



Panel

### 3.1. Intensification of animal husbandry in the nineteenth and early twentieth century. Part I

**Panel organiser: Jonasson, Maren, University of Abo Akademi, Finland**

In this panel the innovations and new scientific methods concerning horse- and stockbreeding, dairy farming and milk trade c. 1830 to c. 1920 will be discussed. Special attention is given to case studies and local applications of these innovations and methods, but contributors will discuss the themes in broader perspectives as well, e.g. Nordic, European or global. The central aim of the panel is to link national and local case studies on breeding of domestic animals and on intensification of animal husbandry to more general trends of rationalization, professionalization and the development of science. The decline in the profitability of grain-growing and years of bad crop in the latter half of the 1800s forced many farmers to change their line of production and direct their energies towards a more intensified form of animal husbandry. In Finland, for instance, the so-called ‘hunger years’ in the late 1860s have been seen as a turning-point in this process, and parallel cases can be found in other European countries. The change of line in production, the rapid technical development and the commercialization of agriculture accentuated the position of cows and horses as the most significant domestic animals. The period c. 1830 to c. 1920 can in many respects be seen as the formative years of organized food and milk control, veterinary medicine and of studbook and herdbook systems, but many of the initiatives and measures taken needed adjustment and reevaluation later on. This nuanced process of selecting the ‘right path’ within the different areas of breeding and animal production will be of interest in this panel. Part II of the panel will explore cattle husbandry in Northern Italy, the rise and decline of large-scale animal husbandry in Hungary, Friesian cattle in Barcelona and regulations on milk trade in Finland, whereas Part I focuses on livestock exhibitions in the United States, horse-breeding in Finland and a revolutionary French invention that spread across the world.

**Chair: Bächli, Beat, Archives of Rural History, Bern, Switzerland**

Tuesday, 20 August 2013 // 0800 – 1000 // Session 3 – Room A-126

### 3.1.1. Modern Livestock and Animal Technology: Livestock Exposition with a Global Mission, 1893–1920

Paper

**Knapp, Neal, Boston University, USA**

The transition of America into the modern industrial age required human actors – rural, suburban, and urban – to harness and exploit the offerings of the environment and usurp the limitations of the national world. To urge agriculture into the modern era, livestock producers and land-grant university professors worked with urban elites, meatpackers, and the federal and state governments to create the International Livestock Exposition (the International), which they hoped would rival the 1893 Columbian Exposition in prestige. The International, starting in 1900, combined the fanfare, architectural opulence, and sensation of a world’s fair with the expansionist impulse of the United States’ economic and military policy. Political officials, businessmen, and livestock producers, who hosted British, Argentine, and Japanese dignitaries at the International, believed that the viability of the United States as a world power rested on the competitiveness and efficiency of animal carcasses, meatpacking, and grain production. The ability to directly influence the genetics, the vaccination, and the feeding of animals provided producers, meatpackers, and policymakers the predictability and efficiency necessary to project global authority. The ability to assert authority abroad required American agrarians to assert their authority over the animals’ bodies and lifecycles. Modern animals were not simply sources of food and fertilizer, but they were units of technology, modern institutions created by systems of cultural and professional knowledge that influenced and were influenced by national policy and international competition.

### 3.1.2. Horse breeding in Finland in the nineteenth century

Paper

**Toivio, Hilja, University of Tampere, Finland**

In the nineteenth century breeding of domestic animals became a general movement in Europe. In a broader perspective this phenomenon can be connected to the intensification of agriculture and the development of science. The breeding movement touched many domestic animal species, such as horses. Transportation, agriculture and industry were largely dependent on the horse. The horse had an important role as a source of power in everyday life. Finland, for example, was at that time a horse-drawn agrarian society. Therefore horse breeding – as well as the breeding of other domestic animals for other reasons – can be seen from the view of utility. In this paper I investigate horse breeding in nineteenth-century Finland. I base my study on administrative source material and focus on the period from 1835 to 1907. During that same period the Finnish administration was also generally interested in improving domestic animals, cows in particular. The first act aiming at improving the horse population was given in 1835. In Finland some of the initial steps towards more efficient horse breeding included an organized placing of stallions in the countryside, state-organized shows and trotting races and the founding of horse associations. The first acts focused on acquiring better horses in general, putting no special emphasis on the domestic horse. Later there were clearly pedigree-oriented characteristics in the breeding, which was central to the purebred breeding method. The official definition of the Finnish horse breed, the so called Finnhorse, was given in 1907 when the studbook for it was founded.

### 3.1.3. Blinded by the beauty of science? – François Guénon’s method of predicting milk yield

Paper

**Jonasson, Maren, University of Abo Akademi, Finland**

In the 1830s the Frenchman François Guénon introduced the public to his invention by which, he claimed, it was possible to predict the exact milk yield for every cow. The method was an immediate success in Europe and the United States. All cows, regardless of breed and age, could by this method be classified by certain external criteria. By using Guénon’s method even newborn calves could be classified and individuals showing poor external distinctive marks weeded out at an early stage. This could save considerable amounts of time, fodder and money, eliminate mistakes and remove many of the uncertainties surrounding dairy farming. But suspicion arose – the method was just too good to be true. Sceptics claimed the method was a fraud, sheer humbug, and they conducted several blindfold tests to prove their point. In this paper the diffusion of Guénon’s ideas is examined, the triumph and longevity of his method throughout the world, the arguments against it, and the reception this method got in different countries, including the Nordic countries and the United States. But were the sceptics right? Had Guénon and his followers been blinded by the beauty of science and lured on by false hopes of predictability?

#### Participants

##### **Bächli, Beat**

Beat Bächli studied history, sociology, and philosophy at the University of Zurich and holds a Ph.D. from the Swiss Federal Institute of Technology. After stays in Paris and Berlin, he was post-doc at Bielefeld University and leader of a junior research group at the centre for interdisciplinary research, Bielefeld. Today he is Research Associate at the Archives of Rural History in Bern, Switzerland, where he works on the scientisation and industrialisation of cattle breeding since the middle of the 19th century. He has published in the history of technology, the history of medicine, and the history of knowledge.

##### **Jonasson, Maren**

Maren Jonasson is a Ph.D. student at the Department of Nordic history, at the University of Abo Akademi in Finland. Her main fields of scholarly interest include agricultural meetings and expositions in the Nordic countries in the 19th century and modern textual scholarship. She is currently working as editor-in-chief of the trilingual editing and publishing project, *The Collected Works of Anders Chydenius, 1729–1803*.

##### **Knapp, Neal**

Neal Knapp is a Ph.D. Candidate at Boston University. For his dissertation he is working on the development of “modern” livestock in the United States and the trading of “animal technology”, which deals with genetic selection, breeding and feeding practices, and the transformation of animals’ bodies among nation-states between the Spanish-American War and the Great War. He is also interested in the role of British policy and British purebred livestock in the transformation of livestock breeding and modern animals in the United States. Neal Knapp is originally from Indiana, where he raises sheep.

##### **Toivio, Hilja**

Hilja Toivio is a Ph.D. student in history at the School of Social Sciences and Humanities at the University of Tampere, Finland. In her Ph.D. research she studies horse breeding in Finland at the end of the 19th century and in the beginning of the 20th century in the context of the movement of purebred breeding of domestic animals. In her previous research Toivio has studied the history of domestic animals in Finland, especially horses and broiler chickens. She has also planned and organized museum exhibitions on these themes.