# Breeding Group notes, ISIC 2023, 28 and 29 October, Väddö, Sweden

*Notes: Wilma and May Britt*

**Breeding Committee ISIC members: Wilma, May Britt, and Louise**

**Breed representatives and breeding committees in the countries:**

Wilma Roem- Breeding committee Netherlands
Louise Roer-Breeding committee Denmark
May Britt Sannerholt- Breeding committee Sweden
Ulrika Söderberg- Breeding committee Sweden
Elin Brastad- Breeding committee Norway
Tulla Schmedling- Breeding committee Norway
Helga Andrésdottir- Breeding committee Iceland
Lene Hyldegaard Knudsen-Breeding committee Denmark
Bergrós Gisladóttir-Iceland Guest

**Online participants:**

Jo-Ann Secondino- USA
Elaine-USA
Martina Persson-Sweden
Sabine Apoloner-Austria
Jessica Berglund-Norway

## 1. Thoughts and reflections on the lecture "Genetic diversity, is that important?" from Elisabeth Rhodin.

In her lecture Elisabeth Rhodin told us that it is impossible to preserve our breed unchanged. With breeding it is inevitable to select, and the current puppy buyers expect other things from a dog than the previous dog owners. But using only the best dogs for breeding means that not enough animals will reproduce to maintain genetic diversity in the population.

In selecting we should prioritize and what is most important is mentality, followed by function, health and confirmation. For the breed, genetic diversity is the most important for the future. Our breed needs to be able to adapt to new situations in the future. Therefore, genetic diversity is crucial for preserving a healthy and adaptive population.

Discussing the lecture in the Breeding group, the reactions were very positive.
**Decision:** The breeding group decided to write a summary of the lecture for the clubs to publish in their newspapers and on their websites. Elin Brastad (NO) has taken up the task of writing and sending this summary to ISIC/Exce and to the contact persons in the clubs.

## 2. Annual club reports

**Summaries and overview statistics last 6 years**

The clubs described 2022 as a year where much has returned to normal. The activities in the clubs have again been able to be carried out and the number of registrations has returned to normal levels after the pandemic.
**Iceland:** The hip score results that we have each year are limited to the ones that are registered with the Icelandic kennel club (HRFÍ), hip x-ray results from OFA in America don't get sent directly to HRFÍ and the owner has to register the results with them for a fee. Unfortunately, if the results are not favourable or the dogs are not bred from, some owners don´t register the results.
***Rescue service Dog:*** Rescue dog Huldudals Smali IS22870/17 attained the A level in General Rescue and Snow Rescue and was honoured at this year's annual meeting. There are currently three Icelandic sheepdogs in the Dog Rescue Service in Iceland, one who has attained B level and a young dog who has just started his training.
**Finland** is writing about new registration rules that came into force in 2022. Dogs under 5 years of age may have a maximum of 9 puppies and dogs over 5 years of age may have a maximum of 18 puppies. (if the limits are exceeded, the entire litter will of course be registered). The background is to reduce the risk of matadors and to limit the use of young dogs in breeding.
***Herding*** has come more popular year by year: 83 herding starts, 4 herding pretests and 25 herding instinct tests, all FCI's traditional style. Two dogs earned Finnish herding champion, Gelgja's Glaesir and Vestanvindur Draumur Kátsson.
**Denmark** announces that starting this autumn, the club will restart with an unofficial selection team description. They will reuse the field team description that the club used before, but which has been down for some years.
The Danish club announced last year its concerns about deteriorating HD results. The subject has been raised with DKK. The explanation for the fact that they see more dysplasia today can be from better examination and sedation methods, but this is probably not the whole truth. In 2022, they campaigned to get more dogs x-rayed, which succeeded. It is important because it gives the club the opportunity to use the HD index on the breed. The club can state that the 2022 results resulted in fewer severe HD remarks (D and E) but an increase in the milder grade (C).
**Netherlands:** The club's policy to take genetic diversity into account in breeding is put into practice by the breeders in The Netherlands. The result is that the COI (coefficient of inbreeding) for Dutch dogs has not increased over the last four years, while the MK (Mean Kinship value) has decreased a little. This is due to the fact that the breeders make use of the data from Dogs Global database to test their breeding combinations beforehand.
**Norway:** The result of dogs with HD shows that the percentage of dogs with C are higher, and the percentage of dogs with D are lower than previous years. In other words, it looks like the dogs with HD has a milder degree than before.
**Sweden:** From 2015 onwards, we have seen an increase in the number of cases of hereditary cataract compared to the years between 2000 and 2014. At that time only one case of non-hereditary cataract was reported.
For dogs born 2015 - 2021, 8 cases with hereditary cataract, 2 cases with unknown genetic significance have been reported.
***Herding*** has become more and more popular over the years: 24 dogs started in FCI's Herding instinct test and 3 dogs in FCI's working test, all traditional style.

We discussed hip dysplasia in our breed and the results of HD testing this year compared to the previous years. In Denmark and Norway, a light increase in HD C hips is reported. In Denmark also a light increase in HD D and HD E is mentioned though in our breed seldom an individual suffers from bad hips. To be able to do useful selection for a multifactorial trait like HD we need to make use of Estimated Breeding Values. In Denmark the Kennel club provides calculations for estimated breeding

value for HD in the breed. In this way you can use an index when you want to breed for better hips. We decide that it would be useful to have the formula for estimated breeding value calculations in the ISIC database available in the future.

In connection with this we talk about the fact that many breeders in Iceland do not use the FCI HD protocol but send their hip results in for OFA diagnostics. They do this because they expect to get better hip results in OFA compared to FCI HD. We want to make clear that the hips of the dog stay exactly the same whether tested in OFA or in FCI HD. OFA is used in USA and FCI HD in Europe. There are sites where you can relate the results of the two methods.

An important conclusion we made after this discussion about HD is: It is very rare that an Icelandic sheepdog is suffering from bad hips and HD D or E hip results are also quite seldom seen in the breed. Hip dysplasia is not a problem in our breed. We want to focus more on problems that we think are more important. Especially mental problems and aggression require our attention in the future.

## 3. How to respond to challenges linked to genetic diversity.

There are two areas in particular that are highlighted at national kennel club level in addition to the work for healthy dog breeding with the same focus as earlier. These two are the work for genetic diversity and mentality. The high-profile cases of recent years where breeds are threatened with bans and where authorities have stripped breeders of their right to breed have meant that the demand for healthy dog breeding has increased.
***Suggestions for what can be done.*** Within the ISIC collaboration, we need to find out and get an overview of what mental tests there are and how the clubs work with mentality in the breed. How does it look in other breeds within the same area of functions.
The ISIC/BC proposal for new breeding recommendations, is written from the starting point of setting goals that lead to reduced risk of losing genetic diversity. What the breed needs most is e.g. that more individuals are used in breeding, low inbreeding rate when planning future litters and increasing the breeding debut to 3 years. By increasing the breeding debut, the risk of a large spread of serious diseases in the population is reduced and the average generation interval becomes higher.
An important tool to reduce the rate of loss of genetic diversity is to use breeding programs with the ability to calculate the kinship of dogs back to the founders. By being able to calculate each individual's degree of inbreeding and mean kinship, one gets to know which individuals contribute to genetic diversity. These individuals are not many. There is still an opportunity to preserve most of the remaining diversity. For that, within the ISIC collaboration, we need to use the tools that are available for this purpose.

## 4. ISIC's International Breeding Recommendations.

We, the ISIC members, have the task to maintain the genetic diversity in the breed. We are the messengers about this to the breeders in our countries. For this reason, we have established recommendations for breeding with Icelandic sheepdogs. New insights make it necessary to adjust the recommendations and a good database will provide the information we need to maintain genetic diversity.

We discuss the proposal for revision of the Breeding Recommendations of ISIC. A number of improvements for the proposal are suggested: to make a summary and a simpler version to facilitate the breeders; to improve the English language use; change the priority order of properties, mentality

first; reformulate the text about the production of offspring that one male is allowed; and add a scheme that shows the number of pups produced per country compared to the acceptable number of offspring per male (children and grandchildren) in this country.

The International breeding recommendations should support the breed clubs to convince their male owners and breeders to use more different males in breeding instead of using the same stud dogs over and over. We should stimulate our breeders to look for males that have not yet been used. For this reason, we could consider allowing a first litter without test requirements. Another measure that can help is limiting the number of litters per male to a maximum.

The recommendation to keep the average generation interval high is another measure that supports genetic diversity. We can stimulate this by avoiding that young animals start breeding before the age of three. Our breed is not mature before the age of three or four years. This is information people need to receive before they start breeding.

In the recommendations a paragraph about Mentality is added. This paragraph will say: ISIC recommend that dogs take part in Mental Description (MH) tests, or Behaviour and Personality Assessments (BPH) or similar assessments for mentality.

About a paragraph in the recommendations on working and or herding abilities we had some discussion. We agreed to have two paragraphs, one on herding and one on desirability of working with your dogs.

ISIC recommend that dogs take part in herding instinct tests. We need to collect knowledge about the herding ability in the breed. The herding test NHAT (FCI Natural Herding Aptitude Test, Traditional style) is recommended. Similar tests, if NHAT is not available in the country can replace this.

About working with our dogs: In an effort to help preserve and protect the all-around working ability of the Icelandic Sheepdog, owners are encouraged to participate in all kinds of activities with their dogs.

The discussion about the recommendations was concluded with the decision to approve the proposal for new recommendations. The ISIC/BC will send the improved text to the chairman meeting, scheduled for January, to confirm the new recommendations. Before the text is send to the chairman it will be shared with the breeding group members for commends.

## 5. ISIC database

During the seminar we were updated about the status of ISIC database and the plans for the near future to improve the data and develop new functionality. In the breeding group we determine that we in ISIC need more information about the whole population. We need that knowledge to be able to advise our breeders how to breed for the future. For this purpose, we need tools and a database that provide us with this population overview for the entire population and for the populations in each country.

What we need from the database is that it is complete and correct. We had a core discussion about having one or two breeding programs, ISIC database verses Dogs global. It became difficult to move forward in the discussion as the positions were already very locked from the beginning. The fact is that seven countries use Dogs Global in breeding planning and some countries only use ISIC database.

## 6. ISIC Breeding program (created by Guðni Ágústsson) and Dogs Global in the future?

What is needed is a data program where correct test mating based on five generations is possible. Also, overview of the population, both on the entire population and per country is required.

The ISIC database is not able to provide this knowledge now. Dogs Global database can provide this information, but ISIC does not want to request it. The reasons are Dogs Global costs money, and some people have lack of trust.

The ISIC data group is working on the ISIC database to get it complete with correct data. This is the first step to take. The breeding group is willing to help with this. Lists of bugs that need to be fixed will be circulated by the data group.

During our meeting we were asked to make a wish list for topics that the breeding group wants from ISIC database. In the breeding group we produced this wish list for the data group.

We have put together a list with main topics and requirements for the ISIC database.

### This is the list:

1. Have a complete and correct database with all Icelandic sheepdogs (keeping the entire populations)
    a. With an import function for the future
2. Inbreeding (COI)
3. Mean kinship
4. Population analysis on relationship back to the founders
5. Test mating
    a. Test mating calculations that are correct (printable for one page)
    b. Test mating calculations on at least 5. generations (printable for one page)
6. Health information on each dog (HD, Eyes, ED)
7. Pedigree information:
    a. Pedigree table / visualization of the pedigree (printable for one page)
    b. Number and list of progeny for each individual
    c. List of siblings sorted into same mother / same father
    d. Information on country (visual)
    e. All registration numbers on the dog (all should be workable/clickable)
    f. Pictures of the dogs
    g. Clickable links
    h. Index on HD (in the future)
    i. Index on herding (in the future)
    j. Export / import information on individuals
    k. Official results for mentality
    l. Official results for herding
    m. Information on breeding availability (neutering / cryptorchid / dead)
8. A comprehensive search, sorting and filtering function
    a. Gender
    b. Age range
    c. Country
    d. Individuals with pictures
    e. All health information

f. Herding test – yes/no
g. Mentality test – yes/no
h. Kennels

9. Overview information on:
    a. The entire population (overall MK, inbreeding coefficient (COI), health statistics for resent years)
    b. Calculate / statistics on a national level (point 8a on nation level)
    c. List of Kennels and their litters

**7**. **Any other business**

There was no other business added to the agenda.