



Lessons presented by
Oklahoma State University
 Ferguson Family Dairy Visitor Center
 With Southwest-Southland Dairy Farmers

Instructor	Jaycie Heath
Grade Level	6-8
Lesson Title	OSU Dairy in Person Tours

TEACHER PREPARATION

Learning Goals & Standards/Performance Indicators	
Learning Goals	Standards
1. Upon completion of this lesson students will be able to better understand what the Oklahoma State Ferguson Family Dairy does and its history.	1. <u>SS: 6.4</u> The student will analyze the interactions of humans and their environment in the Western Hemisphere. <ul style="list-style-type: none"> <input type="checkbox"/> 6.4.1 Describe the commercial agriculture and industrial regions that support human development <input type="checkbox"/> 6.4.2 Evaluate the effects of human modification on the natural environment through transformation caused by subsistence and commercial agriculture, industry, demand for energy, and urbanization. 2. OKH.6.2 Analyze the impact of economic growth in various sectors including: <ul style="list-style-type: none"> <input type="checkbox"/> C. continuing role of agriculture 3.
Resources and Materials	
<ul style="list-style-type: none"> <input type="checkbox"/> Southwest- southland dairy farmers <i>Milk. From Cows to Kids</i> <input type="checkbox"/> Oklahoma Historical Society <input type="checkbox"/> OSU Timeline, A history of Oklahoma State University <input type="checkbox"/> History of the Oklahoma State University Division of Agriculture <input type="checkbox"/> Visuals in the center <input type="checkbox"/> Student tour guides <input type="checkbox"/> 	
Announcement and Other Preliminaries	
1. Welcome students to the Ferguson Family Dairy, introduce self and what you do for the dairy, etc.	

LESSON DELIVERY

Anticipatory Set

- This is the Ferguson Family Dairy Visitor Center, and it opened in October of 2020, not too long ago. However, Oklahoma State has been involved with dairying since at

least 1902- can anyone tell me how long that is?

- Does anyone have any ideas what might have changed here at the dairy in the past 100 years? (technology, buildings, the cows, etc.)
- Well, today we are going to learn more about what has happened and changed with the Oklahoma State dairy in those 100+ years to bring us to where we are today.

Direct Instruction

1st Learning Goal: Upon completion of this lesson students will be able to better understand the history of the Oklahoma State Ferguson Family Dairy.

Content Outline	Instructional Strategies
<ul style="list-style-type: none"> ● First dairy specialist was brought to campus in 1903. (History of OkState Ag) ● Three Holsteins (2 cows, 1 bull) constituted the beginnings of the college dairy herd. (History of OkState Ag) ● The first Dairy Building was built in 1904 at a cost of \$7,900. On the first floor, the structure contained a classroom, a small dairy processing plant, and a milking room. (History of OkState Ag) <ul style="list-style-type: none"> ○ This new building replaced the outdated facility in the Horse Barn. A wing was eventually added to expand the dairy's creamery. The creamery was a popular social attraction for students, faculty, and staff in search of inexpensive dairy products, especially ice cream. (OSU Timeline) ● The department of dairy husbandry established in 1907. (History of OkState Ag) ● The college [did not have a large herd] of dairy cows, so the dairy plant started its operation by purchasing milk from local farmers. [Faculty] insisted that the "college had no thought of going into the creamery business but it did want to point the way and to encourage the buying of separators and the feeding of cows, promising to provide a market for the cream for a time." (History of OkState Ag) ● The Dairy Barn, a large frame building, was added in 1910 to accommodate a new herd of 	<ul style="list-style-type: none"> ● Primary visual resource will be images collected from the OSU Library Archives.

1st Learning Goal: Upon completion of this lesson students will be able to better understand the history of the Oklahoma State Ferguson Family Dairy.

Jersey milk cows, which now supplied dairy products to the new boy's dormitory. Its two milking wings were each 60 by 35 feet. The ground floor of the primary barn accommodated box stalls and grain bins while the upper floor was used for a hayloft. The milking wings had concrete floors, galvanized iron stanchions, and mangers (James' Sanitary Stalls) to handle sixty-six cows. (History of OkState Ag)

- In 1915 the department of animal husbandry now had complete control of the dairy cattle—thirty registered Jerseys. (History of OkState Ag)
- Holstein-Friesians were added [to the herd] in 1916. That year animal husbandry added a course in dairy cattle feeding, management, and judging. (History of OkState Ag)
- A large new dairy barn of steel and brick was completed on the far west side of the farm (west of campus) in 1923. (History of OkState Ag)
 - Building of this building signaled the continued expansion of the dairy operation. (History of OkState Ag)
- A seed herd of 5 Ayrshire cows was added to the jerseys and Holsteins in 1924. (History of OkState Ag)
- The dairy club was chartered in 1924 with 25 members. (History of OkState Ag)
- The dairy judging team had members place at the national dairy judging contest in 1924. (History of OkState Ag)
- Almost from the beginning of the college dairy, a number of payne county farmers had sold their raw whole milk to the dairy plant to meet the expanding output of products.
 - On July 1, 1925 the college entered a contract with the Payne County Milk Producers' Cooperative to operate the college dairy plant using some student labor. (History of OkState Ag)

1st Learning Goal: Upon completion of this lesson students will be able to better understand the history of the Oklahoma State Ferguson Family Dairy.

- Due to high demand from the creamery, the college encouraged upper class students to keep milk cows on the farm. By 1925 ten students owned 2 cows each, costing as much as 250 per head and (probably) purchased from the schools registered herds. (History of OkState Ag)
- Rapid expansion in dairy products manufacturing led to the construction of the new three-story dairy building (completed 9/1/1928). (History of OkState Ag)
 - The dairy science building was constructed in 1928 and it housed the Departments of Dairy Science and Agricultural Economics until 1962. (Oklahoma Historical Society)
- A dairy products judging team began in 1928. (Oklahoma Historical Society)
- On the farm, a mile west of the campus, a new dairy barn was completed in December of 1948 at a cost of \$250,000. Dubbed the "Dairy Palace," the facility contained stalls for eighty cows, milking parlors complete with pre-milking baths and milking machines connected directly to a cooling room, a dairy cattle judging arena, and an adjoining "maternity ward." (History of OkState Ag)-*guide students to think back to the first dairy building that cost on \$7900 and was built less than 50 years earlier to help them understand the growth of the dairy.*
- Poultry science, dairy science, and animal science joined in 1967 to form the Institute of Animal Sciences and Industry. In 1976, the name was shortened to Department of Animal Science. (History of OkState Ag)
- The current parlor was built in 1987. (Oklahoma Historical Society)
- October of 2020, OSU Ferguson Family Dairy Visitor Center opened.

Learning Activity

1st Learning Goal: Upon completion of this lesson students will be able to better understand the history of the Oklahoma State Ferguson Family Dairy.

- Students should receive a timeline with key events outlined and blanks for dates or important words to fill in as they listen to the presentation.

Closure

Closing Announcements/Reminders

- Answer any questions they may have
- Show them the robot and viewing windows one more time
- Thank students for coming to the Ferguson Family Dairy