

Ag Education and Extension: William Bentley and Bermuda John Fields

1. Read and discuss the stories of William Bentley and Bermuda John Fields. Early county Extension agents traveled by train, horse, horse and buggy or by foot to the farms where they provided advice and demonstrated the latest agricultural techniques. Students will pretend they are early county agriculture extension agents and calculate how long it would take to get from the county seat of your county to various locations within the county, traveling by foot.
 - Calculate how long it takes to walk a mile or some other distance, or use a pedometer to determine the number of steps.
 - Identify the county seat of your county.
 - Select a town in your county.
 - Use a road map or online map tool to determine the distance between the county seat and the town you have selected.
 - How long would it take to walk from the county seat to the town you have selected? How many steps?



Ag Demonstration Train

Oklahoma Academic Standards

GRADE 3

Citizenship: 1.2. Economics:
3. Geography: 1A; 2B

Number & Operations:
2.2,4,5. Measurement: 2.3

Vocabulary

compulsory— required by or as if by law

demonstration— an explanation (as of a theory) by experiment

diversification—increase the variety

domestic— of or relating to a household or family

economy— of, relating to, or based on the production, distribution, and consumption of goods and services

experiment— a procedure or operation carried out under controlled conditions in order to discover something, to test a hypothesis, or to serve as an example

Extension Service— a non-formal educational program designed to help people use research-based knowledge to improve their lives

experiment station bulletin— a brief public notice produced by the Agricultural Experiment Station

horticulture— the science of growing fruits, vegetables, flowers, or ornamental plants

invasion—the act of spreading over or into, usually harmfully

investigate— to study by close examination and systematic inquiry

legislature— an organized body of persons having the authority to make laws

livestock—farm animals kept for use and profit

management— the act of looking after and make decisions about

mandatory— containing or constituting a command

provision—condition

seed purity— agricultural or vegetable seeds exclusive of inert matter, weed seeds, and all other seeds distinguishable from the kind or kind and variety being considered

shallow cultivation— to loosen or break up the soil at little depth to maintain organic matter and soil structure

technique—a method of accomplishing a desired aim

territorial— of or relating to a geographic area belonging to or under the control of a government (Indian Territory)

William Bentley and Bermuda John Fields

WILLIAM BENTLEY AND THE AG DEMONSTRATION TRAINS

Cotton was Oklahoma's number one crop at the time of statehood, just as it was throughout the South. A few years earlier the cotton crop had been threatened by an **invasion** of the boll weevil, an insect pest from Mexico that destroyed crops in Texas, Oklahoma and Arkansas. Because cotton was so important to the US **economy**, the US Congress set aside money to **investigate** ways to stop the boll weevil. The US Department of Agriculture appointed Seamon Knapp to be in charge of the investigation. Knapp believed farmers needed to change the way they farmed. He thought the best way to convince them was through farming **demonstrations**.

One of the farmers Knapp hired to conduct these demonstrations was William Bentley, a successful fruit farmer from Wichita Falls, Texas. Bentley had used **diversification** and careful **management** to become one of the most successful farmers in his county. Agricultural demonstration trains carried Bentley and other demonstrators, who conducted meetings in the leading towns along the railroad line. The demonstrators organized **institutes** at each stop and gave lectures on a variety of farm topics. This was the first of what was to become the **Extension Service**.

As one of the first six Extension agents in the nation, Bentley spent long days riding from farm to farm signing up farmers to demonstrate the **techniques** he was teaching. The first programs consisted of instruction in **seed purity**, deep plowing, frequent **shallow cultivation** and growing of all home supplies.

Demonstration trains were part of Extension work for the next 10 years. In 1907, Bentley was appointed to extend his work into Oklahoma. He retired 25 years later as the first director of the Oklahoma Extension Service. Along the way he and his agents also started 4-H clubs in Oklahoma.

BERMUDA JOHN FIELDS

One of the first acts of the **legislature** of the Oklahoma Territory was to establish an agricultural college in Stillwater. Iowa-born John Fields was one of the first two assistant professors. In 1899 he was appointed first director of the Oklahoma Agricultural Experiment Station. The purpose of the Experiment Station was to conduct **experiments** to help Oklahoma farmers.

Fields was a very good speaker. For the next several years he became the most familiar figure in Oklahoma associated with agriculture. He was one of the authors of a **territorial** law passed in 1905 making the teaching of agriculture in the public schools **mandatory**. The next year the Oklahoma Constitutional Convention included a **provision** in the new constitution for the **compulsory** "teaching of the elements of agriculture, **horticulture**, **livestock** feeding and **domestic** science."

Fields was responsible for popularizing and distributing Bermuda grass in the state. This all-purpose **pasture** and lawn grass made its appearance in Oklahoma around the turn of the century. Fields gathered the available information on the grass and planted it on the college farm in 1900. He **sodded** the campus with it, pastured **livestock** on it and published an **experiment station bulletin** on the subject. As late as 1903, some farmers still believed the plant to be harmful to livestock. To overcome their worries, Fields raised and shipped Bermuda grass roots to all who would pay the shipping costs. He was very happy when important citizens such as former governor Thompson B. Ferguson, of Watonga, requested Bermuda grass for their lawns. The giveaway brought the grass and Fields a great deal of publicity. By June, 1906, roots had been shipped to more than 600 farmers, and some were calling Fields "Bermuda John."

In 1906 Fields resigned from the experiment station to become editor of the *Oklahoma Farm Journal*. He ran for governor in 1922 but was defeated by his opponent, John Walton.