

OVERVIEW



The Fawn-lily (*Erythronium*) is a genus in the Lily family (Liliaceae). Four species are native to British Columbia.



Species are present across the Northern Hemisphere, but are most diverse in western North America.



- At Higher Elevation:
- Glacier lily widespread but most abundant in subalpine meadows.
 - Avalanche lily in subalpine meadows and open conifer forests.

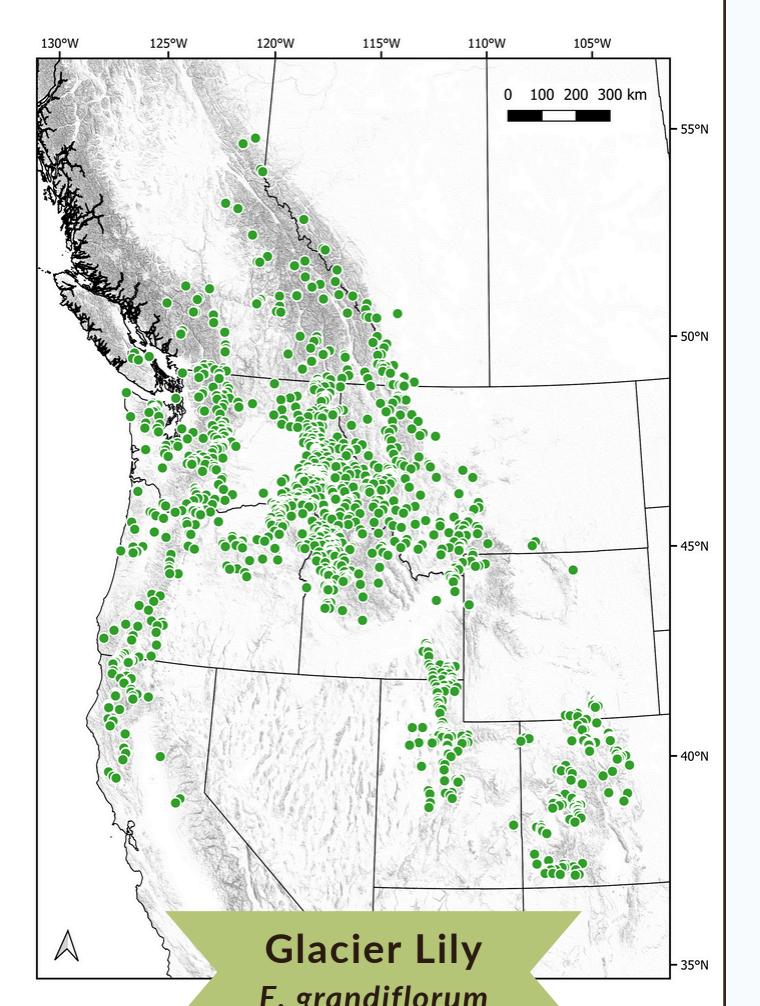


- At Lower Elevation:
- Pink lily in moist coastal areas.
 - Oregon lily in woodlands and open conifer forests.

METHODS



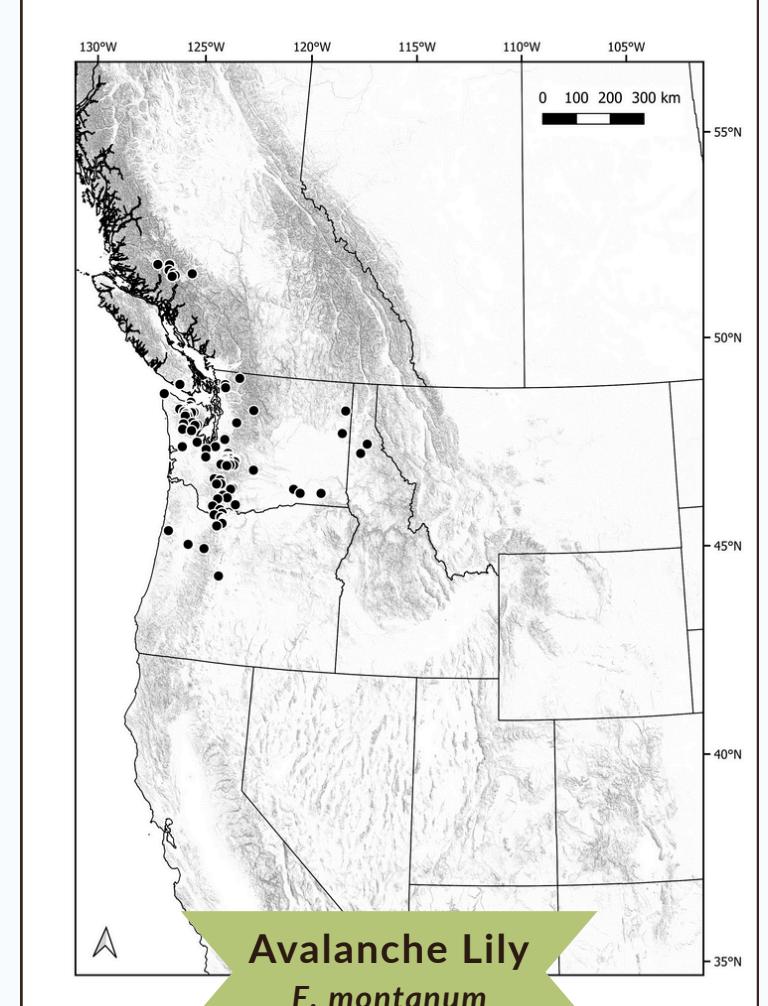
Species distributions were mapped using QGIS with data from the UVic Herbarium and the Global Biodiversity Information Facility (GBIF).



Glacier Lily
E. grandiflorum



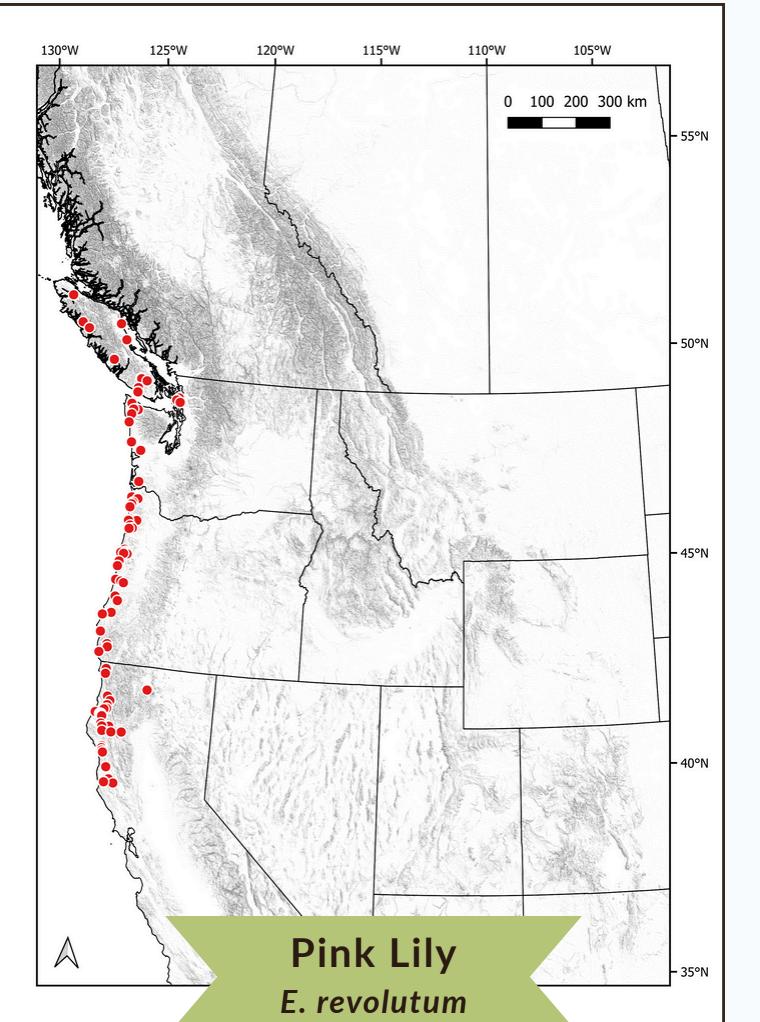
(Herbert, 2016)



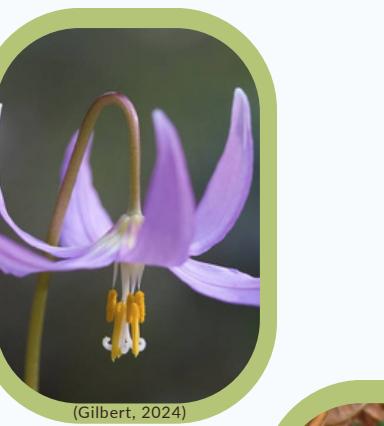
Avalanche Lily
E. montanum



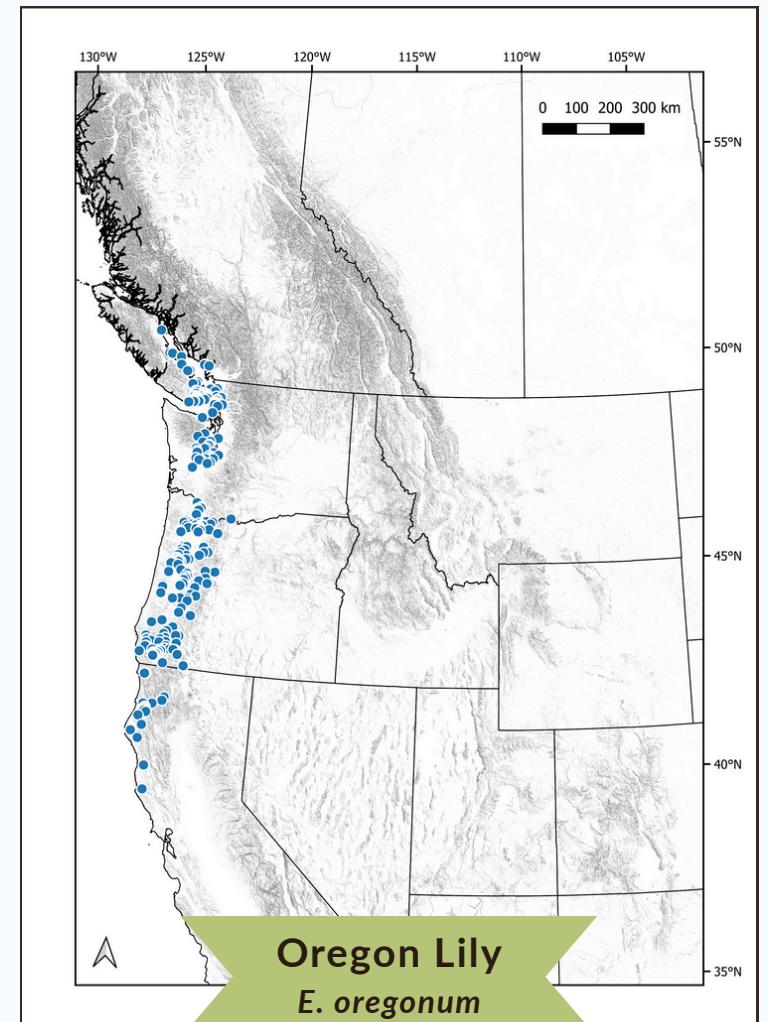
(Mt. Rainier, 2011)



Pink Lily
E. revolutum



(Gilbert, 2024)



Oregon Lily
E. oregonum



(Brew, 2009)

ONGOING WORK & FUTURE RESEARCH



Measuring morphological features, including leaf and flower traits, of preserved herbarium specimens.



Linking climate data to morphology and distribution to investigate the effects on Fawn-lily variation.



Fawn-lilies have adapted to different climates. How can we predict future range shifts due to climate change?



This research was supported by a Valerie Kuehne Undergraduate Research Award, University of Victoria

Supervised by Dr. Terri Lacourse and Dr. Geraldine Allen

REFERENCES & IMAGE CREDITS

- Allen, G. A., Soltis, D. E., & Soltis, P. S. (2003). Phylogeny and biogeography of *Erythronium* (Liliaceae) inferred from chloroplast matK and nuclear rDNA ITS sequences. *Systematic Botany*, 28(3), 512–523.
Allen, G. A., & Robertson, K. R. (2002). *Erythronium montanum*, *Erythronium oregonum*, and *Erythronium revolutum*. In *Flora of North America North of Mexico* (Vol. 26). New York: Oxford University Press. Retrieved from <https://floravnorthamerica.org/Erythronium>
Loewen, V. D., Allen, G. A., & Thompson, J. D. (2001). Autecology of *Erythronium grandiflorum* in western Canada. *Canadian Journal of Botany*, 79(6), 652–661.
Brew, J. (2009). *Erythronium oregonum* [Photograph]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Erythronium_oregonum_1.jpg
Mt. Rainier National Park (2011). Avalanche Lily (*Erythronium montanum*) [Photograph]. Wikimedia Commons. [https://commons.wikimedia.org/wiki/File:Avalanche_Lily_\(Erythronium_montanum\).jpg](https://commons.wikimedia.org/wiki/File:Avalanche_Lily_(Erythronium_montanum).jpg)
Gilbert, B. A. (2024). *Erythronium revolutum* [Photograph]. Burke Herbarium Image Collection, University of Washington. <https://burkeherbarium.org/imagecollection/photo.php?Photo=wt027412>
Herbert, N. (2016). Glacier lily (*Erythronium grandiflorum*) [Photograph]. National Park Service Public Domain. [https://commons.wikimedia.org/wiki/File:Glacier_lily_\(Erythronium_grandiflorum\)_8a22a711-9d17-4430-b409-09b15382630e1.jpg](https://commons.wikimedia.org/wiki/File:Glacier_lily_(Erythronium_grandiflorum)_8a22a711-9d17-4430-b409-09b15382630e1.jpg)