

Minutes from the DNA group meeting 2014

November 2nd 14:00

Hotel Reykjavik Lights, Island

Participants: SKK: Tomas Bergström, Sofia Malm, Helena Skarp. NKK: Kristin Aukrust, Kristin W. Prestrud. FKK: Hanna Bragge, HRFI: Snævar Sigurdsson, DKK: Helle F. Proschowsky (ref.)

1. Welcome, short presentation

The participants made a short presentation of themselves. Snævar was participating in the DNA group meeting for the first time. He is working as a geneticist at Decode and the Icelandic kennel club consults him in matters of DNA.

2. Minutes from the last meeting in Finland

The minutes from the last meeting was approved with one correction; Hanna Bragge and not Katariina Mäki represented FKK in 2013.

3. Strategy for DNA testing

SKK has made a very nice paper describing the different issues concerning DNA testing. The DNA group asked Sofia to make a more general version (leaving out SKK specific topics) and translate it to English.

4. Validation of HD DNA test from IDEXX (DKK)

Helle informed the group about an upcoming project in Denmark. The newly launched DNA test for HD will be evaluated in a number of Labrador retrievers with high and low breeding values.

5. PRA in Yorkshire terriers (NKK)

PRA has been diagnosed in a Norwegian male coming from Sweden. The Optigen test for prcd-PRA can be used to identify carriers. Each of the Nordic kennel clubs will contact the national breed clubs and pass on the information.

6. DNA profiling

The status regarding DNA profiling in each of the Nordic kennel clubs were discussed.

NKK: No system yet for registration of DNA profile in DogWeb. Parentage testing is not routinely done, only when parentage is (or may be) uncertain. In these cases, parentage testing is performed by NMBU/Section of medical genetics on request.

FKK: Parentage testing is recommended but not mandatory. In breeds, where it is possible to include new individuals (e.g. Border collie, Finnish lapphund, Lapponian herder) DNA profiles are taken from these dogs.

DKK: Has registered DNA profiles since January 2014 when a DNA bank opened at the vet school. DNA profiles have been mandatory in German shepherds for many years due to a demand from Germany. These profiles are made in Germany and the results are stored by the VDH. Surprisingly NKK, FKK and SKK do not make profiles on German shepherds.

The group discussed the benefits of using letters for allele sizes as it is done in horses. This would make it easier to compare results from different laboratories using the ISAG panel.

7. CEA test validation (DKK)

Helle oriented the group about a recent master project that compared clinical eye diagnoses at 7-9 weeks of age with the CEA DNA test in the collie. The compliance was very poor and a new project is now running in the Shetland sheepdog.

8. Hereditary free dogs – number of generations

This topic has been on the agenda several times. This year, SKK oriented the group about the decision to introduce a maximum limit of three generations. There are some practical issues concerning the administration of this new rule, and the group decided to wait and evaluate the Swedish experiences next time we meet.

9. Blood versus cheek swabs

SKK has decided to accept cheek swabs.

10. Multi tests

The DNA group is still critical about the concept of multi testing. On the other hand, we are probably going to see more of it in the future. It is cheaper for the dog owner and easier for laboratories to test “every dog for everything”. Genoscooper is now making a certificate showing the results that are specific to the breed being tested. This has helped a lot, and DKK are now registering selected results from Genoscooper. Swedish breeders have to test the breeding partner if a dog is proven to be a carrier

of whatever disease. Therefore it can be quite “risky” to run a test which returns the genotypes of >100 loci.

11. DNA test for Merle

FKK has sent six test dogs of different colors to Biofocus and the results were in concordance with the expected. IDEXX has offered the merle test too, but there is no information about it on their website. FKK mentioned they know a lab doing DLA typing, if anyone is interested.

12. Any other business

Helle mentioned the Excel file comprising approved DNA tests in the Nordic countries. The file is in a common dropbox and the group agreed to continue updating this list. HRFI should have access to it as well. The link to the dropbox is: <https://www.dropbox.com/sh/aam5brtdcihdewx/E4vC8cRMPH>