

This backgrounder covers:

- ☀ Central Experimental Farm
- ☀ Early wheat researchers

Central Experimental Farm

In 1886, Canada established the Central Experimental Farm in Ottawa, Ontario. The Farm became the centre of research activities to improve agriculture and crops. At the same time, four other research farms were created in the following parts of the country: Nappan, Nova Scotia, Brandon, Manitoba, Indian Head, Saskatchewan and Agassiz, British Columbia.

Over a hundred years later, the Central Farm still exists, it still conducts scientific study on plants and crops, and it still houses the federal head offices of Agriculture and Agri-food Canada. The network of experimental stations has grown from the original four plus the Central Farm, to a total of 19 research stations across Canada. The Cereal Research Centre in Winnipeg focuses on cereals including wheat.

In 1998, the government declared the Farm a National Historic Site and shifted focus to include historical education and recreation, acknowledging the Farm's significance in the evolution of agriculture in Canada.

Today the Farm and surrounding 400 hectares of land hosts tours, exhibitions and activities—all designed to raise the profile and understanding of agriculture in Canada, then and now. For instance, a visit to the Agricultural Museum on the site, can introduce you to unique plants, a variety of tree and shrub species, and a hedge collection that dates back to 1891. At the Museum you can also follow the changes in threshing machines over the years and glimpse how technology shapes agriculture.

Early wheat researchers

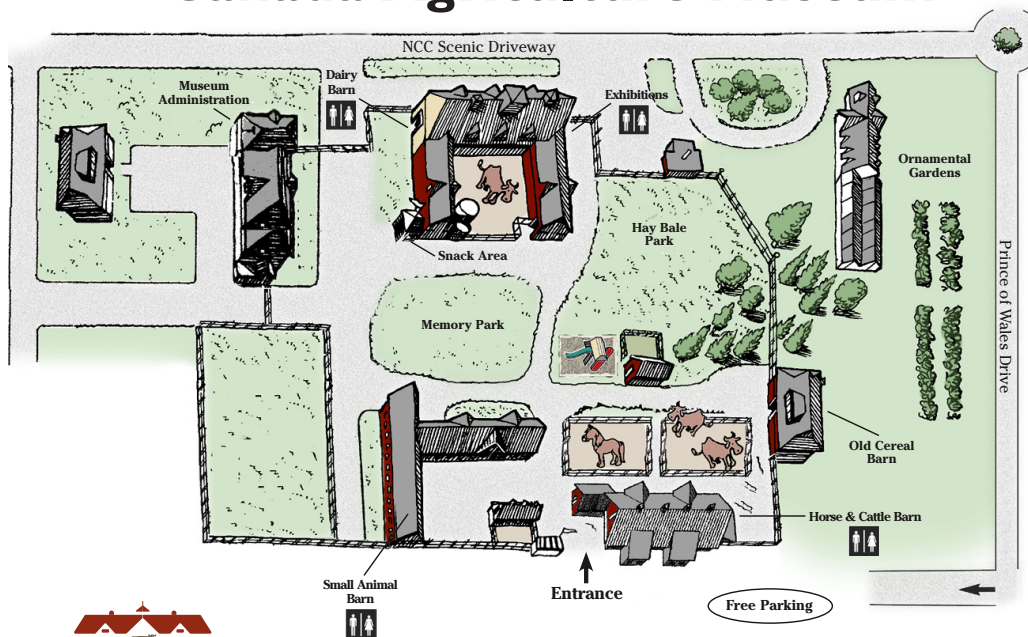
The Farm's history is rich in agricultural achievements. Two individuals in particular—both from the same family—left their imprints on today's wheat industry.

William Saunders 1836 – 1914

William Saunders was born in England and moved to Canada in 1848. His passion was plants. As a druggist, naturalist and agriculturist, his interests led him to pursue scientific study for the purpose of improving plants. When insects began attacking his plants, he looked for answers. And in 1863 he helped found the Entomology Society of Canada and served on its first board of directors. Entomology is the study of insects, including the control of insects.

An 1885 report by William Saunders contributed to legislation that, one year later, established the first-ever Dominion Experimental Farm. Saunders was appointed director of what was then called the Experimental Farms Service. While Director he launched the wheat-breeding program where his son, Charles Edward, later channeled his talents.

Canada Agriculture Museum



Sir Charles Edward Saunders 1867 – 1937

Charles was the third son of William Saunders and not the only Saunders boy to engage in plant research. Although all four sons assisted their father, Charles displayed the greatest talent. He had a keen eye for the scientific method, an abundance of patience and “a good set of teeth.” (his own words from his memoirs)

Charles used the “laboratory of his mouth” to advance wheat breeding. He assessed the quality of the wheat seeds by first rubbing them between his palms, and then tossing a few kernels into his mouth for a quick chew and taste. He was remarkably accurate.

Today, sophisticated technology assesses wheat quality in Canada’s ongoing wheat breeding programs. Wheat breeding is a science focused on improving existing varieties of wheat and discovering whole new varieties. Wheat research remains an important activity in Canada, where wheat farming is part of the economic backbone of the country.

During Charles’ tenure as Dominion Cerealist at the Experimental Farm, Charles created the wheat strain called, Marquis, that today remains the standard for bread-making.

Marquis wheat had many desirable features. First, it weathered our weather well ... it matured before the frost which is no small feat in Western Canada. Second, it produced a high-quality flour.

Charles Edward Saunders retired from plant breeding after 22 years to pursue his other love—music. He was knighted in 1934 for his exceptional role in the advancement of wheat farming.



Companion activities/Resources:

✓ Growing Wheat

Websites worth checking out:

- ✓ Canada’s Agricultural Museum www.agriculture.technomuses.ca/
- ✓ Grains-they’re essential! Program www.grainsessential.ca

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