ACCELERATOR

Stockholms universitet

Historical Works and Objects

In the exhibition *The Experimental Field*

View of the Experimental Field, ca. 1840
Pehr Gustaf von Heideken, 1781–1864
Watercolour

The watercolour by Pehr Gustaf von Heideken was created soon after the building in the image, Bloms hus, was constructed. It was planned to be erected as early as 1816 but a lack of funds delayed the completion of the building until 1838. Designed by architect Fredrik Blom (1781–1853), Bloms hus was the Experimental Field's principal building. Fredrik Blom also designed the Royal Swedish Academy of Fine Arts, Galärvarvet, Skeppsholmen Church and the Italian Embassy, all in Stockholm. The building was used for various purposes throughout several decades, first serving as the main building of the Academy and as that of the Agricultural Chemistry Department. Today, the building houses the senior management team of Stockholm University and the departments of planning and communication. The Experimental Field's lavish main building and the landscaped architecture of lawns and trees along the roads created a park landscape that blended into the royal area around Brunnsviken.

Collection: Nationalmuseum, Stockholm

***Sweden's Cultivated Plants,* 1893–1894**
Henriette Sjöberg, 1841–1915
Seven plant illustrations, watercolour on carton

Henriette Sjöberg was the first woman in Sweden to devote herself to botanical illustrations. In 1869, she was commissioned by the Royal Swedish Academy of Agriculture and Forestry to create images of the Experimental Field's vegetation. Hampus von Post initiated the project, which was called Sweden's Cultivated Plants. Sjöberg depicted more than 700 varieties of plants, a large number of which were cultivated in the Experimental Field, including vegetables, fruit, meadow plants and assorted cereals. Various types of plants were introduced from many parts of the world, mainly from the Alps and the mountainous areas of Africa, America and Asia. Of the many types of cereals that were introduced, several experiments were carried out in the middle of the 19th century on barley from the Himalayas.

Collection: Royal Swedish Academy of Agriculture and Forestry

***View of the Experimental Field from the South West,* 1842**
Lorens Wilhelm Brandenburg, 1794–1850
Watercolour

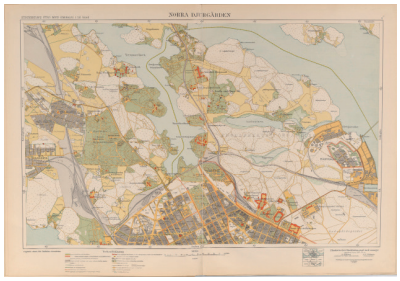
Lorenz Wilhelm Brandenburg was a land surveying consultant. The building in the picture is Bloms hus. Originally called Stora huset, it was the Academy's hospitality building, comprising a ceremonial room, a museum and a library. In 1864, the building became the laboratory of the Agricultural Chemistry Department. It also provided homes for chemists and curators. The watercolour shows the rear of the building, seen from where the Roslagsvägen road is today.

Collection: Royal Swedish Academy of Agriculture and Forestry

***The Central Institute for Experimental Agriculture,* 1928**
Sif Roempke, 1904–1988
Gouache

Sif Birgit Julia Roempke was educated at the Technical School (now Konstfack, the University College of Arts, Craft and Design) in Stockholm. The painting is divided into three parts so that it could be transported to regional agricultural meetings throughout Sweden. The tradition of holding agricultural meetings had its origins in the 18th century. At these larger gatherings, agricultural matters were dealt with and there were exhibitions of agricultural products and tools as well as judging of livestock. Due to economic difficulties, the Experimental Field was taken over by the state and transformed into a government agency called the Central Institute for Experimental Agriculture. Existing from 1907 to 1939, the agency conducted the Experimental Field's original activities in another form. The Entomological Institute (which focused on the protection of plants against noxious insects) was incorporated into the Central Institute for Experimental Agriculture.

Collection: Royal Swedish Academy of Agriculture and Forestry



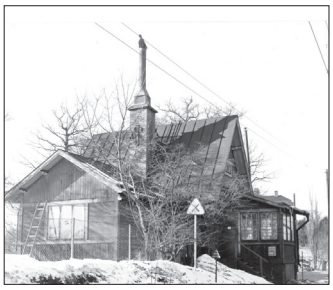
***"Northern Djurgården", from the City of Stockholm and its surroundings in 12 folios,* 1921**
Henning Martin Edvard Hellberg 1861–1934, och August Emanuel Påhlman 1880–1947

At the beginning of the 20th century, the area surrounding the Experimental Field was expanded and came to be known as Science City. In 1885, the Bergian Garden was transferred from central Stockholm to Frescati. Adjoining botanical gardens and retail plant nurseries were established at northern Brunnsviken, west of the Roslagsvägen road, to Laduviken in the south east. In the 1920s, Science City was expanded with large, architecturally lavish buildings, including the Veterinary Academy and the Forestry Faculty. The Royal Swedish Academy of Sciences erected their own building in 1915 and the following year the Swedish Museum of Natural History was inaugurated, both at Frescati. In 1995, the site was designated the world's first National City Park, spanning three municipalities: Solna, Stockholm and Lidingö.

Collection: Stockholm City Archive

On 17 April 1906, shortly after the Experimental Field–Ålkistan line was completed, there was a landslide at Frescati. The driver of a Djursholm train saw the ground sink in front of the train, which slid gently downwards and derailed in an inclined position. No one was injured.

Photo: Unknown
Collection: Swedish Railway Museum



The Post Office at the Experimental Field on the last day it was in use in 1963. The Post office was located adjacent to the Djursholm line.

Photo: Nils Johansson
Collection: Postmuseum

The Experimental Field's Greenhouse, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

The Gardener's House with Greenhouse, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

Garden Director Sven Gréen at the Experimental Field's Planting of Diverse Plants, 1950

Photo: Herman Ronninger. Svenska Dagbladet
Collection: Stockholm City Museum

Professor Schmiterlöw with Assistant Gredborn next to Dr. Halpern's Aerosol Device at the Pharmacological Department of the Veterinary Academy, 1950

Photo: John Kjellström, Svenska Dagbladet
Collection: Stockholm City Museum

The Royal Swedish Academy of Agriculture and Forestry and Svenska Dagbladet's Exposition, The Garden Today.

Garden Director Sven Gréen demonstrates a sprayer intended to keep nightfrost at bay, 1952

Photo: Herman Ronninger, Svenska Dagbladet
Collection: Stockholm City Museum

The Agricultural Museum at the Experimental Field, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

Villa Bellona at the Experimental Field, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

Buildings at the Experimental Field, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

An injured camel is cared for at the Veterinary Academy after it had been attacked by a lion at the Brazil Jack Circus, 1942

Photo: Johansson, Svenska Dagbladet
Collection: Stockholm City Museum

Svenska Dagbladet's Flower Competition at the Experimental Field, 1950

Photo: Yngve Karlsson, Svenska Dagbladet
Collection: Stockholm City Museum

Entrance to the Experimental Field's Garden Department, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

Buildings at the Experimental Field, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

Buildings at the Experimental Field, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

The Gardener's House at the Experimental Field, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

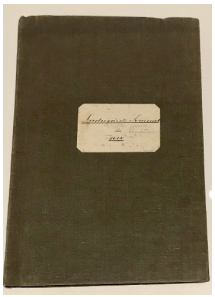
The Professor's Villa at the Experimental Field, 1964

Photo: Lennart af Petersens
Collection: Stockholm City Museum

***The Royal Swedish Academy of Agriculture and Forestry's Experimental Field,* 1833**
Anonymous

The Experimental Field's area originally consisted of dry forest meadows, woodland and much wetland, including moist shore meadows and bogs that were transformed into arable land. The map shows a method of draining the fields of water. The approach was developed in Great Britain and was known as Elkington's method. The result was a dense grid with long, narrow strips of arable land surrounded by shallow canals. The map shows examples of this kind of grid at Västra kärret (the upper part of the map) and at Södra kärret (the lower part of the map). The width of the arable land in these places was ca. 10 metres.

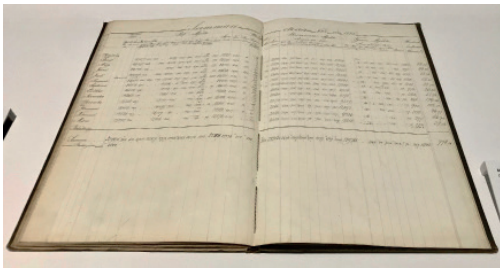
Collection: Royal Swedish Academy of Agriculture and Forestry



The Barn Journal, 1880
Anonymous

The barn journal compiled notes of scientific measurements and results of different types of fodder. Ordered by weight, the daily feed during the stabling period in 1873 contained a total of ca. 5.2 kg hay, 4.2 kg mash, 2 kg straw, 1.8 kg potatoes, 1.4 kg groats of rye and peas and 0.5 kg linseed flour. In addition, the animals received up to 50 litres of draff per day, purchased from the distillery at Kräftriket. Draff is a type of boiled mash that mainly contains the husks of different crops. The barn journal was written the same year that research on sheep was phased out at the Experimental Field. Related to wool and carcass weight, the research was originally intended to encompass some 200 sheep. In 1875, almost all the sheep were bitten to death by stray dogs. After this catastrophe it was decided to replace the lost animals with a smaller herd and in 1880 the sheep research was abandoned entirely.

Collection: Royal Swedish Academy of Agriculture and Forestry



The Dairy Book, 1875
Anonymous

In 1861, scientific studies of dairy cows were introduced. Hundreds of tests were carried out and documented in order to achieve the best possible milk yield. It was concluded, for example, that good grazing availability, such as meadow and forest grazing, contributed to a lower milk yield. It appeared that the lack of pasture favoured the milk yield, as the cows had to be fed with fodder instead.

Collection: Royal Swedish Academy of Agriculture and Forestry

Bloms hus, ca. 1930–1960

Bloms hus, also known as Stora huset, served many purposes: a residence, a museum of tool models, a library, a meeting place, a function room, as well as an institutional building for practical agronomy. Seeds and grains were dried in the attic. In 1884, the Agricultural Chemistry Department moved in and the rear of the building was extended to house an experimental farm. The reorganisation received state funding and chemical investigations and the cultivation of plants on the farm were undertaken. The attic was used for laboratory experiments.

Photo: Unknown
Collection: Royal Swedish Academy of Agriculture and Forestry

The Plant Physiology Department, ca. 1930–1960

When it became clear, in the 1870s, that the work of the chemists could not cover the entire botanical field, the institution was divided into two divisions: The Agricultural Chemistry Department and the Plant Physiology Department. The Plant Physiology Department examined plant adaptation, distribution and changes that were not related to chemistry. Erected in 1877, the building was the botanist's residence and in the greenhouse, research and microscopic experiments were carried out.

Photo: Unknown
Collection: Royal Swedish Academy of Agriculture and Forestry

The Institutional Building for Agricultural Research, ca. 1930–1960

Carl Juhlin-Dannfelt (the Experimental Field's curator in 1859-1881) had a vision in the mid-19th century to transform the Experimental Field into Sweden's largest income-generating model farm. He began cultivating cereals, feeding grain, oat-vetch, hay, potatoes and other root crops. However, Dannfelt failed to make a profit. The Academy responded by discontinuing the model farm and instead allocated land for the production of hay, which became a source of income.

Photo: Unknown
Collection: Royal Swedish Academy of Agriculture and Forestry

The Entomological Department, ca. 1930–1960

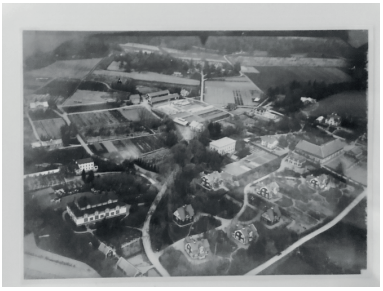
At Gubbacken, a new building was erected in 1912 for the Central Institute for Experimental Agriculture's Entomological Department to study insects harmful to forestry and agriculture. The building housed homes for the manager and an assistant, two laboratories and a cold room for the insects' wintering. The building was demolished in the 1960s. The curator's residence, Gula villan, is glimpsed in the background, the photographer stands where the university library is today located.

Photo: Unknown
Collection: Royal Swedish Academy of Agriculture and Forestry

The Experimental Barn, ca. 1930–1960

When it became clear, at the beginning of the 20th century, that the Experimental Field was not a self-sufficient farm, it was divided into two divisions for the purpose of partially generating income. One division became the Agricultural Department, also called the Practical Research Department. The activities were relocated to the barn, which was a modern building with running water and electricity. There were some 40 animal stalls, root crop storage, milk, steam machine and a mill. The left part of the picture shows tree species used for educational purposes. In front of the trees is the site of the Aula Magna. The image was taken from the south, with the rear of Bloms hus centrally placed. To the right of Bloms hus are the Gasworks and the Research Barn.

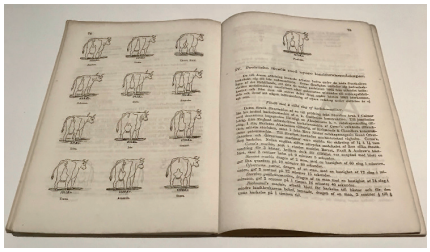
Collection: Royal Swedish Academy of Agriculture and Forestry



Aerial Photograph of Frescati, ca. 1930–1960

Seven large villas for senior officials were built south of Bloms hus. Known colloquially as the “Professors’ villas”, they were given names in the style of Frescati, such as Villa Flora and Villa Pomona. One of them, Villa Bellona, remains today. The detached wing, today’s Skära villan, was later remodelled and had ten rooms. Skogstorpet was converted into a bakery for the field workers. In 1864, the Experimental Field began its own production of gas and supplied all the buildings with electricity. The Central Institute’s part comprised two areas. One consisted of the plot of land surrounding Bloms hus and the fields down towards Laduviken. The other comprised the field at Lappkärret with nearby land. In total, the arable land amounted to 17 hectares. The forest land was located in the north, from Stora and Lilla Lappkärrsbergen down to the southern sections of Långbacken and Gubbacken. In the 1870s, the Institute of Forestry took over the management of the forests, enabling it to provide instruction for its students.

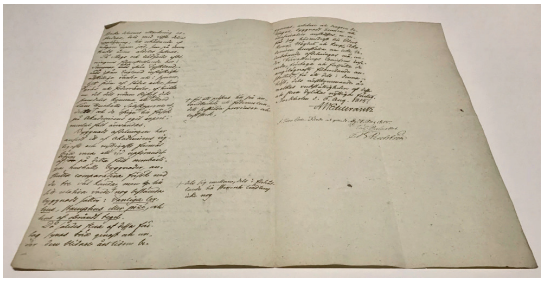
Photo: Unknown
Collection: Royal Swedish Academy of Agriculture and Forestry



***Report on the Activities at the Royal Swedish Academy of Agriculture and Forestry's Experimental Field and the Agricultural Chemistry Laboratory in 1862 and 1863,* 1865**
Carl Juhlin Dannfelt 1823–1904

In the 1830s, François Guénon (1796–1855) developed a method for ranking dairy cows. Guénon believed it was possible to understand milk production by studying the cow's udders from behind. When Carl Juhlin-Dannfelt was the Experimental Field's curator in 1859–1881, he investigated Guénon's theory. Dannfelt developed what he called a milk mirror, seen in the illustration above. The animal husbandry research and experiments that were carried out at the Experimental Field were primarily concerned with various types of fodder and how they affected the animal's growth and milk production.

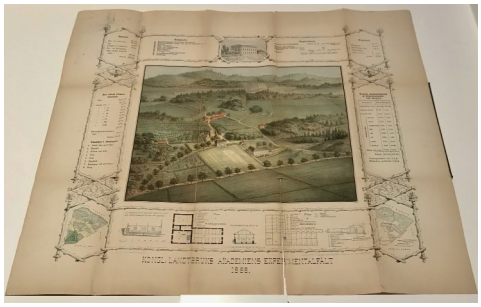
Collection: Royal Swedish Academy of Agriculture and Forestry



***Memorial,* 1815**
Abraham Niclas Edelcrantz, 1789–1754
Ink on paper

In 1815, Abraham Niclas Edelcrantz wrote this memorial, an official description of the intentions to found the Experimental Field. Edelcrantz's goal was to create a research centre at the Royal Swedish Academy of Agriculture and Forestry where new tools, cultivation methods, animal breeds and feeding methods would be developed. Edelcrantz was of the opinion that the site should not be run for economic gain, but for purely scientific purposes. However, during the history of the site and after Edelcrantz's time, economic gain was periodically in focus.

Collection: Royal Swedish Academy of Agriculture and Forestry



***The Royal Swedish Academy of Agriculture and Forestry's Experimental Field,* 1868**
Johan Fredrik Meyer 1806–1893
Lithograph

When this lithograph was created, the Experimental Field was flourishing. At the time, there existed work teams for various soil and forest departments and the area had expanded since the start. The left part of the picture shows tree species used for educational purposes. In front of the trees is the site of the Aula Magna. The image was taken from the south, with the rear of Bloms hus centrally placed. To the right of Bloms hus are the Gasworks and the Research Barn.

Collection: Royal Swedish Academy of Agriculture and Forestry