Master of Environmental Studies

Mariana Cervantes

From my early childhood, I have always had a strong urge to get to know the land I inhabit; whether it be the *Larrea tridentata* or *Yucca elata* growing in the deserts of my hometown, or the *Achillea millefolium* or *Rubus idaeus* growing wild in the Rocky Mountains. I grew up with a family who loved going hiking, camping, and rock climbing in the Chihuahuan desert of west Texas.

Growing up with these experiences is what fueled my passion for environmental science. I heard a Native American proverb said by Chief Seattle from the Suquamish and Duwamish tribes, which perfectly summarizes my motivation; "We do not inherit the earth from our ancestors — we borrow it from our children". The idea of preserving this extraordinary world for future generations inspires me to continue protecting the wilderness, and learn as much as I possibly can about the environment and the relationships we as humans have with the Earth.

Throughout my undergraduate degree in Psychology, I tried spending any free time I had out in the wilderness. I quickly realized how much it improved my mental health while I was a full-time student working two to three part-time jobs. This epiphany is what led to my interest in researching the possibility of a relationship between mental health and spending time outdoors. I conducted a meta-analysis with SEEDS Environmental Advocates where we found a significant correlation between mental health and spending more time outdoors. I worked on this research during my last semester of undergraduate when COVID19 crippled the world. Seeing the effects of all of us being

stuck at home only exacerbated my belief in utilizing outdoor spaces to improve mental health, as proven by the record numbers of people visiting national and state parks in the United States.

After graduating during the global pandemic, I became a behavioral therapist. I worked with children and adults with autism and other intellectual and developmental disabilities (IDDs). Since we were still in the middle of this crisis, virtual education became the norm which caused a lot of my clients to spend an increased amount of their time at home. In response to this, I began encouraging my clients to take a walk, play in their yards, or go to a nearby park. I witnessed almost immediate improvement through a reduction in emotional outbursts, reduction in behaviors that were perceived as problematic, and increased motivation to continue learning. Once again, this exacerbated my perspective on the positive effects of spending time outdoors.

I worked with an eight year old nonverbal child with autism, consistently for a little over one year. He was absolutely in love with spending time outside, and came to expect our daily walks in a field near his home. I found myself in a constant state of awe while watching his face light up every time he learned a new American Sign Language (ASL) word for anything nature related; i.e. tree, flower, bird, etc. I later began accompanying him to his equine-therapy sessions where I found myself in awe once again; I was fascinated by the relationships he built with every new horse that he worked with. I was inspired, and began volunteering at the equine-therapy farm where I was able to hone my skills in behavioral psychology, and apply them to a form of therapy that utilizes animals and outdoor spaces.

With the skills I gained throughout my time as a behavior therapist in an equine-therapy farm, I became an outdoor educator. I had the privilege to teach underserved K-12 youth about botany,

ecology, conservation, and much more. In this role, I was able to utilize everything I had learned about the intersection of science and indigenous knowledge from *Braiding Sweetgrass* by Dr. Robin Wall Kimmerer, a renowned botanist and member of the Citizen Potawatomi Nation. My favorite aspect of this role was having the opportunity to teach youth about the plants we saw all around us, and show them that, as Dr. Kimmerer says, "plants are our oldest teachers". I was most inspired when I saw genuine awe and curiosity while teaching them about *Verbascum thapsus*, and how its incredibly soft leaves were used as both toilet paper and medicine by indigenous peoples. Followed up by witnessing their eye's light up after finding out that the main culprit to anyone who was sneezing, was because of a *Solidago* only a couple of inches away. Then proceeding to be amazed by a bright red flower in the vicinity, *Trifolium pratense*, which has the ability to help alleviate menopause symptoms, osteoporosis, and high cholesterol levels. Seeing the spark in their eye when they realized how useful these plants that are often perceived as weeds actually are, inspired me to continue igniting that spark in even more youth.

The Master of Environmental Studies (MES) program at Evergreen will allow me to continue igniting that spark not only within myself, but within others as well. I hope to continue learning about botany, environmental education, indigenous knowledge, and conservation. I believe the knowledge I will gain from this program will help me pursue my dream of opening a nonprofit educational farm that specializes in teaching those with IDDs. I hope to pass on the message that the wilderness is accepting of every single one of us, and that we can return the love by highlighting the importance of biodiversity. I wish to inspire others by teaching about the importance of leaving the world better than we found it for generations to come.