Dear committee,

My passion for conservation stems from a lifetime of love for science and the environment. In high school, I had the privilege of being a part of Henry Doorly's Zoo and Aquariums Zoo Academy during my junior and senior years, where I took half of my high school classes. In my senior year, I took an Intro to Research class where I did a semester-long project where I implemented the Hefty Energy Bag into a coffee shop in downtown Omaha and decreased their overall landfill waste by 20 percent. I entered this project into the Metropolitan Science and Engineering fair, where I placed first in the human behavior category and received the David Dow Award for outstanding scientific achievement. This class solidified my passion for research and conservation, and from then on, I knew that I wanted to pursue a career in environmental science. Ecosystem conservation is one of the most cost-effective strategies for conserving biodiversity. I want a master's degree in environmental studies to enhance ecosystem conservation efforts by exploring the effectiveness of holistic, interdisciplinary approaches.

Interdisciplinary ecosystem projects require large data sets and a team with varied interests. For these projects to be successful individuals must possess qualities of leadership and teamwork. I have had the privilege of playing collegiate soccer over the last four years at Bellevue University while completing my degree. This experience has greatly enhanced my leadership and teamwork qualities. During my last two seasons, I was voted captain by my fellow teammates and coaches. During these two seasons, I helped lead my team to be back-to-back regular season champions, conference champs, and to a national tournament appearance. Soccer has taught me numerous lessons about leadership, collaboration, and teamwork. These lessons translate into all aspects of my life, most importantly to my professional and academic career.

My research experience has given me a solid fundamental background in conducting scientific research. I can maintain a clean, sterile environment according to research standards and use various methods to test hypotheses. For my senior thesis in my undergraduate biology degree, I used DNA extraction, primer design, qPCR, and whole genomic library preparation to obtain my data. This project analyzed the remaining three *Macrhybopsis* species within the genus. With the addition of these three remaining species, a complete phylogenetic tree of the genus will be completed and may provide managers with new conservation strategies for *Macrhybopsis* throughout the Mississippi River basin. In addition, I also aided in a fellow classmate's thesis project utilizing biodiversity patterns to assess corporate efforts on biodiversity in the Omaha Public Power District. Assisting in this project helped me refine my sample collection and species identification skills.

In hand with my academic research, I work as a research aid and lab technician at Bellevue University. My roles range from performing statistical, qualitative, and quantitative analysis, solution and media preparation, DNA extraction from plants and soil samples, whole genome sequencing, and 16s metagenomic sequencing. My favorite project that I have been involved in is the Study of the Genetics of Nature's Colors. The purpose of this study is to monitor and catalog the seasonal color changes in the native garden over one year and gain insight into the

genetic variation that underly these observed color variations over the different seasons. What is unique about this project is the collaboration of art and science. Bellevue is partnering with professional artists from Luftwerk to bring together students from art and science classes to create art from pigments extracted from native plants. This artwork will create a unity between two disciplines that are vastly different from each other, documenting the seasonal color changes through artwork in addition to analyzing genetic data. Furthermore, I gained valuable knowledge through a research and development internship at a biotechnology company, Streck. I assisted in the development of new hematology controls and cell stabilization tubes. During my summer at Streck, I gained valuable experience and knowledge of numerous laboratory instruments and procedures. I learned from and collaborated with professionals in several areas of specialty, such as biochemistry and molecular biology.

I am confident that the master's program at Evergreen State College will provide the rigorous academic environment and research opportunities needed to propel my career in environmental science. I am excited about the opportunity to contribute to the vast academic community at Evergreen State College and collaborate with fellow students who share my passion for sustainability and conservation. Collaborating with esteemed faculty members like John Withey and Carri LeRoy presents an invaluable opportunity for me to enhance and refine numerous skills especially in experiment design and information literacy. Skills that are vital for pursuing a career in conservation and research.

In conclusion, I am eager to begin this academic journey at Evergreen State College, where I aspire to deepen my knowledge, contribute meaningfully to ongoing research, and emerge as a dedicated environmental scientist ready to address the pressing challenges of our time. Thank you for considering my application. I look forward to the opportunity to contribute to and benefit from the academic community at Evergreen State College.

Sincerely,

Emma Stock