NEW PROJECT ASSISTANT PUTS ENVIRONMENTAL & CONSERVATION SCIENCE DEGREE TO WORK FOR ALBERTA PULSE FARMERS

By Hayley Webster, ART Project Assistant, Alberta Pulse Growers

Webster taking field notes on wetland vegetation for the Alberta Wetland Stewardship Project.

I started working with Alberta Pulse Growers in September 2021 as part of the Adaptation and Resilience Training (ART) program supported by Natural Resources Canada and Alberta Environment and Parks. The ART program aims to strengthen communities by addressing challenges that are being faced as the result of climate change. Through my work placement with Alberta Pulse Growers, I am collaborating with other professionals in the field of sustainability to work on water management strategies for climate change adaptation and mitigation.

As the newest addition to Alberta Pulse Growers' team, I have been working on ongoing sustainability-driven projects including the Alberta Wetland Stewardship Project. The Alberta Wetland Stewardship Project is a proactive initiative monitoring the water quality of wetlands on cropland and understanding land management practices that improve the water quality of agricultural runoff. I am also conducting research on beneficial agricultural wetland management practices for increasing the resiliency of crop production as climate change progresses. Wetlands carry out essential ecosystem services, such as improving water quality and reducing the negative impacts of floods and droughts. I am excited about the opportunity to explore how maintaining wetlands on prairie landscapes can be beneficial for agriculture.

I am relatively new to the world of agriculture. My background is in environmental sciences, and I recently graduated from the University of Alberta with a Bachelor of Science in Environmental and Conservation Sciences. My education was very interdisciplinary because the environment encompasses many aspects and impacts almost everything. Through studying environmental

sciences, I developed an interest in environmental applications to agriculture by learning about the interconnectedness of soil quality, crop productivity, and conservation.

Completing my undergraduate degree led me to want to further explore food security and the ability of current agricultural practices to feed a growing global population given environmental constraints.

During the last year of my undergrad, I completed a work term with Agriculture and Agri-Food Canada as a policy analyst. Through working in policy, I was introduced to some of the challenges being faced by the agriculture sector. Completing this work term deepened my understanding of ways in which I could apply my environmental sciences background to address these challenges and improve agricultural practices. My current role with Alberta Pulse Growers (APG) is an incredible opportunity for me to continue exploring these connections between environmental integrity and agricultural success.

As an environmental scientist, I bring a unique perspective and skillset to APG. I previously worked on numerous environmental monitoring projects involving data collection ranging from bird surveys, to vegetation identification, to soil sampling. While working at APG, I have applied my environmental monitoring experience to the Alberta Wetland Stewardship Project. In October, I visited the wetlands being monitored in Southern Alberta as a part of this project and conducted vegetation surveys to contribute to a comprehensive understanding of environmental factors influencing agricultural wetland water quality.

I have also had the opportunity to visit farms for the first time in my life. Not only have I been able to spend time on farms, but I also received a tour of the inner workings of farming operations and even rode in a combine. I am grateful for the opportunity to meet with farmers and learn about the reality of farming practices in Alberta, given the province's current environmental and political context.

These experiences have helped me better understand the needs of farmers, and I hope to apply this insight to minimize disconnects that exist between the world of science and the reality of farming.

While I am not a pulse farmer, I am a pulse consumer. Chickpea curry, dal, and chili are some of my go-to meals to cook. I also love to garden and spend as much time as possible outside.