Klaus Herrmann, Hohenheim

# **Hohenheim Field Days**

## An Instrument for the Transfer of Knowledge



*Fig. 1: The Hohenheim field days started 1995 with the station "men pulling a plough"* 

From the beginning, the current University of Hohenheim, which was founded as an agricultural education-, experimental-, and model institution in the year 1818, has proudly presented its insights gained in research and education not only to experts, but also to the general public. For this purpose, it not only used the press, but also the possibility to invite the public, to organize open house events, and to present the insights gained during practical field demonstrations. Meanwhile, the Hohenheim field days with their changing special topics have attracted attention Germany-wide.

Dr. Klaus Herrmann is director of the German Agricultural Museum in Hohenheim, Garbenstr. 9 and 9a, D-70599 Stuttgart.

### Keywords

Public relations, field days, Hohenheim

From the beginning, the current University of Hohenheim, which was founded as an agricultural education-, experimental-, and model institution in the year 1818, has proudly presented its insights gained in research and education not only to experts, but also to the general public. For this purpose, it mainly used the Agricultural Weekly Review, whose first editor, Hohenheim professor Friedrich Joseph Pythagoras Ranke, was always eager to spread results of scientific research among common people in an easily understandable language. It is primarily the result of his work that the Agricultural Weekly Review became generally known as the Hohenheim Weekly Review in the country.

#### **Open House**

The willingness of the institution in Hohenheim to open the university campus for visitors was no less important. Both the trade public and agricultural laypeople were welcome and had the opportunity to inform themselves on the experimental fields as well as in laboratories and on model farms about the current state of research. The circle of multipliers who visited Hohenheim included monarchs, politicians, scientists, estate owners, farmers, and people from all walks of life.

Finally, Hohenheim was home to the oldest agricultural machinery factory in Germany since 1819. Founded by its first director, Johann Nepomuk Schwarz, it produced a large number of ploughs, harrows, as well as sowing- and threshing machines under the direction of mechanic Gottfried Heiler and based on the instructions of the Hohenheim faculty. Product names such as Schwarz' or Weckherlin's plough show that the lecturers did not want to live in an ivory tower, but wanted the public to participate in scientific progress in Hohenheim. And if the public could not afford a plough or a threshing machine made in Hohenheim, visitors still had the possibility to purchase the most up-todate machinery as a functional model true to scale.

#### **Field Demonstrations**

The incentive for attractive field demonstrations on the grounds of Hohenheim Academy came from agricultural machinery pioneer Heinrich Lanz in Mannheim in 1870. In a letter which he sent to Hermann v. Werner, then director of the academy in Hohenheim, on 12th August 1870, he proposed that mowers from renowned North American and British manufacturers should be compared in extensive practical tests. Even though these comparative tests were not carried out in 1870, the incentive had been given and kept minds busy in Hohenheim. Informative field demonstrations in Hohenheim took place in 1872, 1876, 1885 and other years. They did not fail to have an effect. Since these demonstrations were reported on extensively, they even got the aura of special events. If science was demonstrated in a manner which everyone was able to understand, it radiated an authority which other field demonstrations did not have to the same extent.

As of 1890, the field demonstrations in Hohenheim reached a new quality level. Connection to the railway network allowed a larger public to participate in the demonstrations. The ride to Hohenheim and watching the machinery demonstrations became an exciting experience which was highly attractive as long as agriculture was in the phase of beginning mechanization. The demonstration of tractors, reaper-binders, as well as threshing and sowing machines by faculty members of the Agricultural Academy Hohenheim helped to overcome the reserved attitude towards mechanization, which was widespread at the turn of the century.

#### **The World Ploughing Contest**

After the second world war, Georg Segler and Günther Franz, both professors in Hohenheim, successfully organized the best-attended public demonstration of agricultural machines and implements on the premises of the academy. This event was not termed field demonstration or field day. Instead, it was organized as a world ploughing contest. In 1958, approximately 100,000 visitors lined the demonstrations grounds on Heidfeldhof, a farm owned by the university, and were introduced into the secrets of optimal tillage by the participants in the contest, who had come from all over the world. Tractors and implements shown in perfection under the conditions of a contest left a deep impression among the audience, not least when the Minister of Agriculture, Mr. Heinrich Lübke, personally presented the awards to the world's best ploughers.

The accompanying programme of the world ploughing contest in Hohenheim included exhibitions, tours of the institute, and scientific colloquia. This required so much effort that no more field days were organized in Hohenheim for decades. This was not considered a grave loss because the Schlüter field days in Freising became so predominant that those who wanted to watch field demonstrations of agricultural machinery travelled to Freising in order to inform themselves.

#### **A New Start**

However, the Schlüter field days were no lasting event. In 1993, they took place for the last time, and their end left a gap. Was there any more obvious idea than to revive the tradition of agricultural machinery demonstrations in Hohenheim? But what should these events look like concretely? How should they be set apart from other regional and local field days? The DLG field days, which took place on the Oberbiegelhof near Bad Rappenau in 1994, were the starting point. Dr. Hans-Hasso Bertram, the head of the agricultural machinery department of the DLG, had proposed that historical and modern agricultural machinery should be demonstrated with explanations as part of the framework programme. The result was positive. The visitors were impressed by the comparison of manual labour, work with horsedrawn implements, and tractor use. Rarely did the progress in agricultural engineering achieved over time become so obvious as during these practical demonstrations. This was exactly the goal which the demonstrations in Hohenheim were going to pursue in the future. Agricultural work had undergone fundamental changes over the course of time without the population becoming aware of it. Instead, many reservations against progress in agricultural engineering had spread. Therefore, practical information by experts was warranted.

Prof. Karlheinz Köller from the Institute of Agricultural Engineering and Dipl.-Ing. agr. Rainer Funk, director of the Meiereihof in Hohenheim, an institution rich in tradition, were among the initiators of the Hohenheim field day. Together with the German Agricultural Museum, they organized the first Hohenheim field day after the war in 1995. The topic was "Tillage and its Development over the Course of Time". The machines shown ranged from the ridging plough drawn by humans to the large tractor Kirovets K 700 A with an 8-share BBG oneway plough. Alternatives in the form of ploughless tillage and direct drilling were presented as well, which was particularly attractive for farmers. The response of the press and the public was convincing. Statements like the following were quite frequent: "Here, a university shows the taxpayer for what purposes research funds are used."

The topic of the Hohenheim field day of the year 1996 was "The Grain Harvest and its Development over the Course of Time". Based on the experiences of the previous year, it was possible to convince agricultural machinery manufacturers and -dealers to support this demonstration. They provided the most up-to-date agricultural machinery in an uncomplicated manner and contributed to the financing of the event, which was all the more important because the university adopted an attitude of noble reservedness in this respect. However, this did not touch the public. The visitors had accepted the Hohenheim field day, and they came in large numbers. After the second field day, this demonstration already counted among the best-frequented events of the university over the course of the year.

#### **Special Focus of Interest**

The 4th field day in 1998 met with particularly great acceptance among the public. Under the motto "Tractors and their Development over the Course of Time", 60 different tractors were presented in six categories. The spectrum of the exhibited machines ranged from the Lanz Bulldog from 1922 and the oldest preserved Unimog built in 1946 to the Fendt 946 Vario and illustrated the explosion of power on the field in a generally understandable manner. Technical specialties, such as the tracklaying chassis of the Claas-Challenger tractors or the continuously variable Vario transmission were explained by experts of the manufacturers.

The millennium field day of the year 2000 will remain unforgotten in Hohenheim. For the first time, a steam plough was shown on the fields of the university. Twelve years of restoration work, which was massively supported by the company Robert Bosch, Schwieberdingen, allowed these two Heucke steam plough locomotives from the year 1911 to be shown in use. The company Lemken, Alpen, also made a contribution to the demonstration by restoring a powerful Kemna balance plough from the year 1921 such that it was ready for use. Thanks to 500 steam hp and several thousand engine hp on the field, the Hohenheim field day attracted attention Germany-wide.

The 11th event in the year 2005 proved that the Hohenheim field day is able to initiate trends. Its topic was "From Steam to Bio-Diesel". This demonstration showed a wide range of alternatives to conventional fuels. Wood gas, alcohol, rapeseed oil, and RME were explained and demonstrated in practical tractor operation. In the "Science City", which accompanied the field day, experts from Hohenheim answered questions. This offer was gratefully accepted by the public and the numerous representatives of the press.

Over the course of the years, the Hohenheim field day has become a quality mark. The idea to show historical machines along with future-oriented agricultural machinery in practical operation and to explain them has been copied several times. In Hohenheim, this was considered an honour because knowledge is useless if the citizen does not understand it.

Fig. 2: Within the framework of the field day 2000, for the first time it was "steam-ploughed" in Hohenheim

