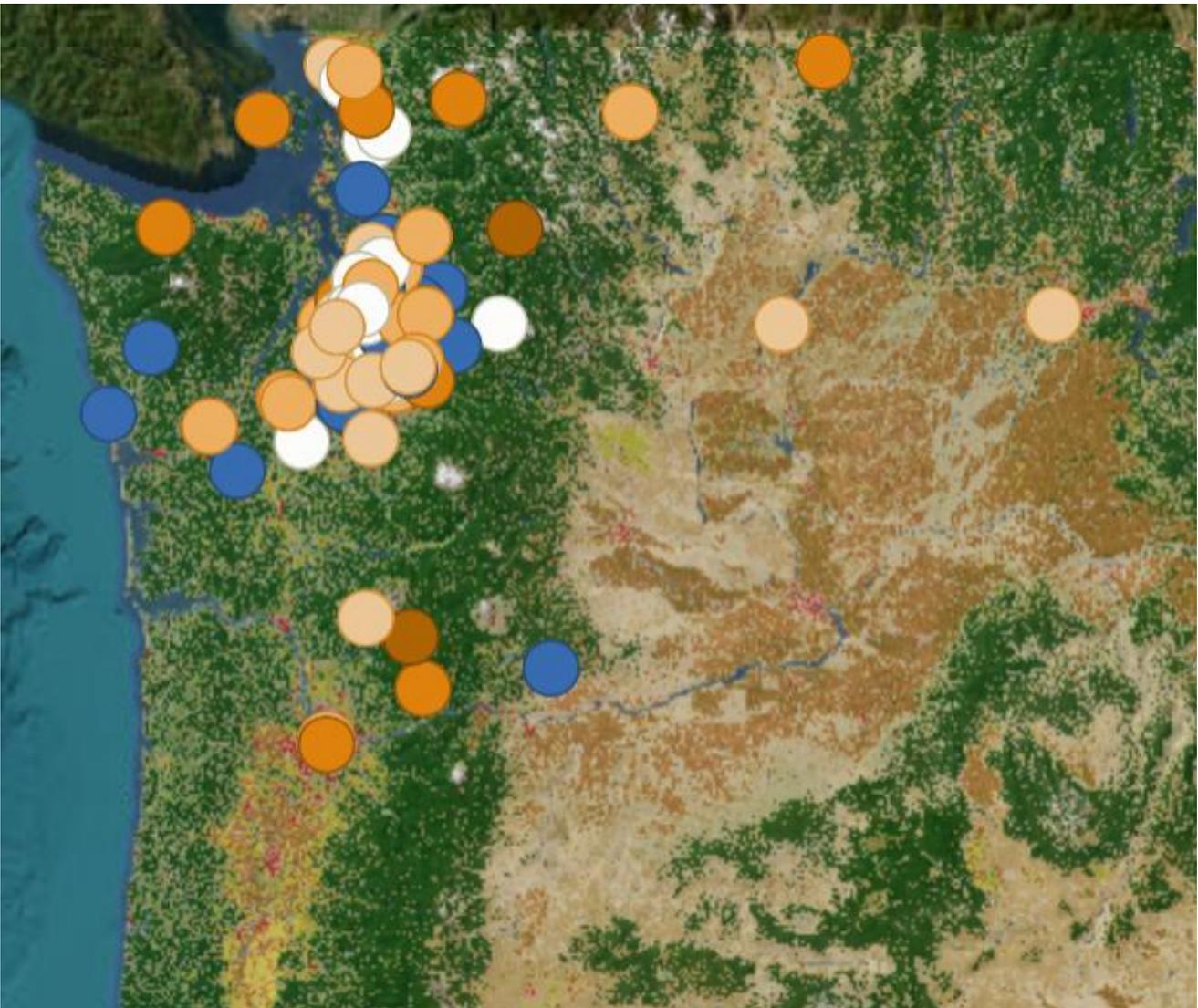
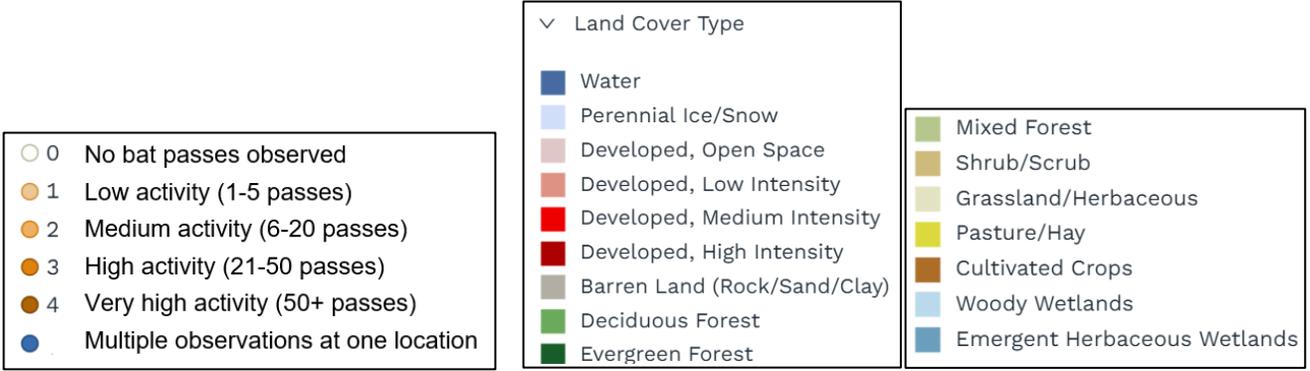
Includes observations only in the program focus months (June to September)



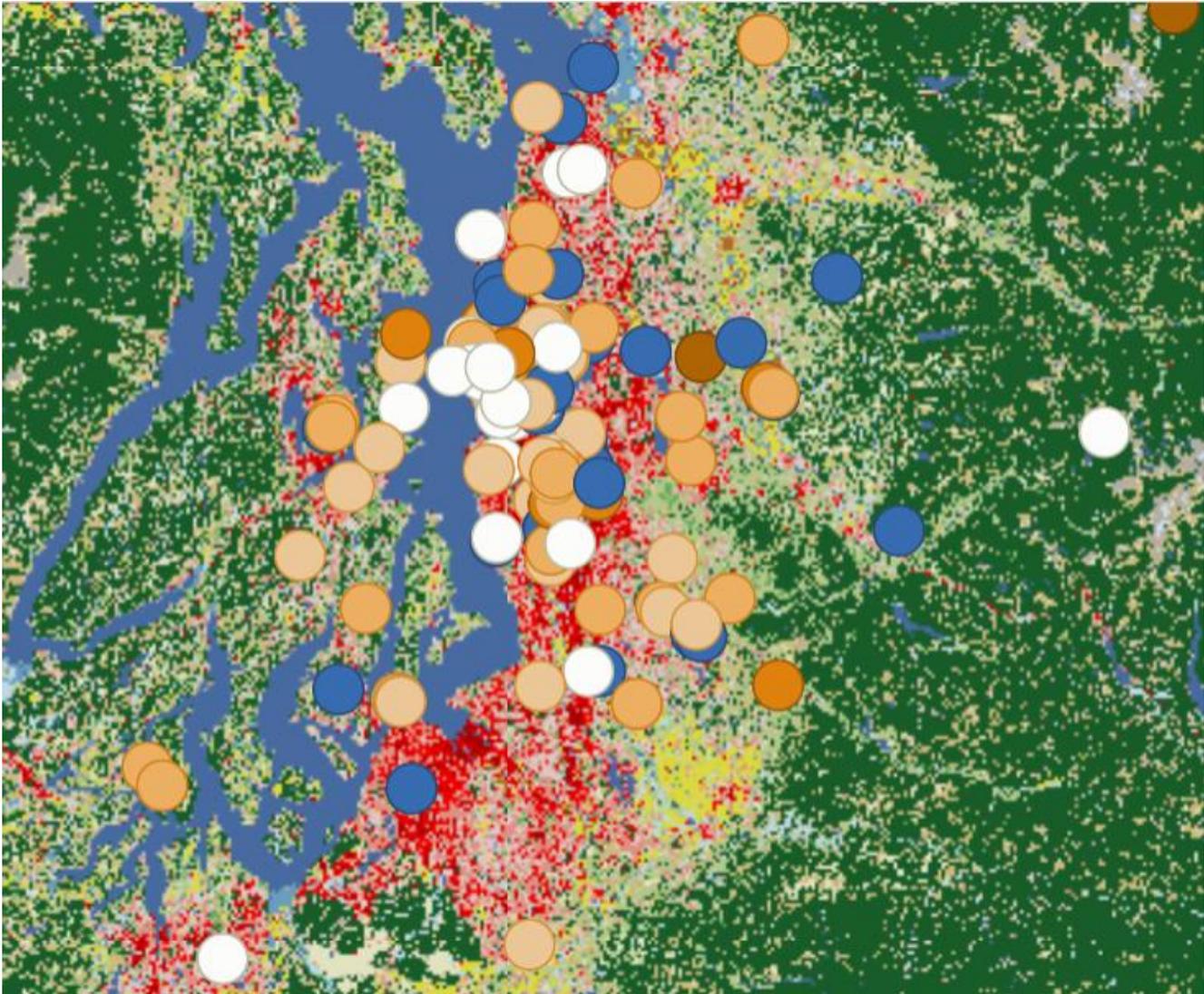
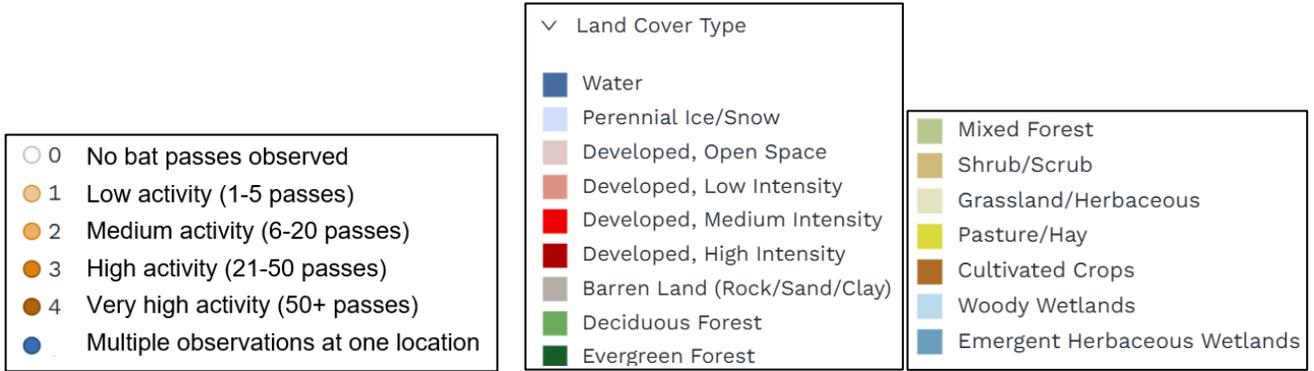
Bar labels show % of total and total count of observations for each activity level in each month



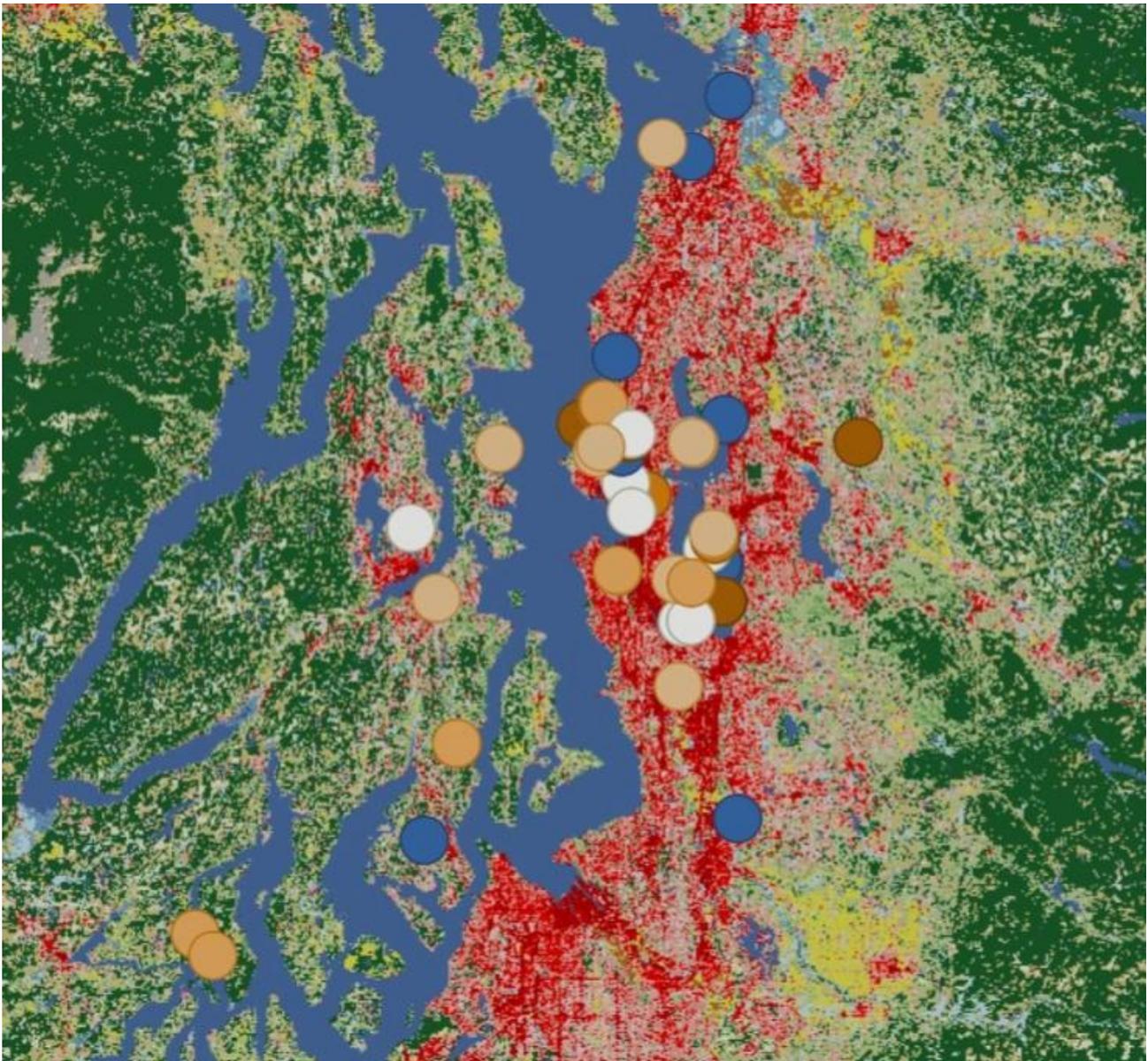
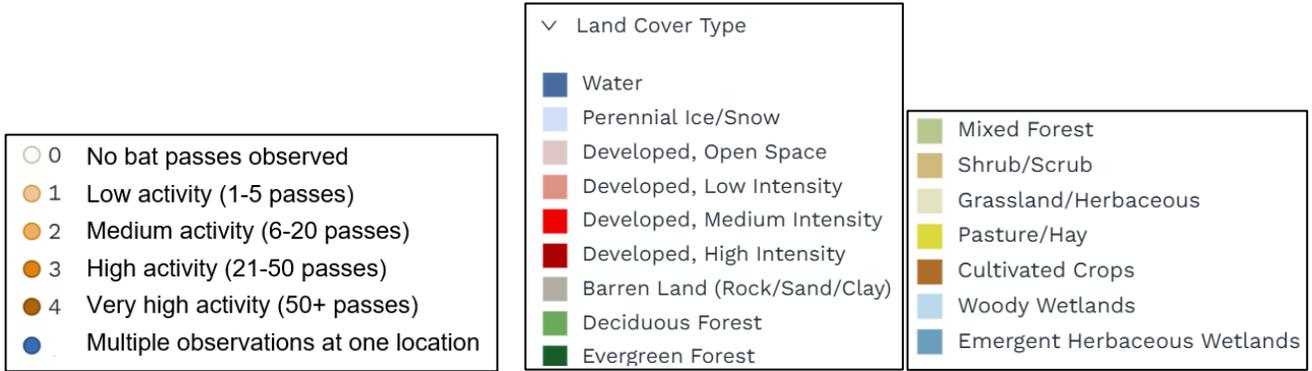
# Map of All Observations 2022-2025 by Activity Level



### Map of All Observations 2022-2025 by Activity Level – zoomed in to Seattle-Tacoma area



### Map of 2025 Observations by Activity Level – Zoomed in to Seattle-Tacoma area

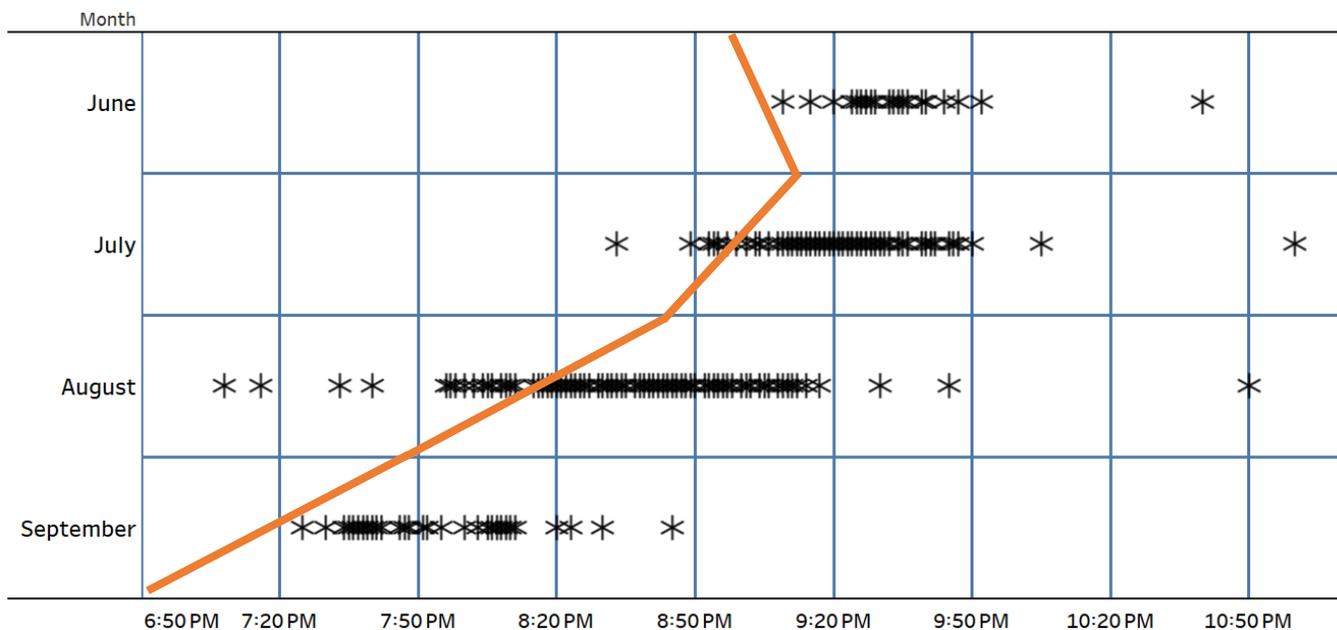


## Time of First Bat Seen

With four seasons of data, we can begin to see trends in seasonal shifts in the time that bats first become active. Time of first bat seen is subject to when the observation period was begun; our protocol suggests starting at 5-15 minutes after official sunset time and observing for only 30 minutes.

**Time of First Bat Seen\* (by minute; 2022-2025); orange line = approximate sunset time for Seattle**

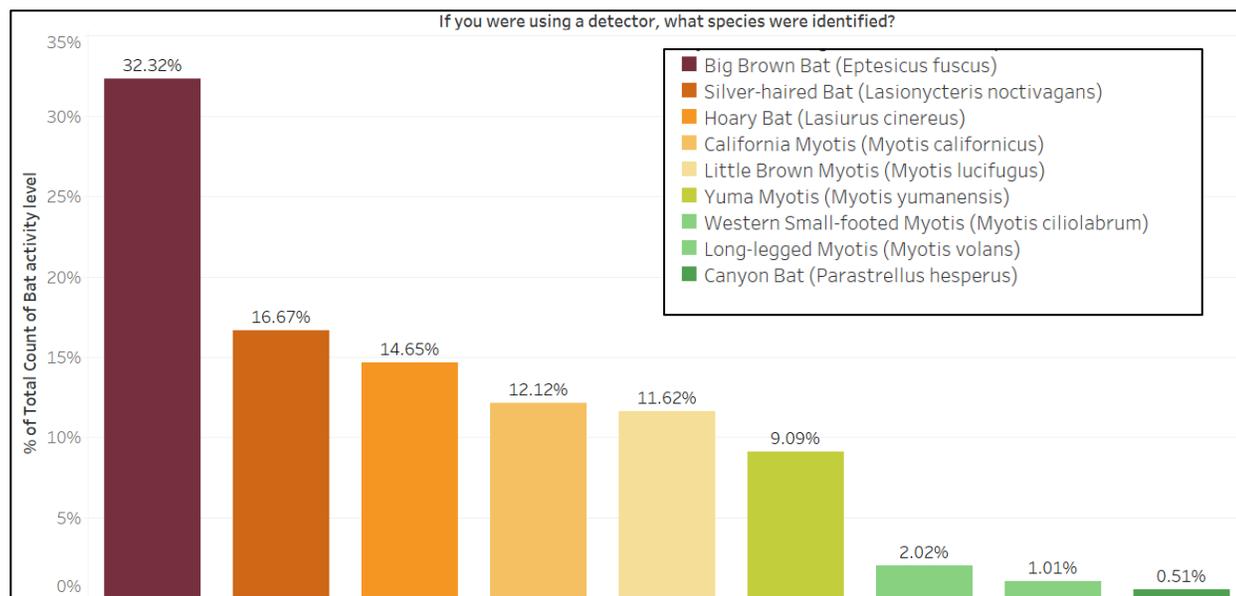
Time of First Bat Seen



## Bat Species Identified With Handheld Detectors

Participants who have handheld bat detector technology can record echolocation calls of bat species observed; these detectors can suggest a tentative identification. The graph below shows which species have been identified by observers with handheld bat detectors and the levels of activity observed.

### Bat Species Observed – Each Species as Percent of Total (2022-2025)



## THANK YOU FOR PARTICIPATING!

Thank you to everyone who participated in our Bat Activity Trends program this year. Thank you to our program collaborators – Seward Park Audubon and Mercer Island Parks!

Looking forward to next season:

- We will again host trainings for volunteer Leaders and organization Host Leaders (organizations with outdoor sites that can host events) to expand the base of people who can lead BAT program observation events. If you're interested in training to be a BAT Program Leader or Host Leader (if you work for an outdoor site), please complete this [BAT Volunteer Interest Form](#)
- We will continue to suggest that observers conduct three observations from the same station at different times during the summer to help us learn about seasonal trends.
- We hope to fill in some areas on the map that do not yet have many observations. In Seattle that includes West Seattle, Magnolia, Ravena/Maple Leaf, and South Seattle/Columbia City up through Capitol Hill. In Washington state there are many spots in need of community scientists, especially east of the Cascades, and we hope to begin engaging folks in both Oregon and Idaho next year!
- We plan to expand our International Bat Night BatBlitz (last Saturday in August).
- We welcome interest from other organizations in joining the BAT program as program partners (partners can take on various roles -- scientific advising, recruiting for the project, training participants and leaders, hosting in-person events, sharing and using the data, etc.).

If you have any suggestions or questions for the Bat Activity Trends program, please email us at [monitoring@zoo.org](mailto:monitoring@zoo.org). **Thank you to all the observers, event hosts, volunteers and others who made the program possible and successful this summer!**



Participants engaging in a BAT workshop at Tukwila Community Center in June 2025.  
(Photo courtesy of Olena Perry, Green Tukwila / City of Tukwila.)



BAT observation at Schafer State Park. (Photo courtesy Washington State Parks).



BAT Volunteer Leader training with Seward Park Audubon and Mercer Island Parks volunteers. (Photo by Katie Remine / Woodland Park Zoo).