

The DKV Breeding Regulations – some comments

by Dr Dagmar Heydeck

This article was written for our newsletter by Dr Dagmar Heydeck, she is both a VR test judge as well as a SZR conformation judge. Over the past 35 years she has held many board positions of the DKV, various JGHV as well as president of the breeding commission of the VDH (German Kennel Club).

The main aim of breeding regulations is to provide to the hunting community healthy dogs with a high level of natural ability for versatile hunting and a balanced temperament in agreement with animal welfare regulations in Germany.

There are three important components: 1) the breed warden 2) the breeder and 3) the dogs.

1. The Breed Warden

The breed warden is one of the most important people in the Club and he has a huge impact on the quality of breeding and resulting dogs. The same applies to conformation judges who must inspect every dog carefully to avoid false scores and hence breeding with these faulty dogs.

The breed warden must know the animal welfare law and regulations and he is responsible for kennel and litter inspections. Only educated breeders and the best conditions for keeping dogs and raising pups are tolerated in the DKV. Breeding experience is not a must, because a person who studied Veterinary Medicine or Biology has the knowledge independently of personal breeding experience. Additionally, there are various options for further qualification in the VDH such as educational seminars for breed wardens, so that missing personal breeding experience can be compensated.

2. The breeder

The DKV must make sure that breeders are educated people knowing how to treat and house dogs and how to raise pups in agreement with the animal welfare regulations. The breed warden must inspect the kennel facility and answer all questions in the respective protocol. All kennels and all dogs of the breeder must be inspected, not only DK's and they must all fulfil the requirements described in the animal welfare regulations. During inspection he must ask the breeder questions to get an impression about his knowledge. If there are deficits in knowledge or the kennel facility, another inspection appointment is needed after these are corrected. Only after successful inspection can the breeder apply with his DK Club for registration and protection of a kennel name. Kennel names must be registered with the FCI. There is no desire to accommodate commercial breeders and puppy mills!

Up to three litters per breeding year can be registered by a breeder. This limitation is to discourage commercial breeders ever being part of DKV breeding.

3. The dogs

According to VDH regulations, the DKV must take care of any health or behavioral problems in the breed and develop strategies how to avoid or eliminate them as problems are noted. Hip dysplasia and Osteochondritis dissecans Xray (OCD) are now mandatory to control these defects. There is no reliable molecular approach available so far. Behavioral problems like gun shyness, fear etc. eliminate such dogs from breeding to avoid these tendencies further spreading in the population. Breeding is allowed only with healthy dogs. No other health problems are tolerated, especially seizures for any reason excludes the dog from breeding. The DKV breed warden analyses the progeny in every breeding year and may identify parents passing on genetically transmitted diseases which impact the hunting use of the dog. According to the breeding regulations these dogs will lose their breeding qualification and not be bred further. An important step was the introduction of litter inspection protocols and the publication of abnormalities in the breed book (annual zuchtbuch). This provides valuable information but is not decisive for further breeding use. For example, bite problems noted in a young dog might disappear in the adult dentition.

Please note the importance, that not every dog which passed the requirements for breeding should be bred !! There may be excellent workers with bad temperaments or dogs lacking natural ability and needing excessive training to get them passed the working tests and both are NOT worth breeding !!

It is the responsibility of the breeders to select ONLY the very BEST dogs for breeding. Honesty of the breeders is of utmost importance. Don't hide faulty dogs in a litter and if health problems are noticed, report it to your breed warden. He will inform the DKV, this is of the utmost importance and the responsibility of the ethical breeder. This is to the betterment and continued high standard of the breed. Additionally keep in mind that close line breeding might produce dogs with similar type and star dogs, but in the long run, this is not good for the breed. Inbreeding depression (small litters, mating problems, disturbances of the immune system, food and skin allergies, reduced life span, diseases etc.) and accumulation of other problem genes might well occur. This is not in agreement with current animal welfare laws.

In the past there were less regulations and breeders just eliminated any ill or faulty pups and nobody knew about them. Everybody just saw the remaining stars. This is another reason that a responsible breeder ensures as many puppies as possible from a single litter are derby and Solms/AZP tested, for the best possible evaluation .

Genetic variability is one of the hallmarks of responsible breeding and ensures the health of our dogs. Matings of first grade relatives (parents and progeny) or half-siblings is now prohibited for this reason.

When planning a mating, one should analyze the parent's prior litters, both if possible and look carefully for any anatomical or behavioral problems produced. An additional option is to observe the inbreeding coefficient (COI), which is a number measuring how inbred an individual is. It describes the probability that two identical alleles (homozygosity) exist at any locus in an individual dog, inherited from a common ancestor of the two parents. A higher COI will increase the risk of health issues. In dog breeding, it is recommended to keep the COI less than 5% in the population, because deleterious effects are more often seen beyond this value (see also <https://www.instituteofcaninebiology.org/blog/coi->

faq-understanding-the-coefficient-of-inbreeding). A COI of 10% means that potentially 10% of all genes are homozygous.

The value depends on how many generations are analyzed. The DKV software (DKVRZV2) allows the calculation over 8 generations. Accession to this software can be applied for at the DKV for breeders, owners or members of the board. In general, 4 generations are most important, because these dogs have the highest genetic impact. The IC should be 0%, or at least below 1% (empirical values).

The increase in COI in the population can be calculated by comparing the numbers of males and females used for breeding. It should not increase over 1%/year.

The FCI has issued a recommendation to breeders that NO dog should have more offspring in its lifetime than equivalent to 5% of the number of puppies registered in the breed during a five-year period. Assuming 1,200 pups/year or 6,000 pups over 5 years, for DK this number would be a maximum of 300 pups. To name just one, Grando von der Schladebacher Alm produced 357 pups. It is NOT recommended to achieve these 5%, in fact the value should be as low as possible!

Females should not be bred before 18 months of age, males before 12 months of age. This difference is due to the fact that pregnancy is way more challenging for the body compared to a mating. Anyway, the dogs must have reached the adult body structure.

To protect the mother bitch from overload by pregnancies and raising pups, their breeding period is limited to 4 litters or 8 years of age. Within 24 months, the bitch can have 2 litters. That means she can either have 2 litters within 12 months, but no additional litter in the following 12-month period or she has one litter every 12 months. The latter option is preferred by most breeders.

Males have 4 studs within the first 2 years of their breeding period when first qualified. If any hereditary diseases or defects in the offspring are observed in this time, which impact the hunting use, the DKV breed warden and the breeding commission will decide about further use of the dog. This is a first and important step to avoid spreading problem genes which might cause diseases or defects in the breed.

Nearly every year, the number of studs for males is discussed. Some people think that there should be a limitation as in other breeds (which I do as well), to not overuse dogs and keep genetic diversity and health in the breed. Others think that the breeders observe this fact anyway and limitations are not necessary because no stud dog reaches the critical value. I guess this is an ongoing discussion and still some stud dogs are frequently used.

To keep or increase the genetic diversity in the breed, from my point of view, litters should not be repeated independently of how successful they were. Repeating litters means that more progeny with comparable genetic background is produced, which lowers the genetic diversity in the breed. Litters with breeding faults (teeth, behavior etc.) more than ever should NEVER be repeated, although there are no such restrictions in the DKV breeding regulations at this point.