



Breeding strategies and goals for rough and smooth collies in Sweden

Background

In the SKC (Swedish Kennel Club) Action plan, approved at the Kennel Delegates meeting in 2001, there is a goal stated saying that all breeding clubs should have a specific breeding strategy based on the specific needs of the breed. This strategy should be completed during 2004 at the latest. It is up to each club to make its own breeding strategy but for the clubs, that have not made such a strategy at the latest during 2004, it is probable that SKC simply gives them a breeding strategy based on SKC's own breeding strategy and the European convention for protection of pets. The Swedish Collie Club (SCC) of course is of the opinion that we should work out a breeding strategy considering the specific issues for collies.

In spring 2002 a group of four persons was formed to work out a proposal for breeding strategy and goals. A number of opinions from local areas as well as private persons have come forward and have been considered when working with the strategy. The proposition for breeding strategy for collies from the breeding committee is based upon these opinions and propositions and on the propositions from the collie conference in November 2003

Now then, what is a breeding strategy? Breeding is a planned reproduction of animals and strategy is the art of thorough planning. Consequently, a breeding strategy is the way of thorough planning for reproduction of animals. The breeding strategy is the basis for the club's breeding policy which is the basic action program for the way to act when breeding our collies and all this eventually will result in goals for breeding, i.e. what we want to achieve with our breeding work.

Breeding strategy for collie

The goal of the breed club

The goal of the Swedish Collie Club is trying to develop the breed in a positive way. The breeding goals of the club are meant to be a help for the breeders, especially the new ones, in their efforts to improve the breed. The goals might seem obvious to the more experienced breeders.

When the breed standards for collies were written there were no means of inspecting eyes or hips more thoroughly and genetics was an unknown concept. People knew that they could influence their breeding work through the selection of the parents but they did not know why it was like that. They were breeding on the function of the dogs. New scientific findings and examination methods are available for today's breeders so that they can further develop their breeding work. By using these scientific methods the breeding can be affected quicker and also developed further.

The breeding principles of SCC

The breeders should follow the basic rules and breeding policies of SKC. Apart from these rules the collie club has recommendations the breeders also should follow.

Breeding policy for the Swedish Kennel Club

Breeding of breed dogs is the foundation for the activities of the Swedish Kennel Club. In the first paragraph of the regulations, which state the goals for the activities, the importance of the breeding is

clear through the text “to awake the interest for and promote breeding of mentally and physically healthy, working, hunting and exteriorly in perfect condition breed dogs”.

Breeding and the development of the breeds are based on the breeders' choices of breeding animals and the way the dogs are used. Genetic variation is essential for breeds and their possibilities to adjust to future demands. Therefore breeding and development of breeds must aim at a goal, be long-term and stable. Stable means that the breeding does not result in deficiencies regarding health, mentality or function or gives the breed no genetic variation.

Breeding must also follow the laws for animal protection and the basic rules of the Swedish Kennel club.

In cooperation with the special clubs the Swedish Kennel Club is responsible for breed formation, breed development and breed care.

Breed formation means:

- Building up new breeds and populations of breeds that already exist in other countries.

Rebuild breeds that due to small numeric strength and high family grade are in need of this.

Breed development should be characterised by a stable and long-term adaption of the dog to the demands put on an exteriorly and functionally good dog in good health.

Breed care can contain genetic health programs regarding physical as well as mental health and overlapping health and breeding programs on a population level. Combinations of these steps may exist in individual breeds.

The Swedish Kennel Club shall contribute to the design of breed specific breeding strategies and

- Give priority to breeding for mental qualities, adapted to the function of the breed and the demands of society.
- Give priority to breeding supporting the offspring's possibility to a long life without health problems.
- Give priority to exterior breeding supporting good function and preventing the presence of not wanted qualities with the offspring.
- Give priority to breeding of dogs with natural capacity for reproduction.
- Work for a low number of breeding with closely related dogs to diminish the increase of inbreeding and contribute not to let individuals or groups of close family members to be over-used for breeding.
- Work for reducing the number of breeding restrictions that are not related to the health of the breeds but limit the possibilities of an efficient use of existing dogs and, when needed, remove obstacles for breeding variations of breeds built upon differences in separate genetic pairs, i.e. colour, hair and size.

SCC's recommendations

The breeder must have a thorough knowledge of the collie breed standard.

Give priority to breeding for mental qualities adapted to the function of the breeds and the demands of society.

The collie, originally a shepherd's dog, was tested early for military work and, as it worked well, was placed in the Swedish Working Dog Association (SBK). To better understand the connection between exterior – mentality – usability, breeders should have studied the breed at work, either in its original

function as a shepherd's dog or working in one of the groups for the SBK or working in the military/civil defence.

Mental description of dogs is an excellent measuring instrument to describe the mentality of dogs. It is compulsory for dogs born after 2000-01-01 to get a registered offspring. The dogs should be described between the age of 12 and 18 months. It is an advantage if the sibling group can be mentally described simultaneously or within a short period of time.

It is important to observe the dog's ability to put scary events behind. The ability to work them off is essential for the dog's possibility to function well in today's society. It is important to breed to increase the breed's playfulness, curiosity and self-esteem.

The breeders should study the mental description of dogs paper for the intended breeding dog and its siblings and, if appropriate, the offspring. The results should be compared with the average results. They should also study the capability of the intended breeding dog to handle different grounds and floors.

Give priority to breeding supporting the offspring's possibility to get a long life without health problems.

The dog must be in good health and very good condition when mating. Dogs taking medicines for chronic disease should not be mated.

Puppies should be eye examined before the age of 10 weeks with official results. The breeding dogs should furthermore have another eye examination after the age of 12 months with official results. Imported breeding dogs must be eye examined in Sweden with official results before they are used for breeding. After the age of 10 weeks the pigmentation of the eyes increases which makes diagnoses of CRD changes more difficult. Coloboma is hard to diagnose with puppies. However, it is of utmost importance that the breeding dog's status of coloboma is known, therefore the breeding dogs must be eye examined again after the age of 12 months. If different diagnoses from this examination occur from different veterinarians, the eye expert group shall determine the correct diagnose.

Dogs with displacement of retina should not be used for breeding. Dogs with coloboma should be avoided for breeding. Dogs with CRD can be used for breeding. However, breeders should know that all kinds of CEA are defective and therefore the frequency of CEA should be diminished by using dogs with as little such defects as possible. The breeding dogs shall be hip x-rayed with HD grade A, B or HD ua (no remark). The results of the siblings regarding hip dysplasia should be observed as HD is inherited polygenously.

Give priority to exterior breeding favouring good function.

The breeding dog shall be described exteriorly or shown in an official class on a dog show.

The breeder should know the breed standards well and the anatomy of the dog.

The breeding dog should have a correct bite and a complete set of teeth as defects in this range are often inherited. The size and quality of the teeth should also be observed

Give priority to breeding of dogs with natural capacity for reproduction.

Females must have normal reproductive cycles and be willing to be mated to be used for breeding. Females should not be mated before the age of two years and not after the age of eight years. Please note that females older than seven years must have a health certificate from a veterinarian according to SKC's basic rules for mating.

Males should have a good sexual desire to be used for breeding.

Work for a low number of breeding with closely related dogs to diminish the increase of inbreeding and contribute not to let individuals or groups of close family members to be over-used for breeding.

At present the inbreeding coefficient is 2,7 %. The figure was 3,5 % in 2002. The breeding work should aim at an inbreeding coefficient not exceeding 2,5 %. Breeders should know the inbreeding grade for the planned litter. For smooth collies the figures are 4,6 % (2002) and 4,4 % (2003).

Work for decreasing the number of breeding restrictions that are not related to the health of the breed but limit the possibilities of an efficient use of existing dogs and, when needed, remove obstacles for breeding variations of breeds built upon differences in separate genetic pairs, i.e. colour, hair and size.

The pedigree for the variants rough and smooth collies is open.

Mating blue-merle with blue-merle is not allowed since the risk for defect offspring is very big. Sable offspring of a combination of sable and blue-merle is forbidden for breeding.

Evaluation of breeding animals

Breeding evaluation is made by help of the official results being reported to SKC. The results are also available from the Swedish Collie club register committee.

Recommendations for females

Females should be evaluated after their third litter. This evaluation is useful not only for the possible continuous breeding but also for her whole family group. Her offspring must be eye examined as puppies. It is wished for another examination of the eyes also after the age of 12 months. Most of the offspring from the first two litters should be hip x-rayed and mentally described to be able to get an evaluation as just as possible.

Recommendations for males

Rough collie males should be evaluated after six litters or at least 15 offspring. Smooth collie males should be evaluated after two litters or at least 8 offsprings. This evaluation is of use not only for his possible continuous breeding but also for his whole family group. The offspring should be eye examined as puppies. It is wished for another examination of the eyes also after the age of 12 months. Most of the offspring from the first two litters should be hip x-rayed and mentally described to be able to get an evaluation as just as possible.

Matador breeding should be avoided. No dog should be used for breeding more than giving totally, during his life-time, an offspring corresponding to 10 % of the registered number of offspring during a year. At present this is approximately 60 puppies and as the average litter size is five puppies it means about 12 litters for rough collie males. The smooth collie has few registered puppies each year (approximately 50-75 individuals/year). It is therefore very important that an individual male is not overused in breeding.

Please note that this number is changed with regard to increase or decrease of the registration of puppies. The reason for this restriction is that the genetic variety must be secured. This recommendation is universal for all breeds, stipulated by leading geneticists.

Breeding goals for collie

Breeding goal is a way of formulating in writing the goals we have had for a long time. The breeding goals are valid for a period of seven years, i.e. the goals should be reached during 2011. When needed, modifying and time shifting are possible. To reach these goals, the club is planning to continuously arrange conferences/trainings for our members.

HD

Present status

In 2002 not quite 40 % of all collies are x-rayed.

The share of HD for the years 1999-2001 is in average 17 %, and for the year 2002 the average is approximately 21 %. Smooth collies has so far been free from hip dysplasia. Lately, occasionally some individuals have had this defect. In 2004 3% had HD and in 2005 approximately 10%.

The share of dogs with hip dysplasia is increasing at the moment.

Goal

- Within seven years having at least 50 % of the total number of collies x- rayed.
- Within seven years having lowered the number of dogs with hip dysplasia to below 14 % (rough collies) or 7% (smooth collies).

Eye status

Present status

Between the years 1998-2002 in average 88,6 % of the rough collie puppies were eye examined. Smooth collie puppies were examined to an extent of 92,7% during 1989-2005. During the same period approximately 5,8 % of adult dogs were examined. More and more adult dogs are examined but many more are used for breeding.

Goal

- Within a period of seven years having at least 93 % of the puppies of the yearly litters eye examined.
- Having all breeding dogs eye examined as adults.
- Within a period of seven years completely exclude dogs with diagnoses of displacement of retina, bleeding in the eye and coloboma from breeding.

Mental description of dogs

Present status

- Out of collies, both smooth and rough, born in 2001, 21 % have been mentally described including the year 2002.
- Out of collies born in 2000 30 % have been mentally described including the year 2002.
- For those born in 1999 the number of mentally described ones is 17 % and for those born in 1998 the number of mentally described ones is 16 % during the same period of time

Goal

- Within a period of seven years having at least 50 % of the dogs of the yearly litter mentally described.

Separate qualities

Present status

- Some mental qualities are more valuable both from a breeding and from a function point of view, i.e. dogs being useful working.
- The qualities that need improvement are the dog's will to cooperate, its curiosity and to diminish the fear reactions.

Goal

- Within a period of seven years to increase the dogs' will to play with people. The average for collies regarding the moments describing play is at present 2,6. The ideal profile for the collie is 4.
- Within a period of seven years to increase the dogs' curiosity. The average for collies regarding the moments describing curiosity is at present 2,4. The ideal profile for the collie is 5.
- Within a period of seven years to diminish the dogs' fear reactions. The average for collies regarding the moments describing fear is at present 2,9. The ideal profile for the collie is 1.

Official working dogs

Present status

- The collie breed has only a few official working dogs.

Goal

- Within a period of seven years get more dogs to do the working tests.

Exterior

Present status

- The exterior of the collie needs to be improved as many features do not correspond to the standards.

Goal

- Within a period of seven years having at least 50 % of every yearly litter shown in a dog show with an official result or being described for their exterior.