



BC Agriculture in the Classroom Foundation



Telling BC's Food Stories

Farm Explorer BC GIS Mapping Lessons

Students will have a brief introduction to GIS maps, familiarize themselves with the Farm Explorer BC Map, and complete a culminating activity which will allow students to share the story of a BC farm in their area with others.

Subject Levels/ Suggested Grade

ADST 8 & 9

English Language Arts 8 & 9

Social Studies 9 and 10

Entrepreneurship and Marketing 10

Marketing and Promotions 11

Composition 10-12

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Grade and Subject	Curricular Competencies	Content Connections
ADST 8	<p>Ideating</p> <ul style="list-style-type: none"> • Generate potential ideas and add to others' ideas • Screen ideas against criteria and constraints • Choose an idea to pursue 	<p>Digital Literacy</p> <ul style="list-style-type: none"> • strategies to engage with personal learning networks <p>Entrepreneurship and Marketing</p> <ul style="list-style-type: none"> • recognition of a market need and identification of target market • development of a product or service, including its features and benefits • forms of advertising and marketing that can influence a potential customer or buyer
English Language Arts 8	<p>Create and communicate (writing, speaking, representing)</p> <ul style="list-style-type: none"> • Exchange ideas and viewpoints to build shared understanding and extend thinking • Use writing and design processes to plan, develop, and create engaging and meaningful literary and informational texts for a variety of purposes and audiences • Use an increasing repertoire of conventions of Canadian spelling, grammar, and punctuation • Select and use appropriate features, forms, and genres according to audience, purpose, and message • Transform ideas and information to create original texts 	<p>Story/text</p> <ul style="list-style-type: none"> • forms, functions, and genres of text <p>Strategies and processes</p> <ul style="list-style-type: none"> • writing processes <p>Language features, structures, and conventions</p> <ul style="list-style-type: none"> • multi-paragraphing • elements of style • usage • syntax and sentence fluency • conventions • presentation techniques

Grade and Subject	Curricular Competencies	Content Connections
ADST 9	<p>Applied Design</p> <ul style="list-style-type: none"> Engage in a period of research and empathetic observation in order to understand design opportunities <p>Ideating</p> <ul style="list-style-type: none"> Take creative risks in generating ideas and add to others' ideas in ways that enhance them <p>Sharing</p> <ul style="list-style-type: none"> Decide on how and with whom to share their product and processes <p>Applied Technologies</p> <ul style="list-style-type: none"> Choose, adapt, and if necessary learn about appropriate tools and technologies to use for tasks Evaluate how the land, natural resources, and culture influence the development and use of tools and technologies 	<p>Entrepreneurship and Marketing</p> <ul style="list-style-type: none"> risks and benefits of entrepreneurship flow of goods and services from producers to consumers identification of a good or service that ensures brand recognition market segmentation by demographic, geographic, psychographic, and purchasing pattern role of online technologies in expanding access to goods and services <p>Information and Communications Technologies</p> <ul style="list-style-type: none"> strategies for curating and managing personal digital content, including management, personalization, organization, maintenance, contribution, creation, and publishing of digital content strategies to manage and maintain personal learning networks, including content consumption and creation <p>Media Arts</p> <ul style="list-style-type: none"> digital and non-digital media technologies, their distinguishing characteristics and uses technical and symbolic elements that can be used in storytelling

Grade and Subject	Curricular Competencies	Content Connections
English Language Arts 9	Create and communicate (writing, speaking, representing) <ul style="list-style-type: none"> • Exchange ideas and viewpoints to build shared understanding and extend thinking • Use writing and design processes to plan, develop, and create engaging and meaningful literary and informational texts for a variety of purposes and audiences • Use an increasing repertoire of conventions of Canadian spelling, grammar, and punctuation 	Story/text <ul style="list-style-type: none"> • forms, functions, and genres of text Strategies and processes <ul style="list-style-type: none"> • writing processes Language features, structures, and conventions <ul style="list-style-type: none"> • multi-paragraphing • elements of style • usage • syntax and sentence fluency • conventions • presentation techniques
Social Studies 9	Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions	<ul style="list-style-type: none"> • physiographic features of Canada and geological processes
Entrepreneurship and Marketing 10	Applied Design <ul style="list-style-type: none"> • Engage in a period of research • Take creative risks in generating ideas and add to others' ideas in ways that enhance them Applied Technology <ul style="list-style-type: none"> • Evaluate the influences of land, natural resources, and culture on the development and use of tools and technologies 	<ul style="list-style-type: none"> • creative ways to add value to an existing idea or product • forms of marketing • online marketing concepts • customer needs, wants, and demands

Grade and Subject	Curricular Competencies	Content Connections
Composition 10	<p>Comprehend and connect (reading, listening, viewing)</p> <ul style="list-style-type: none"> • Access information for diverse purposes and from a variety of sources to inform writing <p>Create and communicate (writing, speaking, representing)</p> <ul style="list-style-type: none"> • Use writing and design processes to plan, develop, and create engaging and meaningful texts for a variety of purposes and audiences • Use the conventions of Canadian spelling, grammar, and punctuation proficiently and as appropriate to the context • Transform ideas and information to create original texts 	<p>Strategies and processes</p> <ul style="list-style-type: none"> • writing processes
Social Studies 10	<p>Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas and data; and communicate findings and decisions</p> <p>Assess the significance of people, places, events, or developments, and compare varying perspectives on their significance at particular times and places, and from group to group (significance)</p>	<ul style="list-style-type: none"> • environmental, political, and economic policies • environmental issues, including climate change, renewable energy, overconsumption, water quality, food security, conservation
Marketing and Promotion 11	<p>Applied Design</p> <ul style="list-style-type: none"> • Conduct user-centered research to understand opportunities and barriers 	<ul style="list-style-type: none"> • marketing and promotion opportunities within the local community

Grade and Subject	Curricular Competencies	Content Connections
Composition 11	<p>Comprehend and connect (reading, listening, viewing)</p> <ul style="list-style-type: none"> • Access information for diverse purposes and from a variety of sources to inform writing <p>Create and communicate (writing, speaking, representing)</p> <ul style="list-style-type: none"> • Use writing and design processes to plan, develop, and create engaging and meaningful texts for a variety of purposes and audiences • Use the conventions of Canadian spelling, grammar, and punctuation proficiently and as appropriate to the context • Transform ideas and information to create original texts, using various genres, forms, structures, and styles • Experiment with genres, forms, or styles of creative and communicative texts 	<ul style="list-style-type: none"> • Text forms and genres <p>Strategies and processes</p> <ul style="list-style-type: none"> • writing processes <p>Language features, structures, and conventions</p> <ul style="list-style-type: none"> • usage and conventions
Composition 12	<p>Comprehend and connect (reading, listening, viewing)</p> <ul style="list-style-type: none"> • Use information for diverse purposes and from a variety of sources to inform writing <p>Create and communicate (writing, speaking, representing)</p> <ul style="list-style-type: none"> • Use writing and design processes to plan, develop, and create engaging and meaningful texts for a variety of purposes and audiences • Use the conventions of Canadian spelling, grammar, and punctuation proficiently and as appropriate to the context • Transform ideas and information to create original texts, using various genres, forms, structures, and styles 	<ul style="list-style-type: none"> • Text forms and genres <p>Strategies and processes</p> <ul style="list-style-type: none"> • writing processes <p>Language features, structures, and conventions</p> <ul style="list-style-type: none"> • usage and conventions

Lesson 1: Farm Explorer BC Map Introduction

Teacher Background

Farm Explorer BC is a geographic information system (GIS) site powered by [Esri Canada](#). Through Esri's web-based mapping software, Farm Explorer BC information helps communities learn about British Columbia farms and gain an understanding of agriculture and farming in the province. Farm Explorer BC provides an enhanced GIS map with customized and interactive tools like layer filtering for farm commodities, experiences, and operating days that makes it easy for users to connect with farms. Discover Farm Explorer BC at <https://farm-explorer-bc-bcaitc.hub.arcgis.com>.

The Farm Explorer BC Map lets you pick a region, and discover the diverse array of farms in your area. It also makes it easy to find farms selling products, offering visits, tours, recreation, educational activities, and other agriculture-related experiences. You can also have fun routing your farm road trip and sharing it with friends! There are also farm listings, so that you can have instant information on the farm and how to connect with them. Lastly, there are **farm stories** which give the inside scoop and share how they contribute to our agriculture systems.

Materials

- Computer/Projector with access to the internet
- Laptops/tablets with access to the internet
- 5 post-it notes per student/pair of students

Procedure

Hook:

1. Ask students if they have ever visited a farm. Ask them to share what they saw, heard, smelt, felt and tasted there. If many students want to share, they can also share in partners or a small group.
2. Tell students that they will be looking at a GIS map today, which tells all about farms and agriculture experiences in BC. Introduce GIS maps to students using one or more of the following videos:
 - [What is GIS?](#)
 - [Importance of Maps](#)
 - [Can a Billion Maps Help Save the Planet?](#)
 - [What You Can See with Smart Maps](#)
3. Pull up [Farm Explorer BC Map](#) so all students can see. Click through burgundy buttons on the left hand side and explain them to students (legend, directions, days open filter, commodities filter, offerings filter).
4. Ask a student to share the name of the farm they have visited, and search to see if it is listed on the map. Try another if it is not. Once you have found one that is listed, note the information that is there.

Body:

1. Have students log onto their laptops/tablets and open [Farm Explorer BC Map](#). Let them explore the tools on the left hand side and change the filters. They can even calculate how far it would take them to get from their house to a farm of their choosing.
2. Have students turn off all filters except for the commodity filter- have them choose *berries*. Let them look through the farms listed and then find the one for The BOG- Riverside Cranberry Farm.
3. Have them explore the information about THE BOG- Riverside Cranberry Farm, and while they are reading, hand out 5 post-it notes to each student/pair of students.
4. Project the following questions on the board using the projector/write them large on the whiteboard.
 - *List three offerings the farm has for visitors*
 - *How big is the farm?*
 - *What is the most unique part of the farm?*
 - *Where is the farm located?*
 - *What do they have to say to students interested in a career in agriculture?*
5. Have students write the answer to each question on a post-it and come stick it to the board under the corresponding question.
6. When everyone has completed their questions, review the answers together. Discuss: How is this website useful to someone who wants to learn more about agriculture in BC?

Extension Activities

- Complete the 5 questions for another Farm Story featured on the [Farm Explorer BC Map](#)
- Have students choose a commodity from [Grow BC Map](#), and then have them search which farms offer sales or experiences related to this commodity.
- Complete the Esri Canada lesson plan about [Food Insecurity](#).
- Explore our [Spotlight on Cranberries](#), which features a video farm tour of a BC Cranberry farm.

Credit

Esri Canada- <https://www.esri.ca/en-ca/home>

What is GIS? Video- <https://www.youtube.com/watch?v=LHDCRjAxpI0>

Importance of Maps Video-<https://www.youtube.com/watch?v=mR2CWUOSC08&t=4s>

Can a Billions Maps Help the Planet?-https://www.youtube.com/watch?v=zQfy1K_vMU0&t=6s

What Can You See with Smart Maps? Video- https://www.youtube.com/watch?v=pg7ByVZo_sg

Farm Explorer BC Map-<https://farm-explorer-bc-bcaitc.hub.arcgis.com/>

Grow BC Map-<https://www.bcaitc.ca/resources/grow-bc-guide-bcs-agriculture-resources>

Esri Canada Food Insecurity Lesson-

<https://edu.maps.arcgis.com/apps/MapSeries/index.html?appid=5fb3937cea264d5ba807032bf8da70a7>

Spotlight on Cranberries-<https://www.bcaitc.ca/resources/spotlight-series-cranberries>

Lesson 2: Crafting a BC Food Story- Farm Explorer BC Map Story Project

Teacher Background

Students have now become more familiar with GIS maps, and have a deeper understanding of how they can be used to tell a story. They will now take this information and combine it with writing, interviewing, photographing and researching in order to create their own farm story for the Farm Explorer BC Map. Completed stories can be submitted, and once edited and approved, will become a permanent story on the Farm Explorer BC Map.

From January 1- March 15, 2023 students who submit completed stories will receive a \$100 Reward. Full Challenge details [here](#).

This is a great way for students to participate in the telling of BC's Food Story, and for them to see how they can impact the agriculture community as they share with others all about BC farms.

Materials

- Computer/projector with access to the internet
- Whiteboard/chart paper
- Laptops/tablets with access to the internet
- Student handouts:
 - *Farm Contact Template*
 - *Farm Interview Questions*
 - *BC Farm Explorer Map Story Project Checklist*

Procedure

Hook:

1. Show students a mind map (drawn on whiteboard or use an online template from canva, venngage, mural, etc.) with *What Makes a Good Story?* in the center.
2. Ask students to think of their favourite story and share with a partner.
3. After a few minutes, ask them to think about why it is a good story, and what makes it a good story.
4. Take ideas and record them onto the mind map. Discuss and add to the mind map as the discussion progresses.
 - Other questions to spark thinking and discussion:
 - What makes a good storyteller?
 - What else enhances a good story?
 - What do you like to hear stories about?
 - How do you go about writing a good story?

Body:

1. Tell students that they are going to work on a story project to help tell others all about a BC farm. They are going to contact a farm, research, write, enhance and submit an account of the farm so others can learn all about the farm.
2. Show students one of the featured stories (Goat's Pride Dairy, Country Golden Yolks, etc.) from the [Farm Explorer BC Map](#). Highlight the pictures and how the answers to questions have a voice.

3. Ask: Are you more interested in visiting the farm now that you have heard more about it?
4. Share with students that they can encourage others to find out about where their food comes from by helping to tell BC farm stories.
5. Explain how the story project will work:
 - Students will choose a farm nearby using the [Farm Explorer BC Map](#) (make sure the farm selected doesn't already have a long story)
 - Students will contact the farm (can use *Farm Contact Template* to help draft email/phone call)
 - Students will interview the farm contact, and gather all the required information (interview questions, photos, logos).
 - Students will take information from interview and craft the story for the farm. Before submitting, students will need to refer to the *BC Farm Explorer Map Story Project Checklist* to ensure they have met the story project criteria.
 - Students submit the completed story. **Students who submit their completed stories between January 1 and March 15, 2023 to the Farm Explorer BC Story Challenge will be eligible for a reward. See full Challenge details [here](#).**
6. Let students log onto their devices and access the [Farm Explorer BC Map](#). Then let students explore farms in the area and let them choose which one they will contact (make sure students are contacting different farms). Students can also choose farms they know, not already shown on the map, as long as they feature a commodity sold at the farm, a tour or educational experience.
7. Discuss with students the time line for the project, and decide on a deadline.

Optional:

1. Open [Farm Explorer BC Map](#), find Little Qualicum Cheeseworks, and show picture of dairy calves.
2. Ask students what they notice about the photo.
3. Ask what does a good photo need? Brainstorm a list together (light, colour, focus, tells a story, lines, composition, rule of thirds, etc.)
4. Encourage students to remember the components of a good photo when taking pictures at the farm.

Extension Activities

- Watch a [Spotlight Series](#) Farm tour video, and complete any accompanying activities.
- Explore the BC Commodity stories on the [Grow BC Map](#)
- Farm Tour videos from across Canada- [The Great Canadian Farm Tour](#)

Credit

Farm Explorer BC Map- <https://farm-explorer-bc-bcaitc.hub.arcgis.com/>

Spotlight Series- <https://www.bcaitc.ca/index.php/resources>

Grow BC Map- <https://www.bcaitc.ca/resources/grow-bc-guide-bcs-agriculture-resources>

The Great Canadian Farm Tour- <https://aitc-canada.ca/Portals/0/360/gcft-eng/index.html#>

Farm Contact Template

Sample Email/script for phone call:

Hello, my name is _____ and I attend _____ School. I am in grade _____ and I am completing a school project about BC Farms.

BC Agriculture in the Classroom Foundation (which creates resources and programs for teachers about BC farming and food), has a new online map website called Farm Explorer BC! This new online site provides a close-up look at 400+ farms and agriculture experiences in British Columbia. The Farm Explorer BC Map is an educational GIS site. It features an interactive map where those using it can discover the diverse array of farms in an area. It is easy to find farms selling products, offering visits, tours, recreation educational activities and other agriculture-related experiences with the map. When you click on a farm listing it shows what the farm offers and how to connect with them. There is also a Farm Story section, where you can discover the farms' unique offerings. This direct farm marketing webpage is special as it is very comprehensive and educational.

Our School project is to help write the farm stories featured on the map. I would like to come and interview you with some questions about your farm, and take some pictures if you do not already have pictures of your farm. Then I will take the information and complete the story of your farm to be featured on the map (upon editing and approval).

I am really excited to meet to discuss your farm and its special story. Please reply back to me with some times that would work for you in the next week to meet and discuss all about your farm!

Sincerely,

Links:

[BC Agriculture in the Classroom Foundation](#)

[Farm Explorer BC Map](#)

Farm Interview Questions

These questions are also featured on The Farm Explorer BC Map page.
They will all need to be submitted via the [online form](#).

Student Name:

Mailing Address:

City:

Province:

Postal Code:

Phone:

Email:

The School I attend:

Grade: 8 9 10 11 12

Were there other students involved in creating this story profile?

I have received permission from the farm owner to submit this Farm Explorer BC Profile:

I have abided by the Farm Explorer BC Story Challenge Guidelines:

General Information

Farm Name:

Operating Organization (if different than above):

Address:

Region:

Phone Number:

Website:

Twitter:

Instagram:

Facebook:

Email Address:

Season Open (Check All That Apply)

Spring/Summer/Fall/Winter/Contact for season opening dates

Open (Check All That Apply)

Monday/Tuesday/Wednesday/Thursday/Friday/Saturday/Sunday

Details (Check All That Apply)

Dog Friendly/Kid's Activities/Wheelchair Accessible/Picnic Area/Seating Area/Washrooms Onsite/Shaded Areas Onsite

Travel (Check All That Apply)

Bike Lock-up/Close to Public transit/Designated Accessible Parking Spaces/Electric Vehicle Charging Station/No Parking/Onsite Parking/Parking Nearby

Payment Accepted (Check All That Apply)

Free/Cash/Credit Card/Debit Card/ Apple Pay/ATM Nearby

Offerings(Check All That Apply)

Farm Visits/Farm Stand/Store/Farmer's Market/ Community Supported Agriculture (CSA)/U-Pick/Garden Center or Nursery/Winery/Brewery

Tours (Check All That Apply)

Guided Tours/Self-Guided Tours/Private Tours

Education(Check All That Apply)

Workshops/Classes/Demonstrations/Educational Exhibits

Recreational Activities (Check All That Apply)

Children's Camp/Camping/Glamping/Horseback Riding/Hay Rides/Tractor Rides/Petting Farm/Playground/Pumpkin Patch/Pitch and Putt/Bird Watching/Trails for Walking/Trails for Biking/Swimming/Mediation/Self-Reflection Spaces/Nature Walks/Other

Food Services (Check All That Apply)

Restaurant with Seating/Restaurant without Seating/Tasting Room

Special Events (Check All That Apply)

Weddings/Private Events/Festivals/Community Events

What is your PRIMARY Commodity (Check One Only)

Berries/Dairy/Vegetables/Flowers and

Nursery/Grains/Herbs/Honey/Hops/Mushrooms/Nuts/Eggs, Poultry,

Meat/Seafood/Fruits/Wine/Farm Animals/Seeds/Historical Farm Artifacts

Which ADDITIONAL Commodities do you Produce (Check All That Apply)

Berries/Dairy/Vegetables/Flowers and

**Nursery/Grains/Herbs/Honey/Hops/Mushrooms/Nuts/Eggs, Poultry,
Meat/Seafood/Fruits/Wine/Farm Animals/Seeds/Historical Farm Artifacts**

Type (Check All That Apply)

Organic (certified)/Organic (Non-Certified)/No-Spray

Farm Description

Year Farm Started

Farm Size (Acres)

Contact Information for seasonal workers

What does your farm teach visitors about agriculture, food, and/or the environment?

What is the most unique part of your farm?

What is the most rewarding part of operating your farm/agriculture business?

What makes you excited about BC agriculture and food?

**What advice do you have for K-12 students who are interested in pursuing a career
in agriculture?**

Farmer First Name/Last Name

Contact Email Address

BC Farm Explorer Map Story Project Checklist

Name: _____ Date: _____

Before submitting your farm story to the Farm Explorer BC Website, via the following [form](#), please make sure all items have been checked off.

- I read at least TWO completed stories on the [Farm Explorer BC Map](#) to get an idea of how the information will look.
- All information on the online form is correct (double checked spelling of names, contact numbers, etc.)
- All long answer questions are: well thought out, detailed, and have a distinct voice.
- All long answer questions feature a story like answer, and evoke the reader to picture the farm and want to visit it!
- All long answer questions are a minimum of four sentences, and are no longer than 1000 characters.
- I uploaded photos (minimum 2, maximum 5). These photos can be given to me by the farmer or taken by me. They fit the following criteria:
 - png or jpg format
 - minimum 1,200 px. on long side of image at 72 DPI or larger
- I uploaded a farm logo (if they have one). It fits the following criteria:
 - png or jpg format
 - minimum 300 px on long side of image at 72 DPI or larger
- I completed a follow up with the farm contact by sending them a thank you note.
-
- Signed, _____