Turkey Red Wheat

Children in Russia hand-picked the first seeds of this famous winter wheat for Kansas. They belonged to Mennonite Colonies preparing to emigrate from the steppes to the America prairies. A peace-loving sect, originally from Holland, the Mennonites had gone to the Crimea from Prussia in 1790 when Catherine the Great offered free lands, military exemption and religious freedom. They prospered until these privileges were threatened in 1871. Three years later they emigrated to Kansas, where the Santa Fe R.R. offered thousands of acres on good terms in McPherson, Harvey, Marion & Reno counties, and where the legislature passed a bill which exempted religious objectors from military service. Within a month after landing in New York the Mennonites planted the red~gold grains their children had selected. The harvest was the first of the great crops of hard Turkey Red and its derivatives that have made Kansas the Granary of the Nation.

Erected by Kansas State Historical Society & State Highway Commission

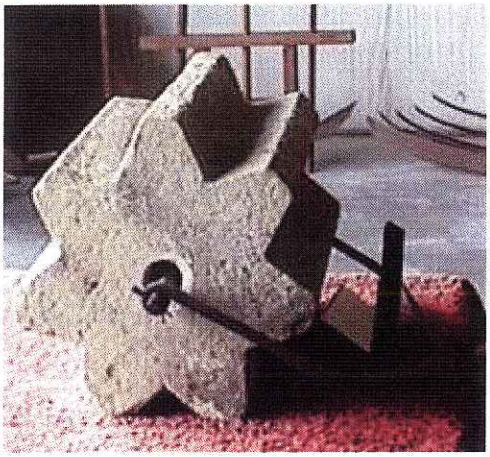
Marker text sent by Mike LeMasters, Wichita, KS

Historical marker on US-50
East of Walton
Harvey County

Turkey Red Wheat Palace

Mennonite Heritage Museum • Goessel, Kansas

The Turkey Red Wheat Palace is a tribute to the farmers who introduced and developed the wheat industry in Kansas. The Mennonites who settled in Kansas brought with them seeds of Turkey Red Wheat, a hard winter wheat, which proved to be productive and eventually developed Kansas into the "Bread Basket of the World". The Wheat Palace features a blacksmith shop, farm machinery and tools relevant to the late 1800s and early 1900s.



The Wheat Bell, a full scale replica of the Liberty Bell made from Turkey Red Wheat, is located in the Wheat Palace. The Bell was made in 1976 at the request of the Smithsonian Institution.

Sample Growing Wheat on the Great Plains Worksheet

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Growing Wheat on the Great Plains

By Sharon Fabian

1

Now

Wheat farmers in Kansas harvest hundreds of millions of bushels of wheat each year. One huge combine can harvest 1,000 bushels in just one hour. That's enough to bake 73,000 loaves of bread! The wheat is stored in giant grain elevators, nicknamed prairie skyscrapers, and then shipped out by railroad or semi truck.

2

Then

It wasn't always like that. The Native Americans didn't grow wheat; they grew corn. The early settlers tried to grow wheat sometimes, mostly as an experiment, but with little success. The prairie soil was too hard. There wasn't enough rain. High winds and dust storms made wheat farming even more difficult.

3 Then, in the early 1870's, Russian Mennonites began to immigrate to the American Midwest. The Mennonites were a religious group who came to America for religious freedom and freedom to live the way they wanted. Back in Russia, they had lived on the steppes, flat land similar to the Great Plains. There, they had grown winter wheat. When they came to America, each family brought a trunk full of wheat seeds with them. This winter wheat had the colorful name of Turkey Red Wheat.

4 Turkey Red Wheat is hardy enough to grow in wintertime, so prairie farmers planted it in the fall. They planted their first crop in 1873, using the steel plows invented to cut through tough prairie sod.

5 Over the winter, the wheat plants go dormant; this means that they stay alive but don't grow much. Then, in the spring, the plants spring back into action, growing taller each day. Soon, wheat heads are forming at the top of the wheat stalks. By early summer, the wheat is ready to harvest.

Paragraphs 6 to 9:
For the complete story: (edHelper subscribers) click here for printable story and worksheets.

Name _____ Date _____

Growing Wheat on the Great Plains

Sample

This is only a sample pre-made worksheet. Sign up now!

1. Turkey Red is a _____.
   - Kind of turkey
   - Color of paint
   - Sports team mascot
   - Type of wheat

2. This article is about _____.
   - How wheat is harvested today
   - How the Indians planted wheat
   - How wheat became an important crop on the Great Plains
   - How the early settlers cleared the wheat so that they could grow corn

3. From the information in this article, you can infer that, in the 1860's, _____.
   - Combines harvested large amounts of wheat
   - (B) Kansas was the breadbasket of the world
   - (C) Turkey Red Wheat was grown in Kansas
   - (D) Very little wheat was grown in Kansas

4. Turkey Red Wheat was brought to America by _____.
   - (A) Columbus
   - (B) The pilgrims
   - (C) Mennonites
   - (D) Indians

5. Winter wheat is planted in _____ and harvested in _____.
   - (A) Winter, summer
   - (B) Summer, winter
   - (C) Summer, fall
   - (D) Fall, summer

6. Mennonites came to America from _____.
   - (A) England
   - (B) Russia
   - (C) Ireland
   - (D) Germany

7. Mennonite farmers used reapers to harvest their first crops of Turkey Red Wheat.
   - (A) False
   - (B) True

8. Wheat plants should be harvested as soon as they are dry enough.
   - (A) False
   - (B) True

START OF THE WHEAT STATE

The first crop of wheat in Kansas was produced by the Shawnee Methodist Mission in 1839. Production in the state grew steadily, reaching 10,000 acres in 1863; 100,000 acres in 1869; and 1,000,000 acres in 1876. Yields were low, usually 10 to 20 bushels per acre, and the first 1,000,000-bushel crop was not harvested until 1866.

Settlers coming to Kansas brought small quantities of the wheat varieties that they had grown in the eastern US and Europe. These varieties usually came from areas with mild climates, however, and were adapted poorly to the state's environment. Many different types were introduced. Spring wheat, which matured late and often was injured by heat and rust diseases, predominated until 1875. The winter wheat that was grown was mostly soft grain; it was easier to mill with the equipment available at the time, but plants often lacked winter-hardiness.

The situation changed slowly but steadily after the well-known introduction of Turkey Red hard red winter wheat from Crimea to south central Kansas by German Mennonites from the Ukraine. Turkey Red was not a pure-line variety, but a type with substantial genetic variability introduced from several areas of the Ukraine. Many other early names, particularly Crimean and Kharkof, are synonyms for this variety. The first crop of Turkey Red was planted in Marion County in 1873 and harvested in 1874. Production increased slowly because seed supplies were short, but the wide adaptation of Turkey Red, invention of the steel roller mill in 1878, and severe winter-killing of other varieties in the 1890s promoted its spread. Turkey Red occupied over 82 percent of the wheat acreage in Kansas and nearly 30 percent of the wheat acreage in the US in 1919, when the first variety survey was made. It remained the most popular variety in Kansas until 1939 and in the US until 1944. Turkey Red, without a doubt, established the wheat industry in Kansas and became the standard for judging all other varieties.

In contrast to the wheat seed, much of the technology for planting, growing, and harvesting the crop was homegrown. Conditions in the Great Plains were so unlike those that settlers had known in the eastern US or Europe that few familiar practices could be applied directly. The prairie sod had to be broken and the soil worked, first by oxen and in later years by horses and mules. Improper preparation of the land often formed poor seedbeds for planting, wasted soil moisture and nutrients, and encouraged weeds that competed with the new crop. Broadcasting the seed, the usual practice, caused uneven stands that easily winter-killed. Seeding rates used in eastern Kansas had to be reduced in western parts of the state, so that the plants didn't deplete the limited soil moisture. A further reduction was required when broadcast seeding with its inefficient seed coverage and plant establishment was replaced by the grain drill and its precise placement of seed in the soil. The optimum planting date also was debated for many decades. Planting too early exhausted soil moisture and

increased losses from pests and winter-killing, and planting too late didn't give seedlings time to become established and hardened before winter set in. Production of wheat was extremely laborious with the equipment that settlers had. Although the steel plow was available for breaking the prairie sod in the 1830s, harrows were not widespread until the 1870s, grain drills until the 1890s, reapers until 1880-90, and tractors until the 1910s. The self-propelled combine, which probably typifies wheat production more than any other machine, was introduced in the 1920s. Chemical fertilizers and pesticides became important for wheat production after World War II. Until then, producers depended on the native fertility of the prairie soil to provide the nutrients needed for growth of wheat and on cultural practices and resistant varieties to control weeds, diseases, and insects. During the 1940s, nitrogen fertilizers became available from converted ammunition plants, and pesticides such as 2,4-D were developed by research.	

http://www.kswheat.com/index.asp This is a link to the Kansas Wheat Commission which should provide very good background information.

The following are publications from K-State covering your topic.
www.oznet.ksu.edu/library/crpsl2/SRL126.pdf

www.oznet.ksu.edu/library/crpsl2/srl120.pdf

www.oznet.ksu.edu/library/4h_y2/4h604.pdf

www.oznet.ksu.edu/pr_histpubs/Pubs/SB176.PDF

www.oznet.ksu.edu/pr_histpubs/Pubs/cont141.pdf

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