

Swedish expert knowledge by Lars-Åke Johansson during a visit in 2014. Paul besökte svenska experten Lars-Åke Johansson 2014-2015. Damm, Lucas och Valle i trespann.

An article in FNH's quarterly in English from a non-Swedish person is surely something unusual. Having visited Sweden for the first time in 2008 and after eight following returns to this magnificent country, I thought it's time to write down my opinion about the goings-on around draft horses, especially the Northswedish breed, which is definitely something special, in many ways.

Compared to most of the other draft horse breeds of Central and Southern Europe, which have turned after World War II and the inevitable transition to motorized farming methods from draught horses into heavy-weight slaughter animals or stylish riding and carriage horses, the North Swedish breeders have the incontestable merit of having kept a true working horse alive. This appraisal relates not just to the physical characteristics of the horses, but also to the mental capabilities.

FNH plays an important role in a lot of issues concerning draft horses in Sweden. However, compared to the millions of draft animals, including oxen and donkeys, which are still daily in use worldwide, the impact of Northswedish horse, globally seen, is negligible. Yes, we can even conclude that, as every species endangered to disappear, the Northswedish breed has to develop strategies to survive

in a world, which changes its face every day with a dramatically speed.

Within this context, the Brunte committee is a good example, how purpose-oriented work can guide into the future. In the past, there has been surely the one or other Northswedish breeder, who considered the other Swedish horse breeds more like enemies than partners. Finally, it is just the union, which makes strong, not the splitting of power and human resources. In France has been initiated a similar coalition named "France trait", which regroups the nine French draft horse breeds. Regretfully this project is now, in the tenth year of its existence, in a profound financial crisis, resulting in a loss of power for everybody involved and this not just on political level.

In February 2015 I was honored and pleased to be invited for giving a lecture for the students and teachers of the "Kuskutbildning i Brukshästkörning" in Strömsholm. Also in this domain there exist similar European projects intended to offer young people the opportunity to taste the real work with draft horses as part of their professional training. Let's name for example the University for Sustainable Development in Eberswalde (Germany), the School for bio-dynamic farming of Warmonderhof in Dronten (Netherlands) or the Agrarian Institute Duca degli

Abruzzi in Padova (Italy). Out of my own pedagogical experience of more than 20 years, as specialist teacher for mechanics at a vocational school in Luxembourg, I consider the training program in Strömsholm as a shiny example for the rest of Europe of what can be achieved through collaboration.

Within this pedagogical context, also the FNH « dragprov » is something exemplary. Sure, there exist similar contests for two- and three-year-old horses in other European countries, like the « Feldprüfung – Zuchtrichtung Ziehen und Fahren » in Germany or the « Concours d'utilisation » in France. But the serene atmosphere during the five "hästdagar", which I visited during the last years, where the judge's eyes are not just focused on the pure draft exercise of the young horses, but also on the interaction between humans and animals are absolutely worth being highlighted.

The Swedish tradition of working with draft horses differs in many ways from the rest of Europe, well even from the rest of the world. It's not just the Scandinavian way of hitching the horse by direct pull on traction shafts, or the unique harness with comfortable arch type back pads or three pad collars, which origins can be traced back to the Swedish army. No, it's the way how the teamwork between humans and animals takes place.

A view from abroad...



Within the non-profit association "Schaff mat Päerd" (working with horses), founded as a network for generating synergies and transferring technologies about new implements, improved harness as well as new methods of communication with horses, I'm concerned since a few years about the analyzing of the interaction between draft horses and equipment. This by electronic measuring of draft and support forces in the harness as well as working speeds and motion sequences.

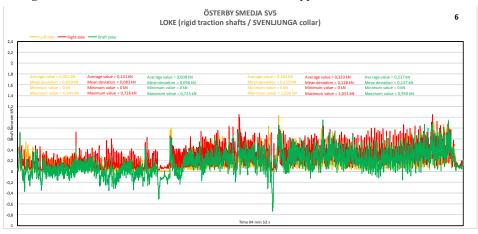
However, this is not just a technical issue. All our studies speak a clear language. The better the contact between the draft horse and its partners on the other end of lines can be established, the higher is not just the working comfort of the animal, but also the efficiency of the translation of the horse's muscular strength into a draft effort for mowing agricultural or forestry equipment. Within this context, the Swedish way of driving horses in an exemplary manner, by calmness and safety first, should serve as guideline for others.

But it might also be allowed to offer some criticism. All of the recent "hästdagar", which I visited, have left a certain "vintage style"image to me. There are surely reasons for keeping traditions alive, but if we want to give the draft horses a place in our modern world, we have to give him also a modern image. By proving that the up-to-date use of the draft horses, as a renewable and eco-friendly energy source, offers realistic perspectives, this not just for forest use, but also in small scale gardening for example, the future of the North Swedish breed could be reassured.

This raises the question, if the FNH, as a breeding association, should be involved in some kind of joint venture with implement manufacturers or not. My answer is a clear YES. A good draft horse must fit to the implement to be pulled and vice versa. In this domain a lot of knowledge of the bygone time, the basics passed on from one generation to the next, has been lost in the last decades. Giving lectures all over Europe and having participated at training courses, workshops and colloquiums with "Schaff mat Päerd" implement prototypes and measuring equipment, has shown me that there is seldom an issue more overrated than the continuing draft power of a horse and the mechanical efficiency of so called modern horse drawn implements.



Electronic draft force measuring during hoeing strawberries by Anna and Håkan Fingal during a visit in 2015. Anna håller i tömmarna med Filippa.



Graph: Example of the interaction between a draft horse and a forwarder

By data loggers capable of memorizing each step of a horse with a frequency up to 500 Hz, equivalent to 500 values saved per second, this mystery of the interaction between horses and implements clears up slowly but surely. The above graph shows exemplarily the draft force results on an Österby Smedja eight-wheel forwarder. This test, done in February 2014 in Luxembourg, was part of a series of seven tests with the same implement and the same horse, but with various hitch and collar configurations. The graph shows the results of the trials where the shafts were blocked in order to analyze the effect of non-articulated traction shafts.

It is exactly there where we have to apply the lever by a fundamental analysis of the horse's pulling capabilities in combination with the most modern equipment. This does not mean that we should neglect the past. Farm and forest equipment of the bygone time are often treasuries full of useful information concerning perfect implement design. We have just to find ways to examine this information carefully and transfer this knowledge into the present day.

Matching well-educated horses to state-of-the-art implements, would not just give a modern image, but would also offer to beginners, interested in starting to work with draft horses, the possibility to buy so called"turn-key"solutions. Most of the implements imported from oversea don't meet this requirement, as designed for bigger hitches used in areas which not just differ by their size and topography, but more by their socio-economical environment from today's situations in

A view from abroad...



Traditional design meets modern technology on a draft horse implement by "Schaff mat Päerd"

Europe. My own experiences of the last nearly twenty years with horse drawn implements as "hobby" farmer, with a lot of trial and errors have taught me that we Europeans should not try to simply copy the plain people in USA, but that we have to find our own way in using draft horses, this with deep and honest respect for the living energy source which we use in form of our draft horses.

2015 has been the "International Year of Soils". Under the motto "Healthy soils for a healthy life" the awareness was raised for the importance for something, which is often treated with contempt, but which is nothing else than the foundation of the human existence, the soil. Experts alert the physico-chemical degradation of the soils worldwide by the so called "modern" farming methods, where the ground is often just considered as a support for applying chemical fertilizers and pesticides and for using increasingly gigantic tractors and implements. Perhaps we all will have to change tack sooner as expected.

Food should not be longer considered as something available at cheap price and all the time in the supermarket, but as something precious. Especially within this domain I see a realistic chance for a renaissance of the draft horses. Beside the forest use of draft horses, where Sweden is the uncontestable leader, I see the future of draft horses especially in the healthy food production. Unfortunately, compared to Southern European countries, like Italy or France, where the use of draft horses by organic market gardeners or wine growers is actually gaining in importance, Sweden hasn't to offer the same climatic



Impressive teachware at the training in Strömsholm with Vhilde

situation. However, giving new tasks to the Northswedish draft horses, by showing its all-around versatility in small-scale holdings, especially also across the Swedish borders, could offer new perspectives for all people involved.

However it's too easy to give other people good advises and to fill up pages with the shiniest visions. What counts is what finally remains in practice. Next spring "Schaff mat Päerd" prototypes, after being designed, manufactured and pretested in Luxembourg, will be improved by field-tests all over Europe. This for example for vineyard green manure seeding in the sunny Toskany of Italy, for extensive grassland maintenance in the hilly Emmental of Switzerland

as well as for vegetable cultivating in the fertile Friesland of the Netherlands. Also during FNH events in 2016, you will have the opportunity to explore new ways in using draft horses in combination with modern gardening equipment, this probably in Östergötland or Skåne. Further information will follow shortly, see you there...

Text, graph and photographs by

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Thanks for a very interesting point of view from abroad. Editor / Christel Carlsson