Please include relevant information regarding your background (without simply restating your resume or transcript), your goals for what you hope to gain in the graduate program, and why you would like to attend the Environment and Natural Resources graduate program, and career goals upon graduating.

The environment has always fascinated me. The more I investigated my surroundings, the more questions I had. How does introducing something new affect an ecosystem? How do environments repair themselves after a crisis? What is the best way to produce sustainable food for our community? During my courses and in my own research, I found that the answers to some of these questions were sometimes linked to small, yet important, aspects of the environment. One factor continued to provide insight to many of my research questions: soil.

Once I realized the extent of the effects that soil can have on an environment, I wanted to know how it could be used to provide sustainable solutions to issues in ecology and agriculture. My experience in environmental toxicology and soil conditions brought me to earn my Master's in Plant and Soil Science at the University of Vermont, and have led me to apply to the Soil Science Ph.D. program at the Ohio State University. I believe that earning my degree from Ohio State and adding to the institution's high quality research would help me to achieve my academic and professional goals.

I first realized the importance of soil as a student at the University of Connecticut when I volunteered for Worldwide Opportunities on Organic Farms. I tested soil conditions to make consultations to secure appropriate crops for the next season. While I learned about soil science in some of my environmental science classes, it was entirely different to have hands-on experience. My recommendations for soil solutions helped to promote sales and healthy living, and I could see the impact my involvement had on the company. After this experience, I enrolled in more courses at the University of Connecticut that gave me a strong basis of toxicology in soil and the environment. Using the knowledge that I acquired from these classes, I served as a

research assistant at General Electric Global Research Center, where I improved management and efficiency of hazardous waste removal. I enjoyed making a difference by creating environmentally sustainable solutions for businesses and contributing to research in soil science. This led me to pursue a graduate degree in Soil Science to learn more about my topics of specialization.

After completing my undergraduate program at the University of Connecticut, I worked with Dr. Kahn at the University of Vermont in her work on natural resources management and planning and soil fertility. For my Master's thesis, I combined my interest in conservation and agronomy and by researching the soil fertility in a Vermont field after the introduction of a new compost and its impact on the surrounding natural area. When contributing to scientific literature in the fields that particularly interest me, I realized that I wanted to continue this involvement. As I reached the end of my program, I discovered that I still wanted to contribute more to soil science research academically, and that I wanted to familiarize myself with additional research methods than I had previously utilized. Pursuing a Ph.D. would allow me to have more flexibility in my future career, whether in academic or private research. I would like to continue my involvement at Ohio State through contributing to research and gaining skills for my professional career.

I think that Ohio State Ph.D. program is the best fit for me based on the commitment to excellence in the Environment and Natural Resource Studies department. The range of research tools and disciplines available at Ohio State, including geospatial analysis, microscopy, spectroscopy, and bioassays, is extremely impressive and would allow me to investigate more varied techniques of analysis. The diversity of research topics being investigated within the soil science department would also give me the opportunity to explore many areas within the field,

specifically in environmental sustainability and agriculture. Dr. Brown's work on soil microbial ecology and the role of management in affecting the functioning of soils within ecosystems closely matches my research interests. I am also very interested in working with Dr. Singh in their work on soil fertility and plant nutrition. With the guidance of Ohio State faculty, I hope to contribute to the soil science research at the university and to the scientific body of literature in general.

Continuing my graduate studies at Ohio State would enable me to acquire skills that would help me achieve my career goals. My goal is to become a professional researcher in soil science, whether as a professor or at a company or government organization. I admire many of the professors at Ohio State as they have worked in private organizations and as part of a university faculty, and I would value the chance to learn from mentors coming from each of these perspectives. I am committed to becoming a soil science researcher in order to improve environmentally sustainable and agricultural farming methods. I would appreciate the opportunity to speak more about my experiences and research interests, and to learn more about the professional opportunities available at Ohio State.