NORTHEAST IOWA
DAIRY & AGRICULTURE
FOUNDATION

IOWA STATE UNIVERSITY
Extension and Outreach
Healthy People. Environments. Economies.

Iowa's Dairy Story
Dairy Maps Lesson

Objectives:
1. Students will learn about the history of dairy cattle numbers and production in Iowa.
2. Students will understand why dairy farming is so important in northeast Iowa.
3. Students will learn interesting facts about dairy cattle breeds.
4. Students will recall information about each of the dairy breeds.

Iowa Core Curriculum Met:
Mathematics Standards
- Content Standard 4: Students can interpret data presented in a variety of ways.

Science Standards
- Content Standard 2: Students can understand concepts and relationships in life science.

Literacy Standards
- Content Standard 1: Students can comprehend what they read in a variety of literacy and informational texts.

Supplies Needed:
Download the PowerPoint with the maps that show information on cow numbers in the United States and in Iowa in the years 1925 and 2020.

Duration: 15-20 minutes

Teaching the Lesson:
You will be using the information below to share with the students.

Maps Statistics:

Compare prevalence of dairy cows in United States – by looking at U.S. Maps first
1. 1925 – total of 21,000,000 cows
   a. *What were the Top 3 States?* Wisconsin 1,942,000, Minnesota 1,482,000, New York 1,342,000
   b. *What were the Lowest 3 States?* Nevada 19,000, Rhode Island 22,000, New Mexico 62,000

          i. *Any ideas why Hawaii and Alaska have no cows?* They were not states in 1925. They became states in the late 1950's.
         ii. *How many cows did Iowa have?* 1,261,000 (4th in the Nation)

2. 2020 – total of 9,334,600 cows
   a. *What are the Top 3 States?* California 1,725,000 Wisconsin 1,260,000, New York 625,000.
   b. *What are the Lowest 3 States*? Alaska 300, Rhode Island 600, Hawaii 700
      i. *How many cows does Iowa have?* 215,000 (12th in the Nation)

Compare prevalence of dairy cows in Iowa – by looking at Iowa Maps second
1. 1925
   c. *What were the Top 3 Counties?* Bremer 27,188, Fayette 24, 282 and Clayton 20,073
2. 2020
   a. *What are the Top 3 Counties?*: Sioux County 35,000 - Dubuque County 21,500 - Winneshiek County 16,100
3. *What were the Lowest 3 Counties in 1925?*
   a. Monroe 1196, Montgomery 1363, Ida 1383
   b. *1997 there were 8 counties with 0 cows*
   c. *2003 there at 17 counties with 0 cows*
   d. *2007 there are 30 counties with O or very few cows.*
   e. *2010 there are 24 counties with O or very few cows.*

Now let's look at the "Average Milk Production Pounds Per Cow"
   f. *In 1925, Average Milk Production Per Cow Per Year 4,000 pounds*
   g. *In 2020, Average Milk Production per Cow per year 24,651 pounds, quite an increase (5x as much)*
Why is milk production so much higher now? In 1925, cows were milked by hand, each farm may have had a few chickens, pigs and a few dairy cows. Also, we know a lot more now about good cow nutrition, the importance of keeping cows comfortable.
   h. 2007 Average Milk Production per Cow per year 20,204 pounds
   i. 2010 Average Milk Production per Cow per year 20,751 pounds

Looking at the Sioux County on the NW side of the state... Why do you think they have the most cows in the state? (allow time for responses)

Has anyone been in LeMars?
   j. *Does anyone know what dairy factory is in LeMars?*

k. This is where Blue Bunny Ice Cream Plant is located and in Plymouth County. *That is why there is such a large number of cows in Sioux county which is very close to that ice cream plant.*
l. *In NE Iowa we have AMPI near Strawberry Point, Swiss Valley in Luana, WW Homestead Dairy in Waukon and Wapsie Valley in Independence all making cheese, and other dairy products.*
m. *There are other dairy processing plants in other parts of Iowa as well, but we have the most here in Northeast Iowa which is helpful for our local dairy farmers*

Processors and Plants Map

Here you can show the kids the map that identifies where processing plants are. Identify a creamery in your area and demonstrate how students can use the poster to identify where processors are located and what types of dairy products they process.