

Instructions for implementing and monitoring crosses between breeds



Approved by the Finnish Kennel Club's Board on 22.11.2013. Valid from 1.1.2014.

Updates: Board 22.11.2019, valid from 1.1.2020.

How to apply for crossbreeding

The goals of crossbreeding as well as traits of the individuals chosen for crossbreeding should be defined in the application. Guidelines for further use of crossbred puppies in breeding should also be given.

Goals: what is lacking: why are breed crosses needed?

- Improving or restoring working traits
- Decreasing the incidence of breed-specific genetic problems in health, behaviour and/or reproduction traits
- A harmful mutation allele has been fixed in the breed: bringing back a normal allele into the breed
- Improving the health in a breed with exaggerated conformation traits
- Improving general vitality in the breed (decreasing the incidence of immunological problems)

Breed crosses are primarily intended for breeds which lack the necessary genetic variance needed in breeding of important traits that have an impact on the dog's well-being.

The application should include an analysis of the situation of the breed and the need for crossbreeding, both in Finland and internationally. As regards the domestic population, the breed-specific breeding strategy (JTO) of the breed may form the analysis or the basis of it.

Which breed to choose for the crossbreeding?

"Why are we going to cross-breed?" This question will help to choose the intended breed:

- A breed with traits lacking in our breed
- If the goal is just to increase genetic variation, the best choice is a breed with only few genetic problems, and otherwise as similar to the original breed as possible.
- The intended breed should not have the same genetic problems with similar frequencies as the original breed
- The intended breed should have the same purpose (similar behaviour and working traits) as the original breed. Alternatively, a neutral, companion-like breed should be preferred, in which no extreme behavioural features exist.

The reasons for choosing the specific breed/breeds will be written in the application. Possible health and other risks involved in crosses with this/these intended breeds are being brought out.

Which individuals to choose?

- Individuals that answer the best to the question "What kind of dogs do we want?"
- Individuals old enough -> accurate health information of the individual and its' close relatives
- Both the sire and the dam of a crossbred litter should have earlier, evaluated offspring

- Healthy and in every way trouble-free individuals which meet the requirements set in the breed-specific breeding strategies.
- An evaluation of the predictability of the most important hereditary traits (behaviour and health) of the offspring should be presented.

Dogs used for the crossbreeding, including a few potential alternative dogs, are specified. Available information regarding health, behaviour, conformation, and working traits of the individuals is given in the application: official health, working, and show results, results from breeding inspections as well as information received from dog owners, the breed club, and other breed experts. As regards dog show results, attention is paid on assessments on the functionality of the conformation as well as assessments on behaviour. Subjects of which no information is available are also pointed out in the application.

How many crossbred litters are needed?

The number of crossbred litters needed depends on the situation of the breed and the goals of the crossbreeding. The needed quantity of litters may become clear only during the project. Some sort of calculation of the number of crossbred litters in relation to the size of the population should however be presented.

Use of crossbred individuals in breeding

Crossbred dogs in the first generation (F1) are registered with the Finnish Kennel Club's EJ Register (Finnish Kennel Club's studbook for dogs not to be used for breeding). Owners of these dogs can, together with the breed association, apply for permission to use these dogs for breeding in specific combinations. Before the permission is granted, the dog in question must meet specific requirements regarding health, behaviour, conformation, and working traits, set by the Finnish Kennel Club and the breed association.

The Finnish Kennel Club can also decide on EJ registration of the F2 and F3 generations. A decision regarding this is made after the first follow-up report. Supervising the use of crossbred individuals in breeding is essential, especially in large-scale crossbreeding projects, in which the gene flow from crossbred populations should be controlled in order to prevent the gene flow from growing too big in relation to the population.

A preliminary plan for the use of crossbred individuals in breeding is given in the application:

- What kind of dogs or lines will be bred with the crossbred individuals of the first and following generations?
- Will the crossbred individuals be used only in some part of the breed or is the plan to spread their gene variants evenly to the whole population?
- How many offspring should we aim to have from each crossbred litter in the future?
- How many dogs per litter should be used for breeding?

It should be noted that the F1-generation individuals may have such behavioural traits that both parent breeds lack. This does not have to be a barrier to use of these dogs in breeding, unless these traits are for example timidity and/or aggressiveness. During backcrossing behavioural traits start to stabilize in the parent breed.

Project plan

In larger crossbreeding projects (when the intention is to have more than one F1 litter), the breed club draws up a project plan for the crossbreeding programme. Breeders taking part in the project agree, by signing, to abide by the plan. The project is approved by the breed association and breed club together and is led by them.

Outline of the project plan:

- Goals of the project
- Requirements for transferring a dog from the EJ Register to the FI Register; in other words, which criteria are applied when modifying the breed?
- Behaviour:
 - o what kind of behaviour is desirable, what kind of behaviour is not – which criteria on behaviour is set for using crossbred individuals for breeding?
 - o of what relevance are results in working trials when choosing individuals? Does the breed have any tests that measure working traits or ability tests?
- Health:
 - o which health examinations are required of the individuals used for the project?
 - o what are the minimum grades required of a dog? In what or what kind of matters is it possible to make compromises?
- Commitment of breed enthusiasts towards goals and crossbreeding
 - o is there a consensus of goals for crossbreeding?
 - o is a sufficiently large part of all breeders involved in the project?

Appendices

- Statement from the country of origin
- Statement from the breed association
 - o If the breed association is involved in the project, a decision made by the breed association's general assembly is needed
- A project plan, if it is a question of a more extensive project
- For each litter, the breeder is required to submit an informal written commitment, stating that he or she has read the project plan and commits to abide by it.

Follow-up report

In the follow-up it will be evaluated whether the crossbreeding project actually achieved its goals, whether the number of crossbred litters is sufficient, and whether any undesirable traits were introduced from the other breed. Based on this evaluation, it will be decided how to proceed.

It is recommended that both the parents and the offspring of the crossbred litters are being monitored during their whole life. Future plans in the project depend on which traits should be strengthened and which reduced. At the same time, it should be controlled that no one line, not even the crossbred line, is increased too much in relation to the whole breed population.

It will be recorded whether there was something particular regarding the pregnancy or whelping. The puppies will be monitored before they move to their new homes. In addition to routine recordings, like body weight development, any divergent observations regarding the health and behaviour of the dam or the puppies will be recorded.

The owners of the puppies will be asked to record reasons of all the visits to a veterinarian, until the puppies are eight years old. They will also be asked to fill in the Finnish Kennel Club's health and behaviour surveys when the puppies are 3–4 years old.

Breed-specific routine health examinations will be performed to the puppies. It is recommended that the puppies will also attend to the Finnish Kennel Club's mental test or mental description.

The first follow-up report is sent to the Finnish Kennel Club once the crossbred litter has reached the age of two years. Information regarding the number of puppies born, puppy mortality rate, and manifested diseases are stated in the report.

The Finnish Kennel Club invites the puppies to a breeding inspection once they have reached the age of five years. At the same time, the breeder or the breed club reports on the health of the puppies.

Dates and causes of death will be recorded to the Finnish Kennel Club's Breeding Database.