

Sam Randall, Western Washington University, Bellingham, WA, for his project: *Reconstructing the Magmatic and Eruptive History of the 6.7 ka BA Tephra, Mount Baker, Washington*



Sam Randall is a Master's student in Geology at Western Washington University, where he works with Dr. Kristina Walowski to study the eruptive and magmatic history of Mount Baker in the northern Cascade Range. His thesis focuses on the 6.7 ka BA tephra, the volcano's most recent explosive magmatic eruption, preserved in undisturbed alpine lake cores. By integrating detailed stratigraphic descriptions with geochemical analyses using SEM-EDS and EPMA, Sam seeks to reconstruct the sequence of eruptive events and identify shifts in magma evolution that

occurred leading up to and during the eruption. This research contributes to a better understanding of the processes driving explosive volcanism in arc settings and provides valuable context for interpreting future eruptive hazards in the Cascades.

Sam earned his B.S. in Geoscience and Environmental Studies from Eckerd College, where he also conducted coastal sedimentology research with the USGS Coastal and Marine Science Center. His broader interests lie in volcanology, igneous geochemistry, and tephrochronology, and he enjoys combining field-based observations with laboratory analyses to unravel volcanic histories. Outside of academics, Sam is an avid hiker, snowboarder, and climber, often exploring the same landscapes shaped by the volcanoes he studies.