

## DNA and verification of parentage

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It is mandatory that a stallion is DNA tested and its parentage has been verified for it to obtain a breeding licence or be finally graded. By verification of parentage it is understood that the animal itself, as well as its sire and dam are DNA tested, and that it is possible from these results to conclude that the parentage matches that which is entered in the animal's passport.

Verification of parentage using blood samples is also acceptable.

The production of the required information can take considerable time, resulting in delays of e.g. entering the stallion on the stallion list, or the breeding licence to come into force. And in some cases it may prove impossible to find the information. Therefore, the KNN has decided the following:

## "Stallions presented for breeding approval must be DNA tested and have their parentage verified when entering the stallion for approval. This must also be apparent from the central horse database, HesteData."

As the results of DNA testing and verification of parentage in some cases can take a matter of months, it is important that stallion owners wanting to present their animals for approval plan ahead leaving plenty of time to complete the process.

DNA can be tested from a blood or hair sample taken and sent in by a veterinarian. In connection with branding, it is possible to have representatives of Landscentret Heste take hair samples and send to Blodtypelaboratoriet at no charge.

The cost of a DNA test in 2008 is DKK 412.50 incl VAT. No additional charge for verification of parentage applies if DNA profiles of both sire and dam are available at Blodtypelaboratoriet However, additional fees can apply if it is necessary to obtain DNA information from other (foreign) laboratories.

Even though the next KNN points assessment does not take place until 4<sup>th</sup> April 2009, it is a good idea to commence the process already now for stallions planned to be presented.

From 2007 DNA testing is mandatory for mares graded with the KNN. However, it is encouraged that owners of mares graded prior to this date that have not been DNA tested get them tested. This way the mare will have DNA lodged should she produce an offspring of stallion potential. If the dam has expired without being DNA tested it may be impossible for a stallion to obtain breeding approval.

## It may be possible to reconstruct the DNA of the expired mare if she has enough progeny (minimum 3-4) that are all DNA tested. This is however significantly more costly than testing the mare while she is still alive.