

Forbesvue Dairy Farm: Teacher Information Page



Curriculum Connections

Understanding the operation of a modern dairy farm, and the path of milk production from the farm to the consumer, addresses various specific and overall expectations within the Ontario Curriculum.

- Elementary Science & Technology Curriculum (2022)
 - A new area of learning in the Science and Technology curriculum is Food Literacy. The curriculum “builds understanding of food literacy by considering various food systems, connections with physical and mental health, the role of the environment plays in how our food grows, and the importance of locally sourced food.”
 - Forbesvue Dairy farm videos show examples relevant to the fundamental concept of “Automation”, explaining how various technologies on the farm allow processes to be accomplished with minimal human intervention.
 - These videos can be used as a resource to address various specific expectations within the Life System strand, throughout all elementary grades.

- Additional links to other Ontario Curricula to be added at a later date.

Title	Length	Summary	Words, Wonderings, and Further Explorations
Welcome to the Dairy Farm	05:16	Owner Kevin Forbes, a third-generation farmer, introduces you to his family and shows you around the Forbesvue Dairy Farm located in the city of Sarnia. Their farm is home to 300 cows and produces approximately 7000 liters of milk per day. In addition to the dairy operation, the family farms 1000 acres of land, producing various crops including those used in feed for their cattle.	Alfalfa Bedding Cow Brush Crop Rotation Dry Cow Fertilizer Freestyle barn

		NOTE: A cow and newborn calf appear at time marker 04:50. The clip shows afterbirth.	Heifer Holstein Jersey Manure Milking Parlour Organic Matter Young Stock
From the Dairy Farm to Me Part 1	02.50	See what happens in the modern milking parlour. The cows at Forbesvue are milked twice a day, 365 days a year.	Disinfect Iodine Time temperature Recorder Tracking meter
From the Dairy Farm to Me Part 2	04.05	Farmer Kevin describes the safeguards in place that ensure the milk you consume is both a high-quality product and is safe to drink.	Acid Agitate Bacteria Colostrum Condensing unit Detergent Filter Food grade/food quality Fresh cow Grading milk Milk fat pH Plate cooler Suction Vacuum
New Life on the Farm	04.10	Approximately 300 calves are born each year at Forbesvue. Farmer Kevin explains the life cycle of a dairy cow.	Calf Colostrum Dry cow Heifer

		NOTE: A cow and newborn calf appear at time marker 00:51. The clip shows afterbirth. A live birth is shown between time marker 1:01 to 1:24.	<ul style="list-style-type: none"> Immune system Macronutrient Micronutrient Milking cow Nutritional needs Pregnant Recuperate Salt block Ultrasound
Cow Comfort and Care Part 1 – Environment: Where Cows Live	04:43	Find out why having a Vet Room and a Freestyle Barn contribute to healthier and more comfortable cows.	<ul style="list-style-type: none"> “Cow Card” “Days in Milk” Bacteria Cow management software Cow number Footing Holstein Canada Registry Milk fat Milk protein Production Skid steer Stress-free environment Udder
Cow Comfort and Care Part 2 – Nutrition: what Cows Eat	05:00	What’s on the menu for the Forbes dairy herd? Find out how cow feed is produced on-farm, what goes into the mixture, how often and when cows are fed, and how a cow’s digestive system differs from that of a human.	<ul style="list-style-type: none"> Alfalfa Barley Barley silage Canola meal Consistent Corn silage Forages Haylage Ingredients

			Juno Minerals Nutrients Nutritionist Percent moisture Pre-mix Protein Ration Sample Soy hulls
Cow Comfort and Care Part 3 – Cow Collars; A Fitness Tracker for Cows	03:12	Cow collars are like a fitness tracker humans might use. Discover what data is collected, what this tells Farmer Kevin, and how the information is used to make decisions about treating sick animals and breeding cows.	Breeding Cow Collars Cud Ruminates Regurgitate In heat

Follow-up Discussion and Research

- Create an infographic to describe the Forbes' farming operation.
- What did Farmer Kevin mean when he said, "All milk in Ontario is local"?
- Why would pregnant cows need a different type of feed?
- Why would the farm have a separate Vet Room?
- Why would Farmer Kevin want the barn to be the cow's "Happy Place"?
- Why are there different feed mixtures for heifers, milking cows, and dry cows?
- What are the parts of the cow's digestive system and what is their function?
- Explain and give examples of how automation and technology is used on the farm. How do you think these tasks were accomplished prior to having this technology? What are the consequences of the technology for the farmer?

- Farmer Kevin said that the most important thing he wants people to know is that their farm puts cow care and comfort at the forefront in all the decisions made on the farm. Explain why this is important.
- There are lots of examples of cycles on the farm. Describe an example of a cycle.

Additional Background Information & Links

- Food and Farm Care Ontario Resource Page <https://www.farmfoodcareon.org/resources/> where you can find:
 - FarmFood360 – immersive virtual tours of working farms and food processing plants.
 - The Real Dirt on Farming – a guide to food and farming in Canada
 - Farm Glossary
 - Additional Links on the Resources page to take you to:
 - Agriculture in the Classroom Canada
 - AgScape (Ontario Agri-Food Education)
 - Agriculture More than Ever
- Dairy Farmers of Ontario <https://new.milk.org/> (See school programs and resources on their “In-Schools” page under “In the Community”.)