

YOUTH EDUCATION PROGRAMS

# Regional Agriculture Days Spring 2022

Inside Education was proud to host five regional agriculture days across the Alberta. These experiences were designed to connect students to local producers and sustainable agriculture in their communities.

*March 30 | Medicine Hat*  
*April 5 | Grande Prairie*  
*April 14 | Calgary*  
*April 20 | Edmonton*  
*May 18 | Red Deer*

**203 Students**  
**10 Agriculture Tours**  
**25 Guest Speakers**  
**5 Schools**



# Introduction

Inside Education launched the Regional Agriculture Days Program in Spring 2022. Five full-day field trip experiences were designed to engage students with the agricultural sector through tours, workshops and guest speakers. With a focus on the importance of new technologies and innovations, the Regional Agriculture Days allowed students to consider a broad view of agriculture and food production through discussions on a wide diversity of topics including plant health, food distribution, and resource use and sustainability.

Expanding upon our experience from the Cultivate Youth Leadership Summit, and over 36 years of building experiential education programs with a multiple perspectives approach, Inside Education was thrilled to be able to invite junior high school classes in five communities across Alberta to participate in this program with us. A total of 203 students participated in these full day programs.

We are excited to share the outcomes and impacts from this unique program through this summary report. The impact of this program in addition to overwhelmingly positive feedback from students and teachers indicates a strong desire for future Regional Agriculture Days in Alberta.



# The Program

Through this dynamic program, over 200 students:

**CONSIDERED** the food production system from raising crops/livestock with connections to best practices regenerative agriculture

**INVESTIGATED** various agricultural factors, including waste and resource recovery along with plant, animal and soil health.

**WITNESSED** food distribution, including shipment of thousands of potatoes, and marketing processes at large and small-scale farms.

**CONNECTED** relevant real-life examples of agriculture to their classroom curricular content.

**EXPERIENCED** memorable hands-on learning opportunities at various farms and agricultural facilities, including:

- ★ Sticking hands in a tub of worms and organic materials to learn about food waste and decomposers
- ★ Eating haskap fruit popsicles
- ★ Learning the difference between queen, drone and worker bees
- ★ Watching manure water from a dairy farm be recycled into nutrient rich water that could be used to fertilize crops (and with a few more steps could become potable!)
- ★ Sitting in the cockpit of a combine harvester
- ★ Taking a soil sample in a field and identifying the texture
- ★ Hand pressing canola seeds to produce oil



## PROGRAM AT A GLANCE

Each program started with an Agriculture 101 presentation in the classroom to introduce key topics, discuss the importance of sustainable agriculture, and prepare for site visits and guest speakers.

### Medicine Hat, AB - March 30

Quattro Farms  
T.R.A.D. Worm Industries

### Grande Prairie, AB - April 5

Broken Tine Orchard  
National Bee Diagnostic Centre

### Calgary, AB - April 14

Livestock Water Recycling  
WiseEats Mushrooms  
Alberta Water Portal

### Edmonton, AB - April 20

Crop Diversification Centre North  
North Bank Potato Farm

### Red Deer, AB - May 18

Ammeter Farm  
Gull Valley Greenhouses

# Participating Schools

The 2022 Regional Agriculture Days program was targeted to junior high schools and provide unique opportunities to to extend their knowledge through curriculum connections to the Plants for Food & Fibre, and Interactions & Ecosystems units in grade 7 science; along with the Freshwater & Saltwater Systems unit in grade 8 science. Some classes were additionally able to apply their gained knowledge and experiences to their existing classroom gardens and environmental science elective classes and clubs.

- Alexandra Middle School** | Medicine Hat Public School Division
- Whispering Ridge Community School** | Peace Wapiti Public School Division
- Foothills Academy** | Independent Calgary School
- Edmonton Christian Northeast School** | Edmonton Christian Schools
- École Lacombe Junior High School** | Wolf Creek Public School Division



# Partners, Expert Guests, and Tour Hosts

We extend deep thanks to our program partners for their incredible support of the 2022 Regional Agriculture Days program. Every teacher expressed appreciation for having a professionally led agriculture field trip provided at no-cost.

We also acknowledge and appreciate the time commitment of the incredible guest speakers and tour hosts. We are so thankful for our guests sharing their knowledge and experience in this important industry.



## A SPECIAL THANKS TO THE FANTASTIC EXPERT SPEAKERS AND TOUR HOSTS:

- Emily Ford | *Quattro Farms*
- Roxanne Doerksen | *T.R.A.D. Worm Industries*
- Kreg & Lee-Anne Alde | *Broken Tine Orchard*
- Patricia Wolf Viega & associates | *National Bee Diagnostic Centre*
- Karleigh Lewis, Gareth Jenkins & Charles Zhang | *Livestock Water Recycling*
- Sheri Vincent & Marina Graber | *WiseEats Mushrooms*
- Kaleigh Watson | *Alberta Water Portal*
- Keith Goutbeck | *Northbank Potato Farm*
- Cam Stevenson, Samantha Muirhead, & associates | *Crop Diversification Centre North*
- Mike & Allison Ammeter | *Ammeter Farms*
- Tara Baycroft | *Alberta Canola Producers Commission*
- Debra McLennan | *Alberta Pulse Growers Commission*
- Lara de Moissac | *SWAT Maps*
- Carmen Tiemstra | *Gull Valley Growers*

“What a fantastic day! The leaders led great, engaging sessions. The places we visited were interesting and relevant to the sessions that were led. The material that was presented and the experiences we had will continue to be used in lessons throughout this year and next.”

-Andrea Cote, Edmonton Christian Northeast School

Inside Education is proud to work with partners committed to excellence in agriculture education.



# Program Impact and Feedback

Inside Education is proud of the many successes of the Regional Agriculture Days program. The follow-up survey results from both students and teachers indicate that it was an exceptional learning experience that will translate into meaningful classroom impact. All students and teachers noted that this unique experience allowed them to apply knowledge and make connections to the curricular content in the classroom.

Inside Education completed pre & post surveys to assess shifts in student understanding of the following agriculture topics:

- Alberta Food Production System (Farm to Fork), including connections to food costs
- Sustainability in agriculture as it relates to soil, water and climate from both a provincial and national perspective

The post-program questionnaire reflects an average of about a 15% increase in students' agricultural understanding. In addition 63% of student respondents believe that Canada's Agriculture sector is headed in the right direction.

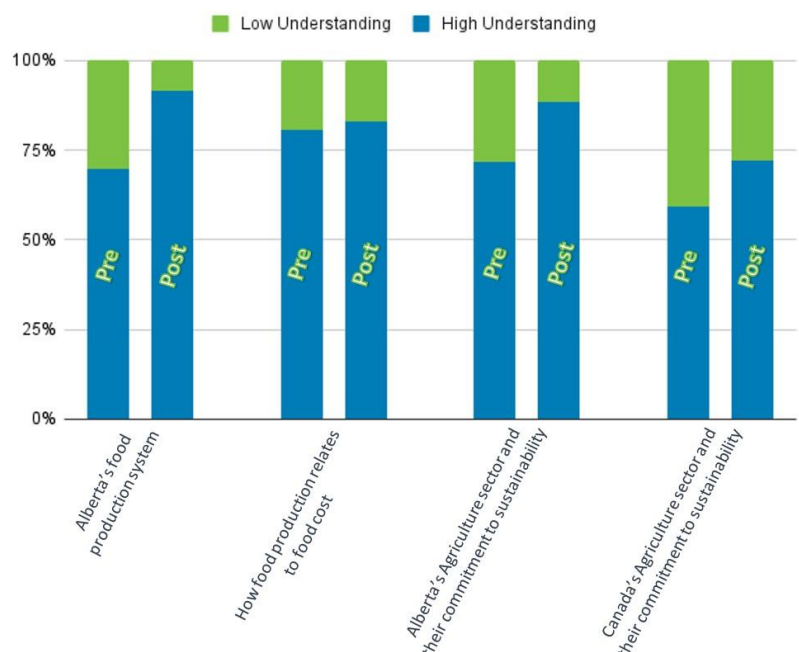
After participating in the program, **100%** of survey respondents indicated that they have increased their knowledge of agriculture and sustainability in their local area.

*“This experience was very informative and fun to learn about agriculture and sustainability.” - Grade 7 Student, Edmonton Christian School*

*“This experience was positive and gave the students a real world perspective on sustainability. I loved how it was local.” - Luke MacKinnon, Foothills Academy*

*“I brag to people about how amazing it was and how much I learned. I always mention how cool the greenhouse was.” - Grade 7 Student, École Lacombe Junior High School*

Understanding of Agriculture Pre-Program vs. Post-Program





*I learned lots such as different methods on how to test soil texture and how it is really weird and wet. I would also say I learned that to get rid of a pest in a greenhouse, you would bring in another bug!*  
- **Student, École Lacombe Junior High School**



*"I enjoyed learning about the bees at the Crop Diversification Centre."*  
- **Student, Edmonton Christian Northeast School**



*"The haskap berries don't need chemicals."*  
- **Student, Whispering Ridge Community School**

## “ On my field trip I learned... ”



## Summary and Futures

Inside Education is thrilled by the outcomes of the Regional Agriculture Days program and we received an overwhelmingly positive response from both students and teachers. We are currently working on complementary programs including:

- Cultivate: Youth Agriculture Leadership Summit, October 2022
- Careers in Agriculture Teacher Professional Development Program, October 2022
- In-School Classroom Programming - ongoing

We expect demand for agriculture programs and resources to grow as teachers share their knowledge, ideas, and experience with their colleagues from across Alberta. We are committed to developing high-quality learning opportunities to support agriculture and environmental education in Alberta. Inside Education recognizes that agriculture is an important area of study for today's students; the key to creating a generation of informed stewards and decision makers.

### Contact

For More Information Contact:

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# Classroom Curricular Connections

Many of the participating classes were grade 7 students focusing on the Plants for Food & Fibre and the Interactions & Ecosystems units. Grade 8 students, from Calgary, focused on the Freshwater & Saltwater Systems unit. Outlined below are the specific curricular connections that were integrated into this program.

## Plants for Food & Fibre, Grade 7

- illustrate and explain the essential role of plants within the environment
- investigate trends in land use from natural environments to managed environments and describe changes
- investigate practical problems and issues in maintaining productive plants within sustainable environments
- investigate and interpret variations in plant structure, and relate these to different ways that plants are adapted to their environment
- investigate and interpret variations in needs of different plants and their tolerance for different growing conditions
- describe life cycles of seed plants, and identify example methods used to ensure their germination, growth and reproduction
- describe methods used to increase yields, through modifying the environment and by creating artificial environments
- investigate and describe characteristics of different soils and their major component
- identify practices that may enhance or degrade soils in particular applications
- describe and interpret the consequences of using herbicides, pesticides and biological controls in agriculture and forestry
- investigate and describe the development of plant varieties through selective breeding, and identify related needs and problems
- investigate and identify intended and unintended consequences of environmental management practices
- identify the effects of different practices on the sustainability of agriculture and environmental resources

## Interactions & Ecosystems, Grade 7

- illustrate how life-supporting environments meet the needs of living things for nutrients, energy sources, moisture, suitable habitat, and exchange of gases
- identify examples of human impacts on ecosystems, and investigate and analyze the link between these impacts and the human wants and needs that give rise to them
- analyze personal and public decisions that involve consideration of environmental impacts

## Freshwater & Saltwater Systems, Grade 8

- illustrate how life-supporting environments meet the needs of living things for nutrients, energy sources, moisture, suitable habitat, and exchange of gases
- identify examples of human impacts on ecosystems, and investigate and analyze the link between these impacts and the human wants and needs that give rise to them
- analyze personal and public decisions that involve consideration of environmental impacts