

Abigail Rose Ruegg

For as long as I have been cognizant, I have been curious. As far back as I can remember, I have been deeply fascinated by the captivating patterns of life on this planet, and the complex relationships that form between them. I found myself with a calling card to discover; manifested in my passion for STEAM (Science, Technology, Engineering, Art, and Math). I chased any opportunity to get more involved in science, including volunteering at museums, joining non-profit organizations, and even captaining a robotics team. It wasn't until I moved from the lowlands of North Carolina to the Appalachian Mountains, surrounded by biodiversity and indigenous wisdom, that this passion found its outlet in environmental science and ecology.

Here, I attended the University of North Carolina Asheville, where I received my bachelor's Degree in Environmental Ecology with a minor in Mass Communications. More important than the diploma, however, was the incredibly influential education I received through their interdisciplinary approach to Environmental Science. Working towards my major, I completed many courses that created a great foundation for me as an ecologist. I took courses such as zoology, plant ecology, herpetology, plant-animal interactions, and field biology lab that provided me with experience carrying out experimental research in the field and in a laboratory setting. This included learning plant and animal identification, sampling methods, water and soil testing techniques, microscope operation, laboratory etiquette, animal tagging, and GPS. My environmental coursework also provided an understanding of environmental policy, data analysis (through RStudio and Excel), biological research writing, and formal presentation. Additionally, UNCA's liberal arts core requires all students to take arts and humanities courses such as philosophy, dance and meditation, and art history. This emphasis on marrying natural and social sciences is a value shared by the Evergreen State College, and one of the qualities that draws me to the Evergreen MES program.

In addition to my courses at UNCA, I was given the opportunity to write and publish a research paper as an undergraduate research scholar. Working alongside my faculty advisor Dr. Andrew Laughlin, I designed, carried out, and presented correlational research on the effects of insect phenology and climatological factors on the breeding behaviors of tree swallows in Western North Carolina. This project included a fieldwork portion spent collecting insect samples and observing tree swallow broods, as well as a laboratory portion spent sorting insect samples and finding the biomass of each taxa. Once all of my data was collected, I ran it through statistical analyses in RStudio and organized the results into a research paper published to the UNCA undergraduate research journal. I also presented my findings at the UNCA 2022 research symposium and contributed my data to a nation-wide study on insect abundance that was published in ESA's Ecology journal.

Since graduating, I have leapt at every opportunity to further my environmental research and outreach experience. Working with a former professor and the National Forest Service, I spent 2 weeks in the field assisting on reptile and amphibian abundance surveys in wetlands in NC, GA, and FL. I also worked alongside park biologists at the Western North Carolina Nature Center planting native and edible plants in habitats around the park. Since relocating from NC to

WA, after a brief hiatus roadtripping around US national parks, I have focused a lot of my energy into community engagement and volunteer work. I have currently been volunteering with the Thurston Conservation District and Olyecosystems on reforestation projects and as an ambassador at the Nisqually Reach Nature Center educating the public about the ecology of the Puget Sound. I find these opportunities to be especially rewarding because they serve as an opportunity to forge stronger communities, educate the public about conservation, and expand my knowledge of Pacific Northwestern ecology.

Through all of these experiences, I have developed a true passion and drive for pursuing a career in ecological research, conservation, and restoration. All that I have learned thus far has inspired me to continue my research as an ecologist, diving deeper into community ecology, evolutionary ecology, adaptation, and speciation. I am especially interested in developing research on the adaptations of extremophilic and geographically isolated metazoan species. Additionally, I wish to incorporate philosophies of deep ecology in my work and apply a communications-based and creative approach to problem solving. Taking a lot of inspiration from indigenous ecology and Cherokee practices in Appalachia, I am also eager to learn more about traditional tribal practices from around the South Sound. I feel that pursuing a Master's of Environmental Science at Evergreen would not only help me toward these goals, but provide me with the interdisciplinary and culturally informed education necessary to be a well-rounded environmental scientist. Given my experience and my enthusiasm for Evergreen's holistic and innovative approach, I believe I would make an excellent addition to the Evergreen State College MES program.