Phryso Translations cont..

CONFORMATION INDEX

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The Royal Association "Het Friesch Paarden-Stamboek" (FPS) commissioned the Netherlands Cattle Syndicat (N.R.S.) to investigate the possibility of breeding value assessment of Frisian horses on the basis of linear scores of conformation characteristics. F.P.S. is grateful for N.R.S.' efforts.

In 1993, FPS introduced the so-called linear scoring. All horses offered for inspection were scored. The first two years when a horse is scored the owner will hardly notice. Starting 1995, the owner receives a copy of the score form. By now the number of horses scored has increased to such extent that the first conformation index can be introduced.
Cattle breeders have been familiar with the concept of indexing for a long time and use it in daily practice. Also our sister association K.W.P.N. has used the index for some years. Also on account of the necessary information breeders will increasingly attach value to the practical application of the conformation index.

SIGNIFICANCE OF THE CONFORMATION INDEX AND HOW TO READ IT

The Board of F.P.S and the breeders are together faced with the major challenge to improve the quality of the Friesian horse. To the breeder there are various sources of information available, such as the reports of the Central Stud Inspection, the performance of stallion in sports and the percentage of star mares. And of course the new additional source of information: the conformation index.

First, it should be pointed out that the index is only an aid. It's as good or as bad as the underlying information. Incorrect or inadequate data will result in an incorrect index, which in turn gives a wrong impression of the relevant stallion. Second, an index may never be given absolute value. As said earlier, breeders can rely on various sources of information. The conformation index is one of them. In addition, the index is an estimation, not a judgment of the breeding value of a stallion. In fact, breeding value should be interpreted in terms of: what is the actual value of a stallion in breeding? This value is expressed in a figure, a number (the index).

To be able to use a conformation index the breeder must have in-depth knowledge of his mare. For this purpose, part of the breeders can consult the breeding mare's linear score form. You can only benefit from this conformation index when you have insight into the strong and weak points of your breeding mare. In breeding we have the existing stock of stallions. The starting point is that each approved stallion can play a role in breeding. It's up to you to select, with the help of the published conformation index, a stallion capable of improving your mare's weak points.

Flexible
The conformation index has to be adjusted from time to time due to the fact that new data are obtained, more complete data. The interrelationship of the elements is complex, but insight into this aspect is still growing. This explains the need for adjustments. Eventually, breeding is not a static thing. It's about live elements, which calls for a dynamic approach. With the ultimate goal to be able to apply a conformation index which is as close to reality as is possible.

Flexibility is required to be able to make these adjustments. It's not at all inconceivable that in a few years an adjusted index will be published. This is a fact we will be faced with for the time being, especially in horse breeding. After all, indexation is a relatively new phenomenon in this sector. There still are teething troubles, which have largely been overcome in cattle breeding. And even there it's a process of constant adjustment.

Explanation
We'll now explain a few standard concepts, which you have to be familiar with to be able to read an index. They're not extremely complicated, and they are of great importance.
Factors we must know in the first place are average and distribution. By way of example: there are hundred apples in a crate. When weighing them they appear to be 10 kilos, or 10,000 grams. So, their average weight is 100 grams. This does not mean that all apples weigh exactly 100 grams. There are big apples (e.g. 200 grams) in the crate as well as smaller ones (e.g. 50 grams). (Consequently, in this respect the progeny of a stallion is comparable to a crate of apples. In one crate the average will be higher than that of another one, but all crates contain big and small apples).

The question is what is understood by average? Is a 120-gram apple a particularly heavy one or is it an average apple? On the other hand, is an apple weighing 75 grams a small one or is it a normal apple? Over the years, scientists have discovered the existence of a so-called standard distribution. In our crate of apples, it appears that about two thirds weigh between 75 and 125 grams or in other words; 25 grams lighter or 25 grams heavier still comes within the concept of average. And the number 25 is called distribution or also standard deviation. Therefore, an apple weighing 75 to 125 grams is a standard apple. It's important to be familiar with this concept. Otherwise we would have to go into detail too much.

We will not consider this starting point in relation to our own index, the conformation index. The conformation index is based on the average, which we have assigned the number 100, with a distribution of 4. If a stallion inherits a croup length of 103, this comes under the standard group. If he inherits a croup length of over 104, then it deviates from the standard picture and consequently is longer. If the index shows 108, the croup length deviates from the standard length two times, and even three times the standard deviation if croup length were 112. When establishing a croup length three times the standard deviation - 112 - we are dealing with an extremely strong transmission of a characteristic.

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Only a very small percentage of the stallions falls in this category of three times the standard deviation.

Naturally, the reverse also occurs. With 96 points or under the croup is short and with 88 points (also three times the standard deviation) we can speak of an extremely short croup.

These examples show that the conformation index should not be looked upon too meticulously to the effect that a stallion with a 103 score for croup length does not have an exceptionally long croup, but still falls within the standard range.

Reliability
Another important factor is the number in the conformation index indicating reliability. One cannot read indexes when leaving out the concept of reliability. The lower the reliability score, the more chance that the index number will change. When the reliability percentage is high, it's likely that we have made a proper assessment of the stallion's breeding value. Then there is little chance that in the next index calculation the number substantially deviates from the previous number. Obviously, with a lower reliability there's a far greater chance of such deviation. The measure of liability depends on the number of observations: the number of children involved. Reliability will increase as the number of descendants increases. This facilitates the assessment of the breeding value. An example by way of illustration: a reliability score of 43% for a stallion with a croup length index number of 108 may increase to 70% in three to four years, however with an index number of e.g. 112 (taking into account a favorable development) or 98 (with a negative development).

When a stallion with a good pedigree enters the conformation index with a very high number, and a low reliability score, this only means that this can be attributed to a relatively small number of descendants. In this case these were descendants of a very high quality. Later, when the number of descendants has increased, reliability may turn out to have increased, while the index number has dropped. Of course, the reverse is also possible.

Interpretation
The overview below can help interpret reliability.

Reliability	Interpretation
less than 35%	hardly reliable
40-50%	not very reliable
50-60%	moderately reliable
60-70%	reasonably reliable
89-90%	reliable
over 90%	very reliable

Inbreeding
As to inbreeding, the following rule applies: keep inbreeding on the pedigree the first three generations. When making a pedigree of the foal to be bred it's desirable that in three generations a certain name should not occur two times or more. In addition, it's possible to obtain the inbreeding percentage via the FPS office.

Breeding council and inspection
Please send your comment on and questions about this conformation index in writing to the Breeding Council, c/o FPS secretariat, Postlaan 1A, 9204 WT, Drachten.