

## **3<sup>rd</sup> International Workshop on Linear Profiling in the Warmblood Horse on February 24-25, 2017, in Marbach / Germany – SHORT REPORT –**

### **How to make the best of linear profiling routines in the Warmblood Horse – great international interest in the continued dialogue between practice and science**

On February 24-25, 2017, linear profiling has proven once more its role as driver of exchange of experiences within the equine sector: The 3<sup>rd</sup> International Workshop on Linear Profiling in the Warmblood Horse was organized in the beautiful surroundings of the Principal and State Stud Marbach in Gomadingen, Germany. An interesting program had been compiled, providing a mixture of oral presentations, discussion rounds, group work and a practical session. And great international resonance supported the approach of bringing together practice and science in such an event format. Among the 49 participants from 14 countries, about two third were from breeding organizations, studbooks and studs, implying a very good starting point for strengthening the practice-oriented dialogue about this year's focus topic: quality of linear data and measures to monitor and improve it.

Several sport horse studbooks have implemented linear profiling over the last couple of years, and further studbooks have plans to do so in the near future. With the presentations from Switzerland, Spain, France and Germany, the delegates got an update overview about the collection and use of linear data in several studbooks for sport horses. Despite differences between the linear schemes used in different countries and studbooks, there are considerable similarities and overlaps of linear traits. To facilitate information exchange and improve transparency for breeders, the initiative of making a comprehensive inventory of linear traits freely available was very much supported, and it was agreed that studbooks should again be invited to contribute and allow updating by the international working group on linear profiling. Presented results from a comparative scientific study using breeding values for linear traits exemplified the promising basis of standardization and harmonization of linear profiling. Consistency of breeding goals for sport horses may be seen as primary reason for similar focuses of linear descriptions of conformation, gaits, jumping and further aspects relevant for performance, but early start of collaboration in developing linear profiling should have valuably contributed to possible cross-referencing between systems. Accordingly, with linear profiling we now have a system at hand which provides

substantially improved opportunities for targeted breeding measures within and potentially also across studbooks. The importance of this step forward from the traditional valuating scoring to more objective and refined data collection - for efficient breeding work in general and especially for future genomic applications - was once more emphasized at the meeting.

Because successful use of linear profiles in the breeding programs requires first and foremost good data quality, consequent and continued data quality management is needed and was highlighted in the workshop. In their reports, the speakers gave insight into the education and training of evaluators, routine data screening and the handling of observed peculiarities. It became clear that there is currently a very wide range of practices, and only the minority of studbooks working with linear systems is also systematically working on their optimal application. Sharing of experiences among those doing the linear descriptions and those analyzing the linear data was also in this context very fruitful and indicated the benefit of the broad and open exchange about how to possibly increase engagement for data quality. The group work and also the networking during the two days of the meeting proved particularly efficient and valuable in developing new ideas and strengthening the overall framework of collection and use of linear data in sport horse breeding.

To strengthen the exchange and collaboration of science and practice across countries and studbooks, the new series of meetings on linear profiling in the Warmblood horses had been established in 2013. The meetings are arranged by the international working group on linear profiling, linked to the Horse Commission of the European Federation of Animal Science and its permanent working group Interstallion. For this year's workshop, the local organizing team gratefully acknowledges the generous support of the Züchterforum and of the hosts, the Kompetenzzentrum Pferd Baden-Württemberg and the Principal and State Stud Marbach. The great support has contributed to the success of the meeting, which makes us optimistically looking forward to the next meeting, the 4<sup>th</sup> International Workshop on Linear Profiling in the Warmblood horse - date and place to be announced.

Conference material can be freely downloaded from:

[http://www.equinephenotypes.org/Texte/recording\\_IWSLP\\_ENG.html](http://www.equinephenotypes.org/Texte/recording_IWSLP_ENG.html)