

*Curriculum Vitae*

**CHANTEL CHIZEN**

**EDUCATION**

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<b>Ph.D. – Soil Science</b> University of Saskatchewan	September 2020 – Present
<b>M.Sc. – Soil Science</b> University of British Columbia	May 2018 – July 2020
<b>B.Sc. – Applied Biology (with Honours)</b> University of British Columbia Major in Applied Plant and Soil Science / Minor in Commerce	September 2014 – May 2018

**HONOURS AND AWARDS**

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<b>2020 Saskatchewan Innovation &amp; Opportunity Scholarship, USask</b>	2020
<b>2020/2021 Andjelic Land Graduate Award in Agricultural Research, Andjelic Land / USask</b>	2020
<b>Devolved Scholarship, USask Department of Soil Science</b>	2020
<b>British Columbia Graduate Scholarship, UBC</b>	2019
<b>Graduate Student Leadership Conference Participant, Soil Science Society of America</b>	2019
<b>Student Travel Award for International Soil Science Meetings, Canadian Society of Soil Science</b>	2019
<b>Dean Warren D Kitts Scholarship, UBC</b>	2018
<b>Faculty of Land and Food Systems Graduate Award, UBC</b>	2018
<b>Undergraduate Book Award, Canadian Society of Soil Science</b>	2018
<b>BC Council of Garden's Club Rose Bancroft Scholarship, B.C. Council of Garden Clubs / UBC</b>	2018
<b>Michael J. Goldstein Memorial Service Award, UBC / Pottinger Gaherty Environmental Consultants Ltd.</b>	2018
<b>Noel Roddick Service Award, UBC / Terralink Horticulture Inc.</b>	2018
<b>C.A. Rowles Alumni Scholarship, UBC</b>	2017

## PUBLICATIONS

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### Journal Articles

Lussier, J.M., Krzic, M., Smukler, S.M., Neufeld, K.R., **Chizen, C.J.**, and Bomke, A.A. (2020). Labile soil carbon fractions as indicators of soil quality improvement under short-term grassland set-aside. *Soil Research* 58, 364-370. doi:10.1071/SR19180

### Presentations

**Chizen, C.J.**, Bedard-Haughn, A.K. (January 18, 2021). Carbon Storage in Prairie Potholes: Strategies to Improve Estimates (oral presentation). 2021 Prairie Water Annual Partners Meeting, virtual platform.

**Chizen, C.J.**, Krzic, M., Smukler, S.M., and Black, T.A. (November 9, 2020). Soil Greenhouse Gas Emissions Following Urea Application in an Incubation Experiment (poster presentation). 2020 ASA-CSSS-SSSA Annual Meeting, virtual platform.

**Chizen, C.J.**, Krzic, M., Smukler, S.M., and Black, T.A. (November 12, 2019). The Impacts of Nitrogen Fertilizer Rates on Greenhouse Gas Emissions from Potato Production (oral presentation). 2019 ASA-CSSS-SSSA Annual Meeting, San Antonio, Texas, USA. *Third Place Oral Presentation: ASA Soil Carbon and Greenhouse Gas Emissions Community*

**Chizen, C.J.**, Krzic, M., Smukler, S.M., and Black, T.A. (July 11, 2019). The Effects of Nitrogen Fertilizer Rate on Greenhouse Gas Emissions and Potato Production in Delta, BC (poster presentation). 2019 Canadian Society of Soil Science, Saskatoon, Saskatchewan, Canada. *President's Award – Second Place Poster Presentation*

**Chizen, C.J.**, Krzic, M., Smukler, S.M., and Black, T.A. (January 7, 2019). The Effects of Nitrogen Fertilizer Rates and Drainage on Greenhouse Gas Emissions and Soil Properties in Potatoes Fields in Delta, BC. (poster presentation). Soil Science Society of America International Meeting, San Diego, California, USA.

## RESEARCH PROJECTS

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<b>Wetland Soil Carbon Storage in the Prairie Pothole Region</b> <i>Dissertation – Ph.D. in Soil Science, USask</i>	September 2020 – Present
<b>The Response of Greenhouse Gas Emissions to Nitrogen Fertilizer Application Rates and Soil Drainage</b> <i>Thesis – M.Sc. in Soil Science, UBC</i>	May 2018 – July 2020
<b>The Effect of Grassland Set-Asides on the Active Soil Organic Matter Pool as Measured by Particulate Organic Matter and Labile Polysaccharides</b> <i>Directed Studies Research – B.Sc. in Applied Biology, UBC</i>	January 2017 – April 2017

## RESEARCH EXPERIENCE

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### **Graduate Researcher**

*University of Saskatchewan*

September 2020 – Present

Project planning and conducting a literature review on wetland soil carbon storage for my PhD research. Will conduct field sampling and soil analyses in the near future.

### **Summer Research Assistant**

*University of Saskatchewan*

May 2020 – August 2020

Conducted a literature review on the effects of drainage on carbon storage in wetlands within the Prairie Pothole Region. Retrieved soil carbon data from publications (reports, articles, and datasets) to support the development of models to estimate carbon losses with wetland drainage.

### **Graduate Researcher**

*UBC Faculty of Land and Food Systems*

May 2018 – July 2020

Completed field sampling of soil, plant, and gas followed by various laboratory analyses. Maintained an effective data management system and conducted statistical analysis. Coordinated and provided mentorship to undergraduate research assistant, volunteers, and high school mentees.

### **Undergraduate Research Assistant**

*UBC Faculty of Land and Food Systems; Delta Farmland & Wildlife Trust*

September 2017 – April 2018;  
October 2016 – December 2016

Efficiently processed soil and plant samples for lab analysis. Maintained a strong attention to detail in order to ensure quality results and workplace safety.

### **Administration Assistant**

*Agriculture and Agri-Food Canada*

May 2016 – August 2016

Designed and maintained a document sharing platform for research centre staff to improve accessibility to safety protocols, training materials, and committee meeting minutes. Became involved in the local safety committee where responsibilities included maintaining first aid kits, processing WCB claims, helping with laboratory safety audits.

## TEACHING EXPERIENCE

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### **Graduate Teaching Assistant**

*University of Saskatchewan Department of Soil Science*

January 2021 – Present

Creating course materials for laboratory modules and grading assignments in the following undergraduate courses:

- SLSC 240: Agricultural Soil Science

**Soil Science Education Content Developer***UBC Faculty of Land and Food System*

September 2019 – December 2019

Developed soil chemistry learning modules which included concept descriptions, graphics, and self-assessments. The modules are a part of a larger online, open-source project with the aim to address knowledge gaps in challenging soil science concepts for post-secondary students.

**Graduate Instructional Skills Workshop***UBC Centre for Teaching, Learning and Technology*

January 2019

A 3-day workshop on the development of skills for effective teaching and learning. There was a particular focus on adult learning theory, developing learning objectives and teaching plans, and encouraging student engagement during class.

**Graduate Teaching Assistant***UBC Faculty of Land and Food Systems*

September 2018 – April 2019

Guided students through problem-based learning cases, led group discussions, taught laboratory modules, held office hours, and graded assignments for the following undergraduate courses:

- APBI 200: Introduction to Soil Science
- APBI 260 - Agroecology I: Introduction to principles and techniques

**LEADERSHIP AND VOLUNTEER ROLES**

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**Graduate School Workshop Committee Member***Agronomy, Crop, and Soil Science Societies*

January 2021 – Present

**VP Communications***USask Soil Science Graduate Student Association*

September 2020 – Present

**Unit Guider***Girl Guides of Canada*

September 2020 – Present

**Science Workshop Volunteer***Let's Talk Science; UBC Faculty of Land and Food Systems*

February 2019 – Present

**Past-President / Student Awards Committee Chair***Pacific Regional Society of Soil Science*

April 2019 – April 2020

**President***Pacific Regional Society of Soil Science*

April 2018 – April 2019

**President-Elect / Website and Media Coordinator***Pacific Regional Society of Soil Science*

April 2017 – April 2018

**Undergraduate Representative**  
*Pacific Regional Society of Soil Science*

December 2016 – April 2017

## **PROFESSIONAL AFFILIATIONS**

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<b>Saskatchewan Institute of Agrologists</b> ( <i>student member</i> )	2020 – Present
<b>Soil Science Society of America / American Society of Agronomy</b>	2018 – Present
<b>Canadian Society of Soil Science</b>	2018 – Present
<b>Pacific Regional Society of Soil Science</b>	2016 – 2021
<b>British Columbia Institute of Agrologists</b> ( <i>student member</i> )	2017 – 2020