

## **AN INTERNATIONAL SPORT HORSE DATA-BASE IN PROGRESS**

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Several European countries by tradition have a well developed sport horse breeding. Breeding sport horses for the Olympic disciplines is an important activity of the horse-industry in most of these countries. Sport horses as well as breeding stock are exchanged within and outside Europe.

For long there has been an exchange of live stallions to introduce new blood-lines into the breeding programmes. Germany, France and Holland are the main exporting countries. The use of AI – both with chilled fresh and frozen semen – provides new fantastic opportunities to use the very best stallions worldwide.

It is of major importance to be able to interpret correctly different performance and progeny tests as well as breeding indexes as much money is involved in the sport horse breeding industry of today.

Yearly foal production:

**Germany (30 000), France (15 000), Holland (12 000), Belgium (4 000), Ireland (4 000),  
Sweden (3 500), Denmark (2 500)**

### **INTERSTALLION**

A working group, called Interstallion, was formed in 1998 by **WBFSH** (WORLD BREEDING FEDERATION OF SPORT HORSES), **ICAR** (INTERNATIONAL COMMITTEE FOR ANIMAL RECORDING) and **EAAP** (EUROPEAN ASSOCIATION OF ANIMAL PRODUCTION). The author was until recently member of the working group.

#### **The aims of the project are:**

- To describe the breeding objectives of the different stud-books.
- To describe the testing schemes and genetic evaluation systems of the stud-books
- To find possible ways to compare genetic evaluations across countries
- Recommend improvements of genetic evaluation

An inquire was sent to all WBFSH member stud-books in Europe. Twenty stud-books responded and several problems were detected to be dealt with to facilitate selection of stallions (semen) across the world.

## Evaluation problems

The most common problems found are listed below without priority order:

- Breeding objectives are differently or insufficiently defined and communicated among countries, also for the same discipline of sport.
- Discrepancies exist sometimes between breeding objectives as practised by the breeders and the theoretically calculated breeding values.
- Different methods are practised for performance-testing of stallions, special tests vs. competitions, and regarding choice of traits, age of the tested horses and length of the tests.
- Breeding values based on progeny information are estimated on various degrees of selection of horses, causing biased breeding values.
- Incomplete information is published on test results, estimated breeding values and their reliabilities.
- Methods and models for estimation of breeding values vary and are often not well enough published or understood by the breed-societies.

## Proposed development

- Publication of clearly defined breeding objectives and traits evaluated to reflect these according to a standardized format.
- Scientific review of methods applied and data suitability for estimation of breeding values for improvement of national systems and credibility within and across countries.
- Harmonization of traits within sports discipline, bases for comparison and expression of breeding-values.
- Regular exchange of information, experiences and results to improve methods and transparency among countries.
- Pilot studies to compare breeding-values of similar traits for the same stallion used in different countries.
- Establishment of an international data-base, linking national ID information to international competition-results for use in national data-bases for genetic evaluation.

## Unique Equine Life Numbers

Unique Equine Life Number (UELN), which should be given to the foal when registered to be used all its life. Today, some stallions have several different numbers, each given in the different countries where they have been used.

The Interstallion group must now find out which number each stallion was given at birth and to create his UELN. Some stud-books already use the UELN system when they register their foals and it is hoped that all WBFSH member stud-books will adopt the UELN system within soon. This is a **sine quo non** for the Interstallion project.

