

Farming and Dairy

This lesson meets State Standards **B.8.1** Interpret the past using a variety of sources, such as biographies, diaries, journals, artifacts, eyewitness interviews, and other primary source materials, and evaluate the credibility of sources used, **B.8.8** Identify major scientific discoveries and technological innovations and describe their social and economic effects on society and **D.8.9** Explain why the earning power of workers depends on their productivity and the market value of what they produce.

The farming and dairy is a prominent part of Marathon County. We are looking at it from the historical perspective in the power point presentation and a more modern day perspective in the expansion activities.

Included in this lesson is a Power Point presentation filled with primary sources and exhibit pictures for Farming and Dairy in Marathon County. The presentation is a great preview or post lesson activity for the exhibit. Along with the power point presentation is a list of vocabulary terms highlighted throughout the presentation. We also included expansion activities to go with the lesson.

Vocabulary

Dominated

Recipients

Subsistence

Creameries

Make ends meet

Rural

Flourish

Cooperatives

Vast

Cultivation

Expansion Activity Suggestions

1. Try one of the Opinion Cards Activity ideas.
2. Do a cheese or milk tasting in class.
3. Make butter as a class.
4. Learn about a cow with a hole in its stomach with an online video.
5. Debate which is better/easier to care for a cow or a crop.

Opinion Cards Activity

The cards included can be used in various ways. Here are a few suggestions;

- Play scoot
- Have students fill in their answers and form a continuum in the classroom having students stand where their opinion falls. Have students share their opinions trying to sway students to their part of the continuum.
- Use the cards during the power point presentation for reflections.
- Use the cards as a jumping board into a writing activity.
- Use them as task cards.

Opinion Cards

Why were cheese factories important to the community?

Why do you think dairy farming is prominent to Marathon County?

Besides farming, how could settlers make money in Marathon County?

Would you have put in the hard work to start a farm?

Explain your answer.

Milk Tasting

There are a variety of types of cow's milk available today in the grocery store. While settlers only drank whole milk fresh from the cow, that is impossible to purchase at the local grocery store. We have other choices, such as pasteurized or ultra pasteurized varieties of whole milk, 2% milk, 1% milk, skim milk, and even fortified Vitamin D milk. You may even try cream or half and half.

	Taste	Texture	What would you use this type for?	Would you drink this?
Whole Milk 3.5%fat				
2% Milk				
1% Milk				
Skim Milk 0% fat				
Vitamin D Milk				
Cream				
Half and Half				

For more cow's milk information check out these websites!

<http://www.healthyeating.org/Milk-Dairy.aspx>

<http://www.dairydoingmore.org/>

<http://www.wmmb.com/wdc/overview.aspx>

Cheese Tasting

Living in the heart of America's Dairy Land allows us the opportunity to try out the latest dairy creations, as well as, the tried and true favorites. You have the opportunity today to try five different cheeses made in Marathon County. As you do the tasting think about the cheese process.

Cheese Type	Taste	Texture	What would you use this type for?	Would you eat this?

For more Wisconsin Cheese information check out this website!

<http://www.eatwisconsincheese.com/cheese/wisconsin-cheese.aspx>

How to Make Butter

Settlers in Marathon County had to be self-reliant for a few years before stores came to town. Even once the stores arrived, they only carried dry goods. Most families had at least one cow for milk. A few times a week the children would turn the cream into butter. If you have an old fashioned butter churn take a look at the parts and figure out how it worked. Today you will not be using a butter churn, but it will take arm power.

This process may be done as a group with one large jar and a marble, or individually with baby food jars.

Supplies:

Chilled whipping cream

Clean Jar(s) with lids

1 marble

Procedure:

Fill the jar 2/3 full with chilled whipping cream; add the marble to the large jar. Screw on the lid very tight and begin to shake. If you are using one jar, pass it around so everyone has a chance to shake the cream.

The cream will become very thick, like whipped cream. Take a look in the jar but do not taste, it does not have sugar in it.

Return the lid and continue shaking, it will sound like it has gone back to liquid, that is because the fat has separated from the buttermilk.

Once you have a ball of butter, discard the buttermilk and keep the ball of butter.

Try the butter in its original state, notice it is white, not yellow.

Mix in some salt and try it again.

If you want yellow butter, you need to add yellow food coloring.

Hole-y Cow!

Veterinarians have been studying cow digestion for the last few years. One way they do this is by putting a window or hole into a cow's stomach.

Watch the You Tube video Titled Hole-y Cow about a cow named Portia.

<http://www.youtube.com/watch?v=dY4QkhwQMRA>

or watch Mike Rowe on Dirty Jobs

<http://dsc.discovery.com/tv-shows/dirty-jobs/videos/holey-cow.htm>

If these videos do not work, many others are available on the internet.

Discussion Questions:

Why do veterinarians insert holes into the side of cows?

How many parts of a stomach does a cow have?

Why do they put the hole in the first chamber?

What happens to the cow's digestion if it gets sick?

How do the veterinarians help a cow's digestion get better?

Do you think this is a good way to study and help animals?

What other ways could be used besides installing a hole into the cow?

Could this procedure be used on other animals?

Cows vs. Crops

Debate

Many farmers have both cows and crops on their farms. Is one better than the other? Is one easier to care for than the other? You will decide in a debate. You will be divided into two groups and given time to formulate your arguments. If you have time, it would be wise to look up some facts to support your argument.

Use the following to begin formulating your argument, do not stop with this list, but come up with ideas of your own too!

- How much does it cost for cows or crops?
- How much time does it take to care for cows or crops?
- How long do you need to wait for a return on your investment?
- Do you need a specialist for your cows or crops?
- How much work is it at the end of the life of the cows or crops?
- Can you use the cows or crops to survive?
- What type of storage space do you need for cows or crops?
- Do you need any special equipment for cows or crops?
- Do you need special training or schooling to care for cows or crops?

During the debate, your teacher will set the rules. Listen carefully so you are not disqualified! Have fun!