

BC Dairy Farms Spotlight



A Day on the Dairy Farm

Students will learn about what a typical day on a BC dairy farm looks like by watching a video tour. Students will then complete a bingo activity to help reinforce concepts discussed and can also complete a cheese tasting activity to taste some BC dairy products.

Subject Levels/ Suggested Grade

ADST: Food Studies 9

Food Studies 10-12

Culinary Arts 10-12

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Grade	Curricular Competencies	Content Connections	
and Subject			
ADST: Food Studies 9	 Evaluate the personal, social, and environmental impacts. Evaluate how the land, natural resources, and culture influence the development and use of tools and technologies. 	Health, economic, and environmental factors that influence availability and choice of food in personal, local, and global contexts.	
Food Studies 10	Evaluate the influences of land, natural resources, and culture on the development and use of tools and technologies.	 Food trends, including nutrition, marketing, and food systems. Simple and complex global food systems and how they affect food choices, including environmental, ethical, economic, and health impacts. 	
Food Studies 11	Critically evaluate how competing social, ethical, economic, and sustainability considerations impact choices of food products, techniques, and equipment.		
Food Studies 12	Critically evaluate how competing social, ethical, economic, and sustainability considerations impact choices of food products, techniques, and equipment.		
Culinary Arts 10	 Explore the impacts of culinary decisions on social, ethical, and sustainability considerations. Evaluate the influences of land, natural resources, and culture on the development and use of culinary ingredients, tools, and technologies. 	Food products available locally via agriculture, fishing, and foraging.	
Culinary Arts 11	Analyze and evaluate how land, natural resources, and culture influence the development and use of culinary ingredients, tools, and technologies	B.C. agricultural practices.	
Culinary Arts 12	 Examine and critically evaluate how culinary decisions impact social, ethical, and sustainability considerations. Analyze and evaluate how land, natural resources, and culture influence the development and use of culinary ingredients, tools, and technologies. 	Social, economic, and environmental effects of food procurement decisions.	

Teacher Background

The majority of dairy farms in BC are made up of dairy cattle, more commonly called dairy cows. As with all mammals, it is the female dairy cow that produces milk. BC dairy farmers raise several breeds of dairy cows. The main dairy breeds in BC are the black and white Holsteins, red and white Ayrshires, tan/black Jerseys, Brown Swiss, and brown and white Guernseys. Holstein cows are amazing milk producers: one cow can produce up to 9,500 litres of milk in one year. That's enough to fill over 100 glasses in one day.

BC dairy farmers produce around 700 million litres of milk annually, with the average cow producing 35 litres of milk every day (2023).

Nearly all BC dairy farms are family owned and operated, with an average herd size of 135 milking cows. BC dairy farmers use many technologies to make their jobs easier and to produce the highest quality milk with the fewest environmental impacts.

Materials

- Computer/Projector
- Internet Access
- Video: Spotlight on Dairy: BC Dairy Farms Tour
- BC Dairy Bingo Card Questions
- BC Dairy Bingo Card Answers
- Bingo counters
- prizes
- Student handouts:
 - o BC Dairy Bingo Card
- Optional Activity:
 - 3 different types of BC Cheese (a variety of soft, hard, old, etc.) enough of each type for each student to have a small taste
 - BC Cheese Tasting Activity Handout

Procedure

Hook:

- 1. Display *BC Dairy Bingo Card Answers* where students can see them. Have them read them and ask them to listen for them or to notice them when watching. Have them pay particular attention to the bolded words.
- 2. Watch Spotlight on Dairy: BC Dairy Farms Tour video.
- 3. After viewing, ask students if they heard any of the bolded words, and to share their meaning/definitions.

Body:

- 1. Distribute a BC Dairy Bingo Card and Bingo counters to each pair of students.
- 2. Have them use the *BC Dairy Bingo Card Answers* to fill in each blank space on their Bingo Card. They can put them in any order they choose.
- 3. Use the *BC Dairy Bingo Card Questions* and begin to ask students the questions. If they have and know they answer they can cover it with a Bingo counter.
- 4. If a pair gets five in row, they get Bingo (and a prize).
- 5. Can play again or until another pair gets 5 in a row.

Optional Activities:

- 1. Introduce students to cheese tasting. Show them the handout and describe the different categories. Explain the tasting process:
 - a. Look at the cheese and record any notes about the appearance.
 - b. Smell the cheese sample and record notes about the aroma.
 - c. Taste the cheese and record any notes about the taste. Use the flavour wheel guide to help.
 - d. Describe the mouthfeel and texture using the texture guide.
- 2. Give each student three different pieces of cheese, and the *BC Cheese Tasting Activity Handout*. Have them taste and answer the questions.

Closing:

1. Have students vote for their favourite cheese by making a tally on the board.

Extension Activities

- Choose a BCAITC BC Cheese recipe like, <u>BC Cheese Scones</u>, <u>Tres Leches Cake</u> or <u>BC Ancho Lime Beef Fajitas with White Cheddar Queso</u> to make.
- Watch: BC Dairy at the Table
- Grow BC: Dairy Story

Credit

- Spotlight on Dairy: BC Dairy Farms Tour Video: https://vimeo.com/user1663027
- BC Cheese Scones: https://bcaitc.ca/recipes/bc-cheese-scones
- Tres Leches Cake: https://bcaitc.ca/recipes/tres-leches-cake
- BC Ancho Lime Beef Fajitas with White Cheddar Queso: https://bcaitc.ca/recipes/bc-ancho-lime-beef-fajitas-white-cheddar-queso
- BC Dairy at the Table: https://bcaitc.ca/resources/bc-table-dairy-resource-guide
- Grow BC: Dairy Story: https://bcaitc.ca/resources/grow-bc-dairy-story

BC Dairy Bingo Card Answers

- Holstein
- Feed the Cows
- Separate them from the rest of the herd
- Every two weeks
- Milk production
- 100,000 Litres
- Every other day
- Parlour
- Processing Plant
- Dairy Nutrition
 Team
- Agronomists
- Use fans

- 12 degrees
- Maintaining the health of the herd
- Rising Costs
- 55,000
- 4:30/5:00 AM
- Ear Tags
- Clean, dry, plenty of fresh air
- 5:00/5:30 PM
- GPS
- Sand
- Milking
- High sources of vitamins, calcium

BC Dairy Bingo Card Questions

- 1. What breed of cow was shown on the farm? Holstein
- 2. What is the first thing Farmer Mark often does on the farm in the morning? Feed the cows
- 3. Cows on Farmer Michael's farm are milked in a ______. Parlour
- 4. What time does a typical day on a dairy farm start? 4:30/5:00 AM
- 5. If the cows are sick, what do the farmers do? Separate them from the rest of the herd
- 6. What time is a farmer typically done most of their work for the day on a dairy farm? 5:00 /5:30 PM
- 7. What are Holstein cows best known for and bred for? Milk production
- 8. How often does the veterinarian visit the farm to do routine checks on Farmer Mark's herd? Every two weeks
- 9. Who helps balance the diet of the cows and ensures they are getting what nutrients they need? Dairy Nutrition Team
- 10. Who helps the farmers grow the best crops? Agronomists
- 11. What are the three important things to maintain in a dairy cow barn? Clean, dry, and plenty of fresh air.
- 12. What do farmers do for their cows when it starts getting warm? Use fans
- 13. At what temperature does a cow start getting warm? 12 degrees
- 14. Why is biosecurity important on the farm? Maintaining the health of the herd
- 15. What is one thing robots do on the dairy farm? Milking
- 16. What technology is used on tractors? GPS
- 17. What technology do the cows wear? Ear Tags
- 18. How often do milk trucks pick up milk from farms in BC? Every other day
- 19. Where does the milk go after leaving the farm? Processing Plant
- 20. What is the biggest challenge of being a dairy farmer? Rising costs
- 21. Approximately how many milking cows are in BC? 55,000
- 22. How many litres of milk do most cows produce in their lifetime? 100,000 litres
- 23. What is something that gets recycled on the farm and reused on Farmer Mark's Farm for bedding? Sand
- 24. What makes dairy products nutritious to consume? High sources of vitamins, and calcium

BC Dairy Bingo Card

Names:	Date:	
1 4011103.	Daic.	

В	I	N	G	0
		FREE		



CHEESE TASTING

#1



SMELL & TEXTURE		
Strong Medium Slight Odorless	□Runny □Soft □Semi-soft □Semi-firm	

Appearance	
Aroma	
Taste	
Mouthfeel	

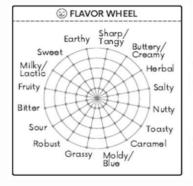
#2

	Earthy	Sharp/ Tangy	D. H /
Swee	et T		Buttery/ Creamy
Milky/ Lactic		-FX	Herbo
Fruity	44	WAY.	Salty
Bitter	T	AXX	Nutt
Sour	X	TX?	Toasty
Robus	t		Caramel
	Grassy	Moldy/ Blue	/

SMELL & TEXTURE		
Strong Medium Slight Odorless	□Runny □Soft □Semi-soft □Semi-firm	□ Firm □ Hard

Appearance	
Aroma	
Taste	
Mouthfeel	

#3



SMELL & TEXTURE		
Strong Medium Slight Odorless	□Runny □Soft □Semi-soft □Semi-firm	□Firm □Hard

Appearance	
Aroma	
Taste	
Mouthfeel	

My favourite is: