

LESSON 3

Dairy in Our Environment

Going Round and Round
Grades 3rd to 5th

DISCOVER Dairy

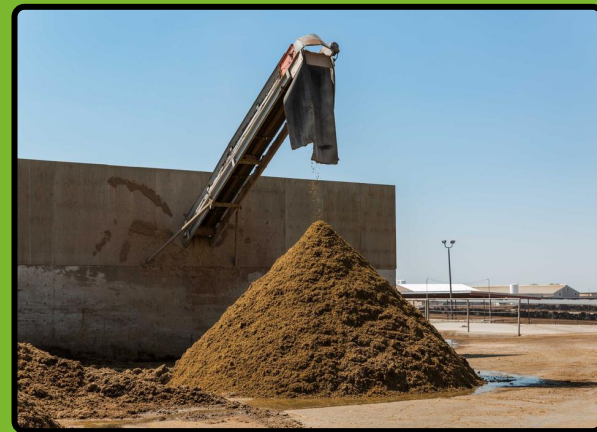


»» Introduction



HOW DO FARMERS PROTECT OUR ENVIRONMENT?

Farmers take good care of the land where they live and work. They use environmentally friendly practices on their farms to make sure that air and water are kept clean and healthy.



»» Words to Learn



DAIRY DEFINITIONS

Crops: What a farmer plants in a field and grows into food for people and feed for the animals

Dairy Herd Manager: A person who takes care of the cattle on the dairy farm and also the people who work with them

Environment: The surroundings in which a person, plant or animal lives

Field: A piece of land where a farmer plants crops

Manure: Waste made from a cow's body

Methane: A natural energy producing gas

Methane Digester: A machine that pulls the methane out of the manure to make electricity

Nutrients: A substance that helps things grow

Recycle: To use something again

Soil: The top layer of the field where farmers grow crops

»» Activating Strategy



DISCOVER DAIRY IN OUR ENVIRONMENT

Let's discover how dairy farmers recycle water and manure on their farms



INTRODUCTION

How do dairy farmers use manure over again?

A large, stylized white splash of milk or cream is positioned at the bottom of the slide, set against a solid green background. The splash has several peaks and valleys, with some smaller droplets appearing to be in motion.

Let's explore how farmers reuse manure to protect our environment.

»» All About Manure



COWS PRODUCE MANURE



Cows are just like any other living being. They drink lots of water, eat lots of food, and produce a lot of milk.



Their bodies also produce waste or cow manure. This waste must be properly handled.

»» All About Manure



MANURE AS FERTILIZER



Cow manure is rich in nutrients and contains a lot of water. Farmers recycle this manure.



The manure is spread on crop fields to give nutrients and moisture back into the soil to help crops grow.

»» All About Manure



MANURE AS BEDDING



Manure can be recycled into bedding for the cows by a manure separator. The separator takes the water out of the manure leaving just the organic matter.



Manure bedding does not smell. Using this process, farmers do not have to buy sand, straw, or other popular bedding materials which saves money.

»» All About Manure



MANURE AS ENERGY



Manure can be recycled into electricity by a methane digester.



The digester converts the manure into methane – an energy-producing gas.



Farmers can produce enough electricity for their farms and their community.

»» Recycled Manure



INTRODUCING COW POTS – A BETTER BIODEGRADABLE

Discover how a Connecticut dairy farm recycles their manure into a biodegradable container to put plants in the ground.

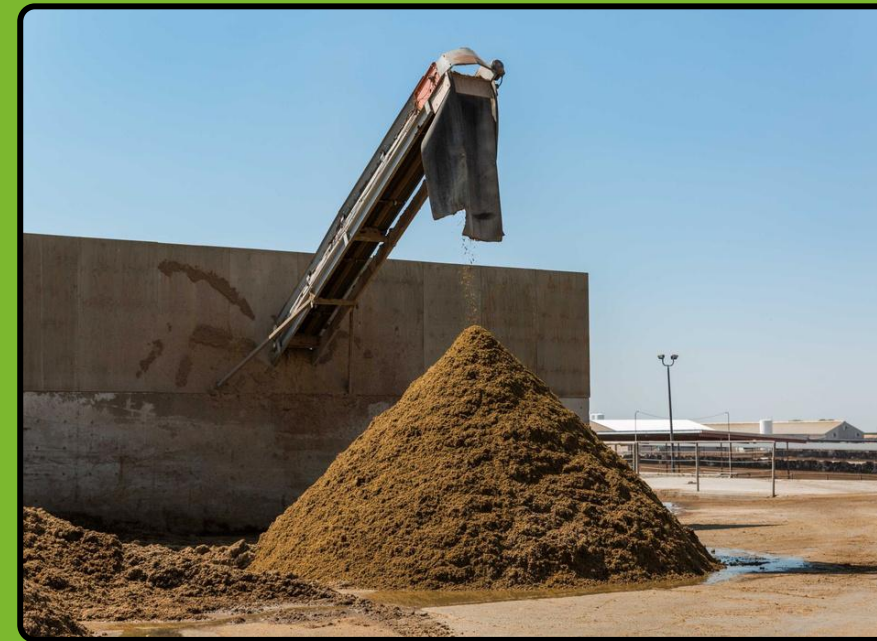
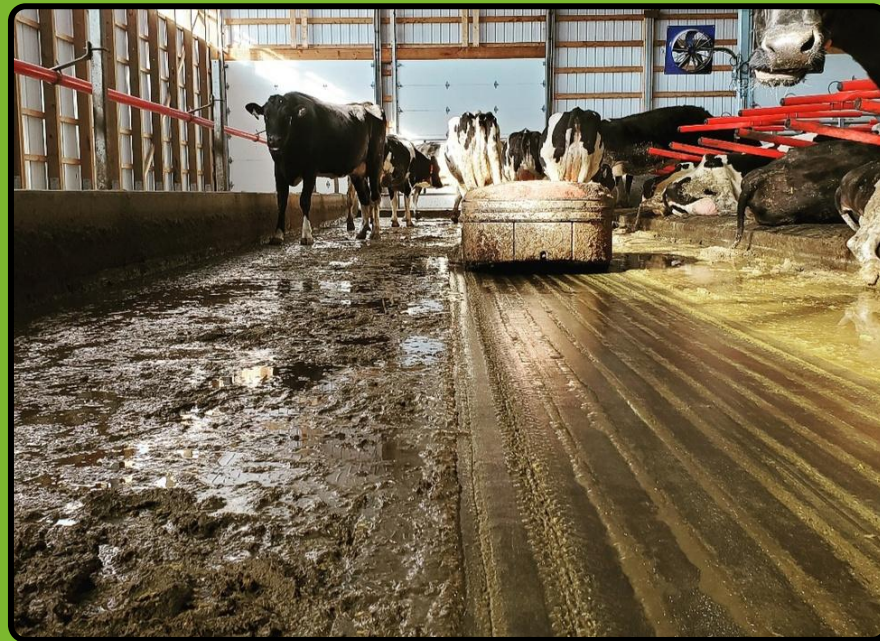


»» Going Round and Round



CLOSURE

Share one way that dairy farmers recycle their cow manure.



»» Career Spotlight: Dairy Herd Manager



INTRODUCTION

A dairy herd manager oversees the day-to-day operations of the dairy farm that deal with the cattle from calves to adult cows.



»» Career Spotlight: Dairy Herd Manager



ACTIVATING STRATEGY

Let's discover the career of a dairy herd manager



»» Career Spotlight: Dairy Herd Manager



WHO IS THE DAIRY HERD MANAGER?

The dairy herd manager takes care of all the cattle (calves, heifers, milking cows, and dry cows) on the dairy farm.



»» Career Spotlight: Dairy Herd Manager



DAIRY HERD MANAGER RESPONSIBILITIES

1. Breed heifers & cows
2. Care for and treat sick cattle
3. Manage the milk operations and procedures
4. Develop feed rations
5. Analyze cattle data
6. Oversee employees within supervised areas
7. Work with veterinarian and nutritionist



»» Career Spotlight: Dairy Herd Manager



DAIRY HERD MANAGER EDUCATION

- High School Diploma with an Apprenticeship
- Associate or Bachelor's Degree in Animal Science or Livestock Management



»» Career Spotlight: Dairy Herd Manager



CLOSURE

- Tell us one way that dairy herd managers care for dairy cattle.
- Are you interested in being a dairy herd manager when you grow up?



»» Recycled Milk Carton Activity



INTRODUCTION

Let's do an activity to help us remember how recycling can help the environment.

How do dairy farmers take care of the environment?

»» Recycled Milk Carton Activity



BEFORE



AFTER



»» Our Job to Recycle

HOW CAN WE DO OUR PART TO CARE FOR THE ENVIRONMENT?

- Recycle water when doing things at home like brushing teeth, washing hands, and taking showers.
- Recycle aluminum and tin cans, plastic bottles and containers, glass bottles and jars, and papers and newspapers. Take them to a local recycling center.
- Recycle materials for art projects.



**Share one way you
can take care of the
environment like dairy
farmers do.**

