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I, as many ecologists, connected with nature early in life: My family's annual migrations north to the woods in British Columbia encouraged me to explore the living world, including rocky intertidal sea creatures, a rainbow of fungal fruiting bodies, a bald eagle's nest, and decomposing trees that turn into nurse logs for seedlings. My first research experience, a summer program in the Rocky Mountain tundra at Niwot Ridge funded by the National Science Foundation, subsequently shaped my research trajectory by sparking my interest in ecosystem engineers and plant nutrient cycling. My second scientific mentor, Dr. Kyle Harms, inspired me to graduate work in ecology with his depth of knowledge, pattern-recognition skills, and curiosity about underlying processes in Panamanian tropical forests. Now, I am a PhD candidate at Duke University, where I study how plant functional traits affect carbon and nitrogen cycling – specifically, methane and nitrous oxide emissions – at an experimental wetland restoration site in Duke Forest, North Carolina.

During my undergraduate years at Swarthmore College, I cultivated my ethic of concretely living my values in many facets of my life. In my personal life, I grapple with global warming through my food and transportation choices, I grow native plants in my garden, and I volunteer extensively with an emerging local non-profit, Traction, whose mission is to build civic energy among young adults. Similarly, in my career, I want to combine basic science with research that will make positive change in the world.

I study how plants physically and chemically modify their environments in order to (1) improve our understanding of plants' biogeochemical effects and (2) enhance our ability to maximize the ecosystem services plants provide. Wetland restoration projects are excellent systems for such research: In them, we can both address fundamental questions about how ecosystems function and investigate ways to improve multiple ecosystem services provided by wetlands during restoration. In my dissertation research, funded by the Garden Club, I specifically address whether different plant species, through their functional traits, can help us minimize greenhouse gas emissions from restored wetlands.