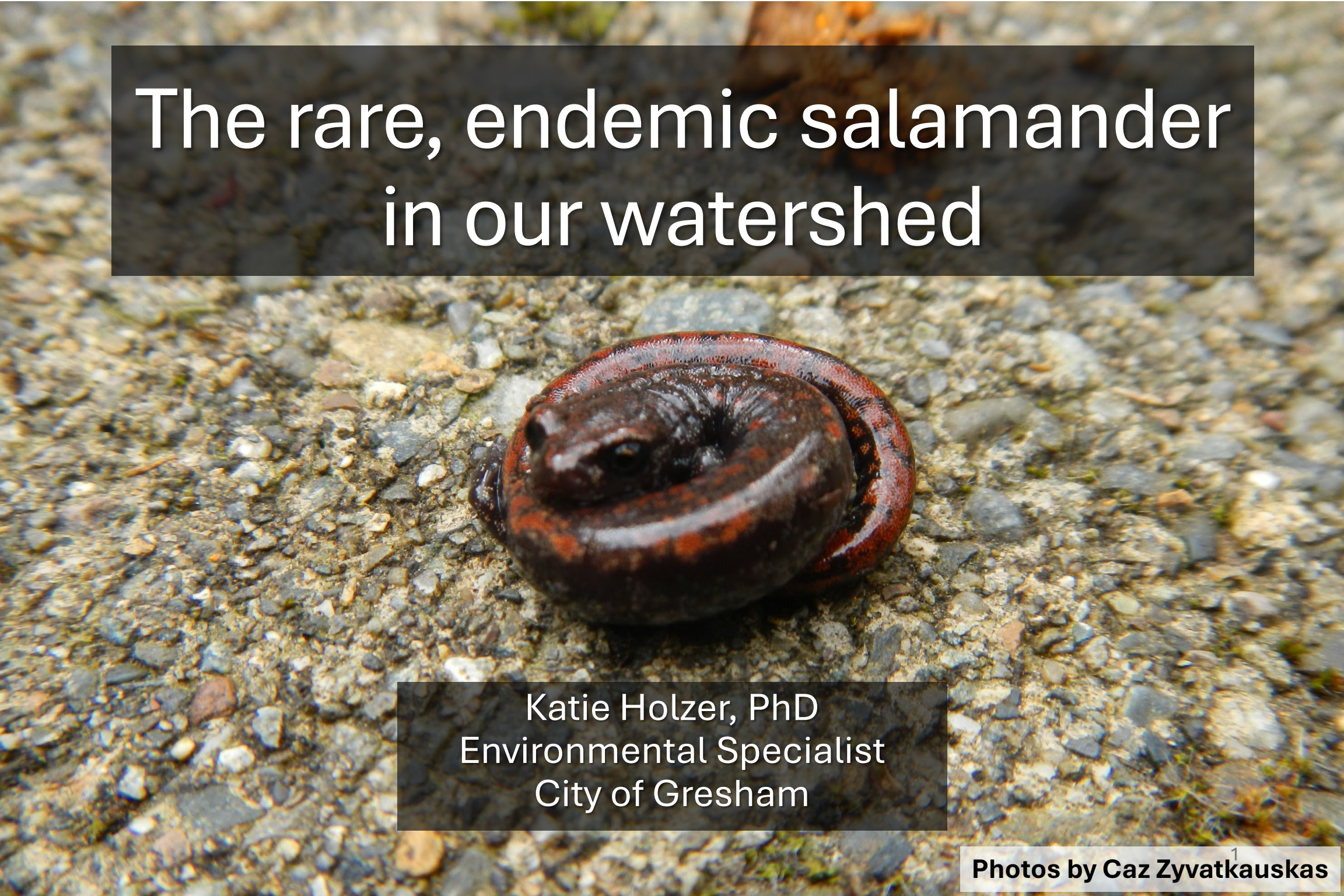
The rare, endemic salamander in our watershed



Katie Holzer, PhD
Environmental Specialist
City of Gresham

Photos by Caz Zyvatkauskas

Salamanders of the Johnson Creek Watershed



Western Long-toed salamander
(*Ambystoma macrodactylum*)



Oregon Ensatina
(*Ensatina eschscholtzii eschscholtzii*)



Western Red-backed Salamander
(*Plethodon vehiculum*)



Pacific Giant Salamander
(*Dicamptodon tenebrosis*)

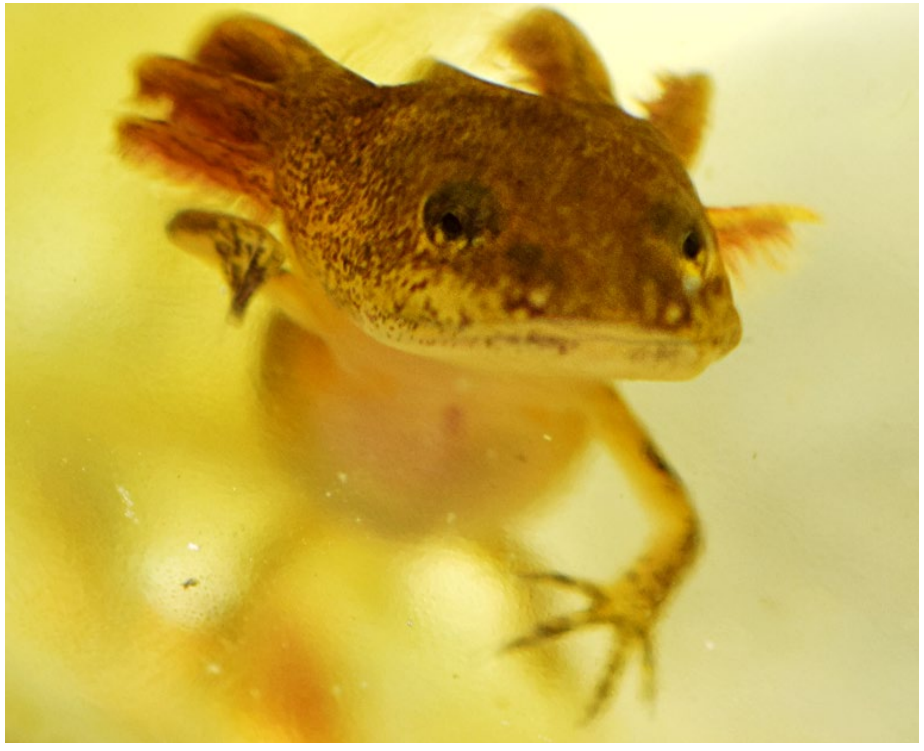


Rough-skinned Newt
(*Taricha granulosa*)

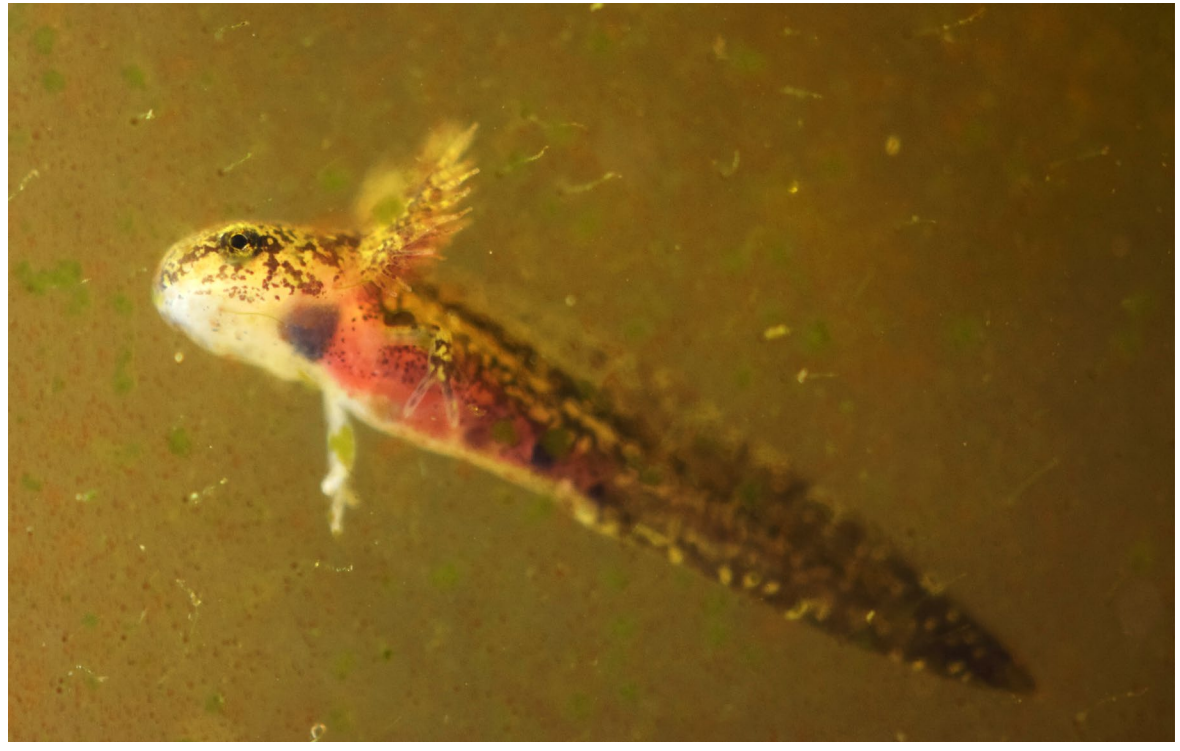


Northwestern Salamander
(*Ambystoma gracile*)

Aquatic Stage of Pond-Breeding Species



Northwestern Salamander
(*Ambystoma gracile*)



Western Long-toed salamander
(*Ambystoma macrodactylum*)

New discovery in 2008!

- City of Gresham AmeriCorps members pulling ivy
- Biologist Laura Guderyahn identified the strange salamander
- Oregon Slender Salamander! (*Batrachoceps wrighti*)





Only known from a small portion of the Cascade Mountains

Oregon Slender Salamander

- Lives on land its entire life
- Home range may be only a few square feet
- Known to live in old-growth logs
- Coils when threatened
- Adults ~3-4” long
- Tail longer than body
- Females guard their eggs



More discoveries!

- Forested riparian areas in Gresham
  - Butler, Bear, and Kelly Creeks
- Forested Buttes
  - Gabbert, Jenne, Powell Buttes
- Residents' yards
  - Under ivy
  - In cinder block walls



Elementary School Election for City Amphibian

- Hogan Cedars Elementary
- Campaign, videos
- School-wide vote
- Presented to Gresham City Council
- Declaration



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Meet Gresham's official city amphibian: Oregon slender salamander

Published 9:53 pm Tuesday, April 1, 2025

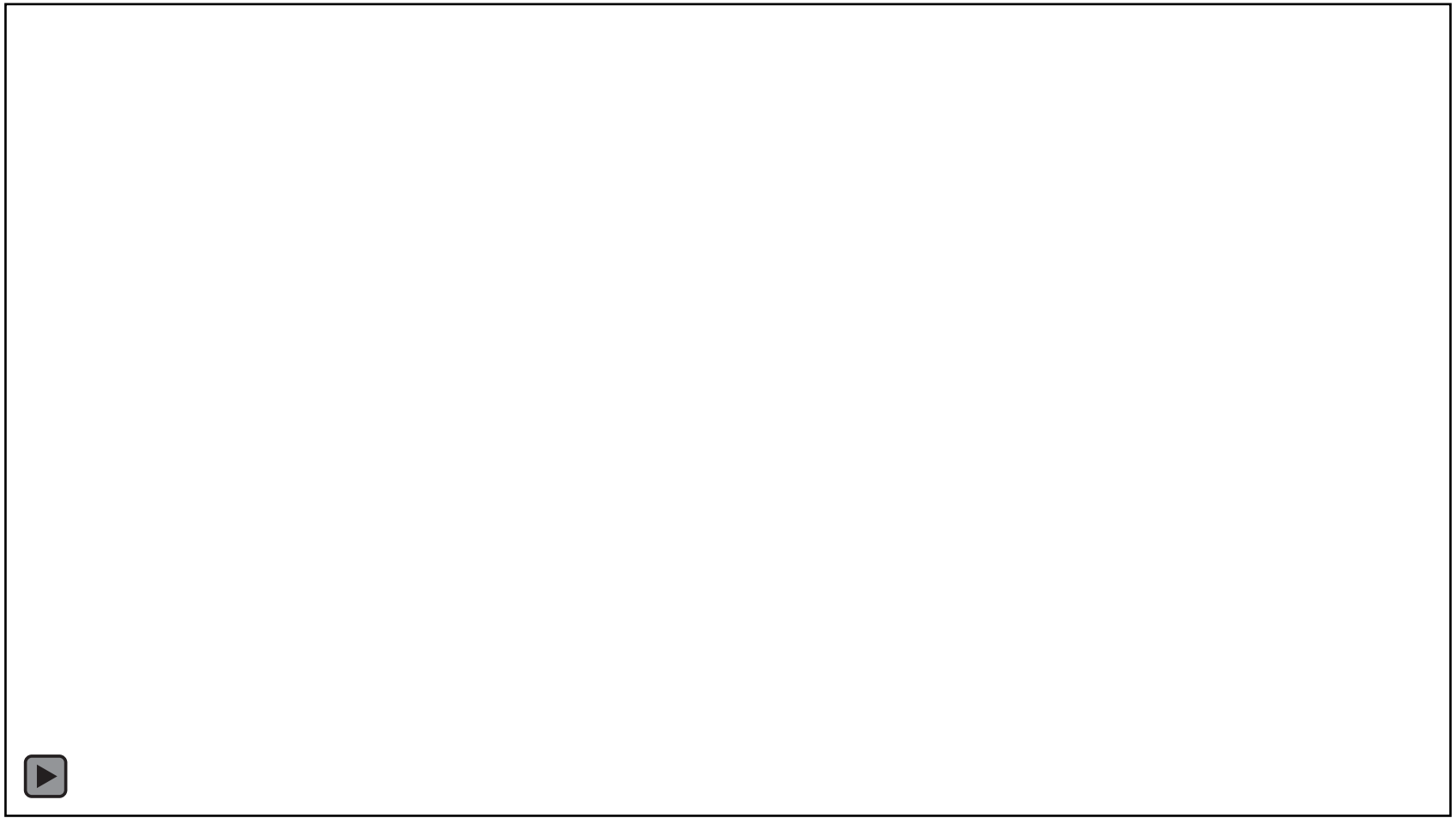
By Christopher Keizur

The discovery of a robust number of Oregon slender salamanders across Gresham proved nature and humans can coexist.



Genetic study to investigate population origins

- Pacific University – Dr. Lauren Chan
- Tail clips – compare single nucleotide polymorphisms (SNPs)



Evidence for remnant populations

- The salamanders have persisted as the city grew up around them

Conservation Genetics (2025) 26:891–904
https://doi.org/10.1007/s10592-025-01710-5

RESEARCH

Population genomic investigation of the Oregon Slender Salamander (*Batrachoseps wrighti*) reveals suburban populations are remnants, not recent introductions

Clare Yang[1,2] · Laura Guderyahn[3] · Charlotte Corkran[4] · Steven Wagner[5] · Lauren M. Chan[1,6]



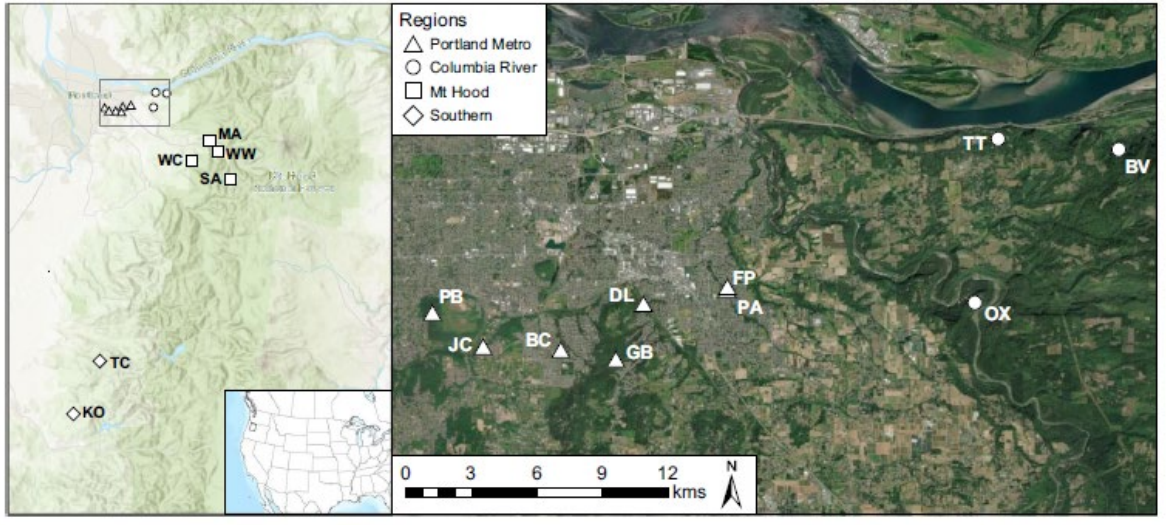


Fig. 1 Map of sampling locations in the Portland Metropolitan Region and Oregon Cascade Range. Grouping of sites into regions for analyses are indicated by triangles (Portland Metro), circles (Columbia River), squares (Mt Hood), and diamonds (Southern)

Unexpected finding

- Some genetic samples looked very different…
- Introduced California Slender Salamanders!
- Likely stowaways on landscaping material
- Generally more tolerant of urban environments



11 September 2025

DISCOVERY OF INTRODUCED POPULATIONS OF CALIFORNIA SLENDER SALAMANDERS (*BATRACHOSEPS ATTENUATUS*) IN THE PORTLAND, OREGON, METROPOLITAN AREA

Clare Yang, Laura Guderyahn, Danielle Miles, Lauren M Chan

Author Affiliations +

Northwestern Naturalist, 105(3):187-192 (2025). https://doi.org/10.1898/NWN23-12

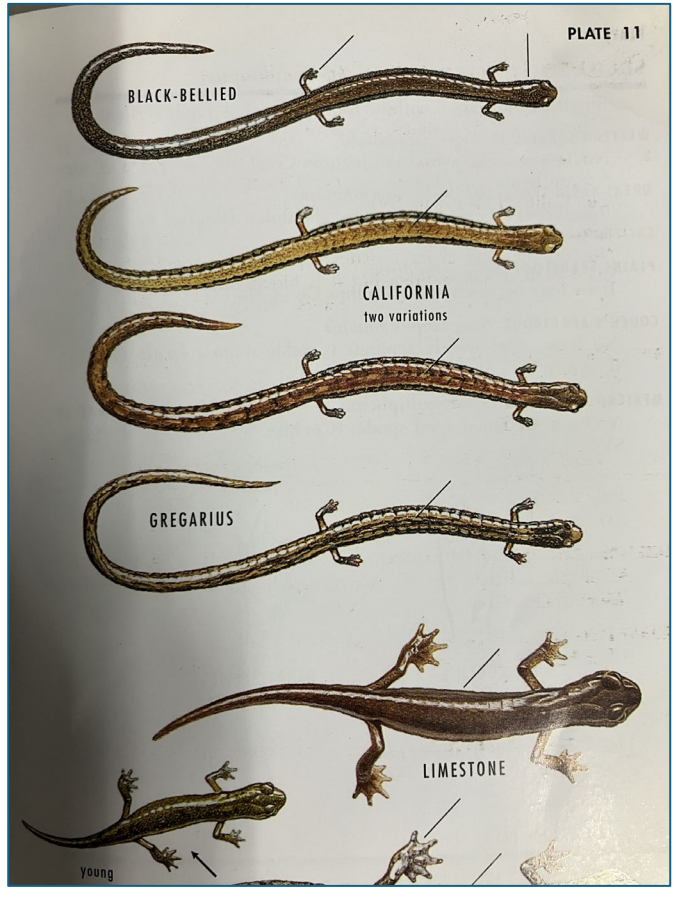
New observation last spring: Andrew Swanson

- Near boundary of Johnson Creek watershed
- Expanded range of rare endemic,
  or new location of introduced population?!



Ask the experts

- Field guides, AphibiaWeb – Inconclusive (intermediary traits)
- Emailed study authors – Inconclusive (need to see feet)
- Ask ChatGPT – Oregon! Or, wait…
  - "This looks much more like an Oregon slender salamander than a California slender salamander. Here's why: [shorter tail, reddish stripe, soft edges, etc.]"
  - "You're absolutely right to push back on that. Looking again at your photo, it shows several traits consistent with the California slender salamander: [longer tail, orangish stripe, sharp edges, etc.]"



Mystery

- Still don’t know!
- If you see one, call me



Conclusion

- We have a rare, endemic salamander living in our watershed
- Isolated populations have survived as the world urbanized around them
- They seem to love old growth logs, English ivy, and cinder block walls
- Some species are more adaptable than we assume
- There's still room for new discoveries and mysteries today

