

Berner - IWG International Working Group Group President Martha Cehrs

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On behalf of Norsk Berner Sennenhund Klub (NBSK) we want to inform you about the situation for the Bernese Mountain Dog (BMD) in Norway.

In our country there has been huge changes in recent years, when it comes to laws and regulations that deal with animals, animal health and animal breeding.

On the 10th of October 2023, the Norwegian supreme court stated that it was prohibited to breed Cavalier King Charles Spaniel in Norway, because it would be contrary to section 25 of the Animal Welfare Act.

These changes all started in 2020 when The Norwegian Society for protection of animals (Dyrebeskyttelsen) filed a complaint, claiming that it is contrary to section 25, the first and second paragraph, of the Animal Welfare Act, to breed English Bulldog and Cavalier King Charles Spaniel. The legal proceedings were brought against Norwegian Kennel Klub (NKK), the two breed clubs and three named breeders of each breed.

This is The Animal Welfare Act, translated to English: Section 25. Breeding

§1

Persons who keep animals, breeders, breeding organisations and breed clubs shall through breeding promote characteristics which produce robust animals which function well and have good health.

§2

No breeding, including through methods of gene technology, shall be carried out which: a) alters genes in such a way that they influence the physical or mental functions of animals negatively, or pass on such genes,

- b) reduces the ability of animals to engage in natural behaviour, or
- c) raises general ethical concerns.

§3

Animals with genes as cited in the second paragraph shall not be used for further breeding. The King may issue regulations on breeding in accordance with the principles in this section, including on breeding activity within breeding organisations and breed clubs."

Because of all the health issues with cavaliers, the low genetic variation and that the Norwegian Cavalier King Charles Club decided not to start an outcross project, it is now prohibited to breed cavaliers in Norway.

The English Bulldog can because of their health project with BOAS testing still be bred.

NBSK and the Bernese breed in Norway are now facing the same issues and it must be taken seriously. There have been signals and statements from The Norwegian Society for protection of animals (Dyrebeskyttelsen) that they will try to prohibit breeding of several breeds, and that the BMD is high on their list.

In Norway we have a considerable amount of information about our bernese population. Almost all BMD in Norway are registered in NKK. Approximately 80-90% of all registered bernese are x-rayed on hips and elbows, and the results are registered and published at the NKK digital database Dogweb. On Dogweb you can also find information about which dogs that have had c-sections, all registered litters, stillborn puppies, pedigree based inbreeding coefficient, show results, written critiques, date of death, statistics and more. In addition NBSK has a detailed health register with test results, health issues, diagnoses, defects, temperament issues, cause of death and so on. This register was started in the 80s and as of 01.01.2025, 5348 BMDs have been registered. In 1992, 2000 and 2013 had NBSK health surveys. The club received answers from several thousand owners.

Due to this thorough registration, we know that we have high numbers of cancer cases. More than 50% of the breed die from variations of the disease. The breed also suffers from kidney diseases like RD and FN, epilepsy, cruciate rupture, stomach torsion, SRMA, OCD, HD, ED, DM. The list is quite long.

Statistics, from the insurance company Agria, from 1995 to 2021, confirms the same. The BS is among the most costly breeds, when it comes to veterinarian expenses. They are highly overrepresented in several diagnoses such as upper urinary tract, reproduction male and infection, compared to other breeds. And most common veterinary diagnosis on BMD are tumors in thorax, uremia and tumor respiratory lower. It is also a much higher risk that a bernese will die young, than most other breeds.

Quite often matings do not result in pregnancy. And it's not uncommon that females are mated several times without conceiving. The matings can be difficult, some males are not interested and some females are very reluctant. There are quite a few males with poor sperm quality and a lot of males with prostate issues. Uterus infections are common and litter sizes are lower than you can expect of a breed of this size.



However, what concerns us most in this case is that more than 50% of births end with c-sections!

NBSKs breeding rules have been adjusted several times over the years. In the beginning the focus was on HD and ED. The rules were quite strict, with several restrictions connected to the x-ray results on the breeding dog, its parents and siblings.

The last 10-15 years the rules have been changed to encourage the use of a wider range of dogs in breeding. Show-results for the breeding dog have been reduced and rules for HD and ED have gradually been eased. We now use an index for HD and allow HD C. The rules have more focus on longevity. NBSK recommends using older dogs in breeding and strives to achieve an AOD average of 8 years or more in fictive pedigrees on planned litters. In addition, it is recommended to perform the HS test and keep the inbreeding coefficient low.

NBSKs breeding committee (HAK) has continued collecting information, and made the health register digital and available for members of the club. HAK has also used the health register more frequently in their advice for breeders to avoid combining dogs who have to much of the same diseases, defects or issues in their lineages.

Unfortunately we have not seen any noticeable changes for the better. The average life span is still around 7 years. We still have around 20% HD and ED. We still have too many dogs who die from cancer and kidney diseases, and an increasing number of dogs registered with SRMA. We have found that it is becoming more difficult to find combinations where the dogs don't have the same health problems close in their pedigree.

When we look at these health issues in addition to the fertility problems, there is no doubt that the main reason for this and the lack of improvement is low genetic diversity and high genetic COI.

In November 2024 we had a breeders meeting, where 47 breeders/stud owners participated. Veterinary Ph D Kim Bellamy who is NKKs breeding consultant, held a lecture about health, fertility, COI and genetic variation in BMD in Norway. Kim Bellamy referred, amongst others, to the article *Genomic Diversity and Runs of Homozygosity in Bernese Mountain Dogs*, from 2023. This study reveals that the genetic COI in the 33 tested dogs on average was 39,5%. The study also shows that the bernese breed has unusually many runs of homozygosity, on average 383 per individual compared to 69 in dogs from less inbred breeds.

This confirms our fear, that the genetic variation is so low that our effort to improve health and life span have very limited effect. The problems we have in the BMD are now so severe, that outcrossing with one or more breeds might be the only way to activate the genetic changes needed to continue breeding BMD in Norway, according to the Animal Welfare Act.

NBSK has after the meeting in November started a project called "Berner for framtida" - BFF (Berner For the Future). The project is initiated by the board in NBSK along with the breeders. NBSKs board chose Tony Cathrine Torp and Kjersti Olsen to run the project in collaboration with NBSKs board and NBSKs Breeding Committee (HAK).



The goals for the project are to:

- Increase genetic diversity and achieve a more heterozygous breeding stock.
- Lower the genetic inbreeding coefficient (COI).

The ripple effects will hopefully be

- better health and stronger immune systems
- longevity
- lower risk for recessive diseases
- improved fertility and less c-sections
- keeping the desired bernese temperament

How can we reach these goals?

- Chart the genetic COI of the Norwegian population, using either Embark or Feragen for testing.
- "Matchmaking" considering COI and DLA/haplotypes with Embark or Feragen. We will strive to do this in cooperation with other bernese breed clubs.
- Adapting NBSKs breeding rules so more dogs can be used in breeding as well as limiting the number of offspring from a single stud dog/breeding bitch.
- Outcrossing with one or more breeds over a longer period of time. This project's development will be in close collaboration with NKK, genetic experts, scientists and breeders.
- Dogweb Monitoring the pedigree based COI of single combinations and in the breed.
- Continue to develop NBSKs health register.
- Educate the breeders.

The project group will start with the following tasks:

- inform KBS, IWG, NKK and NBSKs members about the situation and the temporary plan.
- select a laboratory for testing COI and genetic variation in all breeding dogs. We want to reveal what the situation is for the Norwegian bernese population.

We understand that this can be perceived as controversial, but we hope for your recognition of the situation we are facing. We would appreciate your collaboration moving forward. At the moment it's not settled which measures are necessary, but hopefully the charting will guide us forward.



We will keep you updated when we have completed the initial phase of the project.
Best regards from
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Sources:
020222_EN Dom i sivil sak - Dyrebeskyttelsen-NKK-1_NKK-logo(1).pdf
Genomic Diversity and Runs of Homozygosity in Bernese Mountain Dogs
Factors affecting reproductive performance in the Swedish Bernese mountain dog

Hundrasen med kortast livslängd - Agria Djurförsäkring

Rasespesifikk avlsstrategi (RAS)