

The Danish Animal Ethics Council:

Statement on the breeding of dogs and cats

The Danish Animal Ethics Council: Statement on the breeding of dogs and cats

© The Danish Animal Ethics Council 1999



The Danish Animal Ethics Council
Ministry of Environment and Food of Denmark
Slotsholmsgade 12
1216 Copenhagen K
detdyreetiskeraad@mfvn.dk
www.detdyreetiskeraad.dk

Contents

1. Background	1
2. Description of the situation	2
3. Legislation	8
4. Summary of ethical issues	8
5. Specific problems and possible solutions	9
6. Who is responsible?	12
7. Summary of the Council's recommendations	14
8. Annex - Council activities in relation to the statement	15

Statement on the breeding of dogs and cats

1. Background

The dog has been domesticated for more than 10,000 years. Through breeding, a vast number of dog breeds have been developed over the years, and these, in turn, have formed the basis of numerous mixed breeds. Cats have been living with humans for almost 5,000 years. Except for a few breeds, it is only within the past couple of centuries that humans have been breeding cats systematically, resulting in the development of pedigree cats as we know them today. Most cats today are still so-called "house cats", i.e. these do not belong to the group of pedigree cats. Pedigree cats do not vary as much in size and appearance as pedigree dogs, but new cat breeds are still being developed. At present, approx. 300,000 pedigree dogs and approx. 55,000 pedigree cats are registered in Denmark.

A breed can be defined as a subgroup of a species in which all individuals have specific features and traits that are passed on from one generation to the next. Breeding pedigree dogs and pedigree cats is governed by breeding objectives expressed in individual breed standards. The objectives have been defined by people with an interest in the relevant breeds, and the objectives in themselves rarely represent an ethical issue. The problem is that, as an unintended

consequence of targeted breeding, animals may be bred which are predisposed to diseases or other problems negatively affecting their quality of life. Until recently, our understanding of breeding and its consequences was very poor. However, current knowledge on inherited disorders has made it much easier to understand the potential consequences of breeding. This means that the people involved in breeding now have ethical responsibility.

Most dogs and cats bred in Denmark are healthy. For most breeders, breeding dogs and cats is a hobby rather than a business, and many breeders are conscientious and aware of their responsibility when selecting animals for breeding. Unfortunately, there are still serious problems in the breeding of dogs and cats. Several breeds have problems with inherited disorders, but for some breeds the problems are more numerous and more serious. This may be due to characteristics of the breed which in themselves exacerbate the risk of a certain disorder. It may also be due to an inherited disorder which has spread through the breed. An inherited disorder can be difficult to eliminate because the mode of inheritance is unknown, because the breeding base is too small, or because not everyone is working purposely and fully towards this end.

2. Description of the situation

Two types of problem can be observed in breeding:

1. Problems in relation to breeding objectives, the breed standard and over-interpretation of the breed standard: Disorders can be linked directly or indirectly to the breeding objectives. This phenomenon is also known as extreme breeding.
2. Inherited diseases: Carriers of inherited diseases are being used for breeding without this having any connection to the breeding objectives.

In the first case, the problem is that the objectives for breeding, directly or indirectly, cause problems for the animals. The other type of problem arises when animals used for breeding carry genetic defects or other factors which increase the risk of developing a specific disorder. The latter type of "invisible" problem is at least as important as extreme breeding.

Diseases can be inherited in different ways. For some disorders, only one of the parent animals need to carry the gene for the disorder (dominant gene) in order for the disorder to occur, while for others, both parents have to carry the gene (recessive gene). Another possibility is that several genes are responsible for the disorder occurring (polygenic inheritance), and the more of these genes the animal carries, the more serious the disease can become. Furthermore, the gene can be sex-linked, i.e. it is only on the X chromosome. In practice, this means

that the disease primarily occurs in male animals, because female animals have an additional "healthy" X-chromosome.

Comprehensive literature is available that describes inherited problems and disorders, as well as the mode of inheritance. Some problems are specific to just a few breeds or a single breed. Other breeds have no problems with breeding objectives or inherited disorders. The following are just a few examples of the problems observed in the breeding of dogs and cats:

Problems in relation to breeding objectives and extreme breeding:

Skin and fur:

- Deep skin folds: Inflammation of the skin may occur inside the folds. It may be necessary to remove the skin folds by surgery.
- Thick heavy fur: The weight and size of the fur hinders the movement of the animal. Furthermore, there is a higher risk of heatstroke in hot weather.
- Hairlessness: If an animal has no fur, its ability to maintain its body temperature will be impaired. Moreover, there is a risk of sunburn and frostbite.
- Merle coat: In dogs, this coat colour is sometime associated with vision or hearing defects.
- White coat: In both dogs and cats, in some genetic combinations, a white coat can be associated with deafness.



The combination of a wide head and a narrow pelvis may cause difficulties in giving birth. Deep skin folds are often associated with inflammation of the skin.

Head:

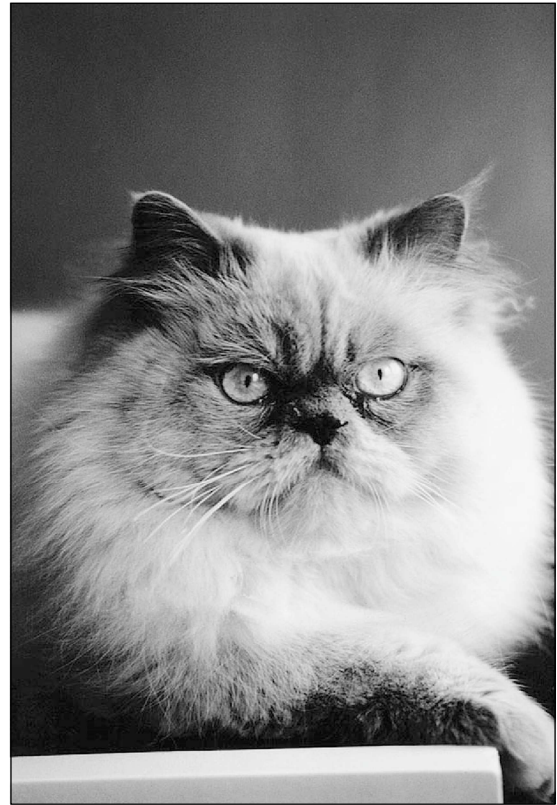
- Flat noses and short heads: These characteristics may be associated with difficulties in breathing. Nostril openings are often too small and the soft palate is too big (causing "snoring-like breathing"). Surgery on the nostrils or removal of part of the palate may be necessary to facilitate breathing. Poor passage through the tear duct causes eye irritation. Furthermore, malalignment of teeth also occurs.
- Inward-turning/outward-turning eyelids: These conditions are often accompanied by chronic eye inflammation that may necessitate surgery to remove part of the eyelid.
- Big eyes and wide heads: Often, the head is too big in relation to the pelvis. This may cause difficulties giving birth and eventually result in a caesarean section. Furthermore, there is an increased risk of severe eye damage, and the eyes may even "fall out" of the eye sockets.

- Heavy, hanging ears: The ears reduce ventilation in the ear canal, and this may give rise to inflammation of the ear canal. Surgical removal of part of the ear canal may be necessary.

A flat nose with small nostrils can make breathing difficult.

Body:

- Disproportionate dwarfism: This gives e.g. a combination of short legs and a long back. The risk of back problems and herniated disk increases.
- Straight leg angles: The straight angles increase the risk of joint injuries. Surgery may be necessary.
- Lack of tail in cats: Often associated with abnormalities of the back or the organs, and the cat has no tail for communication and balance.



Inflammation of the ear canal in a dog with heavy, hanging ears.



Photo: Flemming Kristensen



Outward-turning eyelids are often associated with eye inflammation. Disproportionate dwarfism can cause back problems.

Inherited diseases:

Eye diseases:

- PRA (progressive retinal atrophy): Inherited eye disease causing the cells of the retina to gradually break down, leading to decreased vision and eventually blindness. The disease is inherited recessively.
- Cataracts: Clouding of the normally clear eye lens. This impairs vision, and the animal may become blind. However, cataracts can also develop independently of inherited conditions. Different modes of

inheritance have been described for different breeds.

Skeleton:

- Hip dysplasia (HD): Developmental defect of the hip joint in which the hip socket and the femoral head do not fit together. This leads to abnormal attrition of the hip joint, and depending on the degree of development, the animal will experience pain and start limping. The disorder depends on environmental factors, but increased risk of developing HD is hereditary. The mode of inheritance is polygenic.

- Arthrosis of the elbow joint: Chronic changes in and around the elbow joint, often secondary to other disorders of the elbow joint. Often accompanied by lameness. The primary disorders can be difficult to diagnose, and the arthrosis changes can be used to indicate the "health status" of the joint. Offspring of parent animals with arthrosis suffer from arthrosis more often and to a more severe degree than offspring of parents without arthrosis.

Hormonal disorders:

- Increased production of adrenocortical hormone (Cushing's syndrome): This disorder may cause animals to drink more and urinate more frequently, and it may lead to loss of hair and reduced activity. The disorder may have other causes than hereditary, but it does have a higher incidence in some breeds.
- Reduced production of thyroxine, the hormone in the thyroid gland (hypothyroidism): This disorder may cause e.g. reduced activity and loss of hair. Certain dog breeds have an inherited disposition for the disorder.

Immune system:

- An inherited immunodeficiency can cause problems with follicle mites: Dogs usually have a small number of follicle mites. The mites are transferred to puppies during the first days after birth. In puppies with this immunodeficiency, the mites can propagate. This can lead to hairlessness and possibly secondary inflammation of the skin, as well as a risk of additional immune system

failure. The precise mode of inheritance has not been described.

Skin:

- Allergic inflammation of the skin: Allergic reactions to e.g. pollen and house dust may occur with varying



Photo: Flemming Kristensen

Follicle mites on a dog with immunodeficiency.

degrees of itching and inflammation of the skin. The mode of inheritance is assumed to be polygenic. Development of allergies also depends on environmental factors.

Organs:

- Kidney cysts: In cats, the kidneys may be enlarged and have cysts. The disorder may result in kidney failure. Inheritance is dominant.

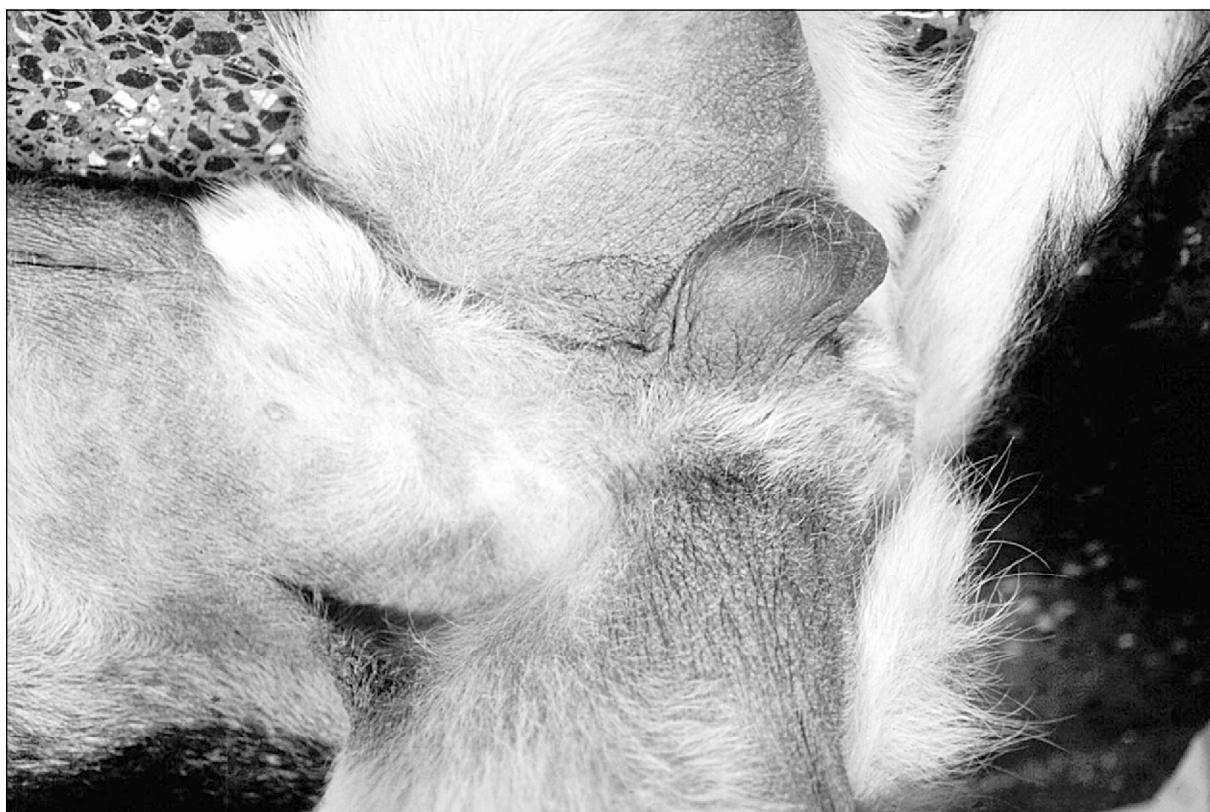


Photo: Flemming Kristensen

Allergic inflammation of the skin can be inherited.

- Heart muscle diseases (idiopathic dilated cardiomyopathy): Diseases of the heart muscle are seen more frequently in certain larger dog breeds. The symptoms can often be controlled for a period, but the disorder will result in the animal dying suddenly or developing severe heart failure. The mode of inheritance is unresolved.

Behaviour:

- Nervousness and aggression: A tendency to nervous and/or aggressive behaviour may to some extent be inherited. Such behaviour may cause problems, e.g. that the animal cannot be left at home alone or that it bites, and eventually, it may be necessary to put the animal down.

An animal can carry inherited diseases without ever becoming ill itself. Furthermore, not all diseases can be checked for, and disorders may show up after the animal has been used for breeding for several years. Identifying animals carrying inherited diseases can therefore be difficult. Continued breeding with these animals may thus be due to ignorance, either because of a lack of information, a lack of possibilities to identify animals or a lack of knowledge regarding the mode of inheritance or the presence of the disease.

However, before an animal is selected for breeding, it can be checked for certain diseases. Furthermore, presence of a disease can be checked by examining relatives of the breeding animal. For some breeds with certain known problems, requirements may be imposed for X-ray photography or tests, e.g. of eyes or kidneys, before

registering offspring in the breed register. However, not all clubs have such requirements.

3. Legislation

Denmark has acceded to the European Convention for the Protection of Pet Animals of 13 November 1987. Chapter 2, Article 5 on breeding states that:

“Any person who selects a pet animal for breeding shall be responsible for having regard to the anatomical, physiological and behavioural characteristics which are likely to put at risk the health and welfare of either the offspring or the female parent.”

Furthermore, The Council of Europe resolution (1995) on breeding of pet animals gives e.g. the following recommendations on the breeding of dogs and cats:

- improvement of breeding standards in consideration of animal welfare
- training of judges and breeders to prevent over-interpretation of the standards
- increasing the general knowledge concerning problems related to physical or behavioural characteristics

4. Summary of ethical issues

Breeding for specific features which lead to diseases or other welfare issues in the animal will lead to the promotion of these features in the breed. This

increases the risk of more animals becoming affected. Inappropriate breeding may increase not only the occurrence, but also the degree of development of a disorder. People who breed using an animal with an inherited defect are therefore not only responsible for more animals getting problems but also for exacerbating the problems. The problems moreover entail an emotional burden for the owners of the animals, and often also a significant financial burden from having to pay for veterinary treatment of the animal’s disorder.

However, defining when a defect is sufficiently serious to exclude the animal from breeding is not simple. People have different limits regarding when an animal has reduced quality of life. For example, is it compatible with a good life for dogs and cats if a significant proportion of litters by a specific breed are born by caesarean section? Or what if the offspring must undergo certain operations? Opinions vary. For some people, what matters most is that potential problems can be relieved and that they are relieved as quickly as possible so as not to compromise the wellbeing of the animal. For others, however, it is unacceptable to breed from animals in the first place if the offspring is known to be more likely to develop certain disorders.

The Danish Animal Ethics Council considers it ethically unacceptable to carry out breeding likely to give rise to a disease causing suffering, significantly reduced functional capacity or other problems with a negative impact on the animals’ quality of life.

5. Specific problems and possible solutions

Some breeds are associated with serious issues of extreme breeding or other inherited disorders. No matter how targeted the effort is to eliminate these disorders, overcoming the problems will take many generations. However, a targeted effort obviously increases the likelihood of quicker results. The problems are not likely to be resolved by means of legislation.

The leading associations of breed clubs are already launching many good initiatives to solve the problems, and internationally, certain breed standards have been changed. The Council is also under the impression that pedigree cats in Denmark have significantly fewer problems than pedigree dogs, partly because, for most pedigree cats, the characteristics of the breeds do not cause any problems, and partly because, through a targeted effort, cat breeders have managed to reduce or eliminate a number of inherited diseases. In the following, the Council will take a closer look at the different aspects of breeding work, the parties responsible and the potential problems and solutions. Some breeders, clubs etc. already follow several of these recommendations. However, there are still much that can and should be done.

The breed standard:

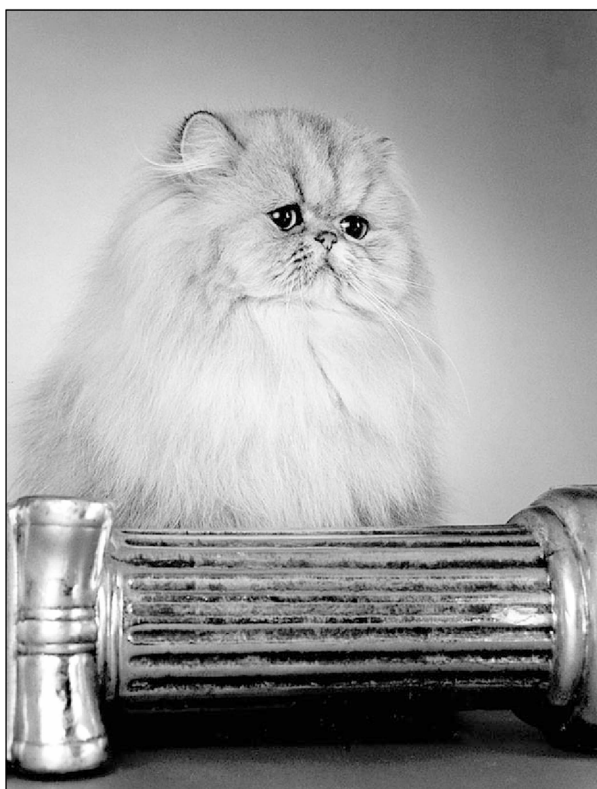
Breeding in breed clubs for pedigree dogs and pedigree cats follows international standards developed by people with an interest in the relevant breed. The breed standard, or the way in

which it is interpreted, may lead directly or indirectly to problems. The standards do not set detailed measures for a desired appearance, e.g. for the eyes and the bridge of the nose. For example, how big are "big eyes", how short is a "short bridge of the nose", and compared with what? Such detailed measures cannot be defined, and consequently, it is up to the judges to interpret these standards. The Council is aware that these standards are developed by international bodies, and consequently cannot be changed locally. However, the Council of Europe resolution (1995) on breeding of pet animals (whose declaration of intent the Fédération Cynologique Internationale and Fédération Internationale Féline agree with) recommends the following changes to the standards:

- state maximum and minimum values for height/weight, as well as maximum values for proportions between length and height.
- state limits for shortness of skull and nose.
- avoid abnormal position of the legs, crooked legs, abnormal sets of teeth, abnormal size and shape of eyes and eyelids, very long ears and heavily folded skin.
- if the related problems cannot be avoided, it is recommended to stop the breeding of hairless animals, Manx cats, cats with "dominant white" coat colour, dogs with "merle factor".

Danish organisations have a duty to collaborate with international partners to agree on an international interpretation of the rules and to raise the standards. New guidelines can be established at local level on how to

interpret the breed standard to minimise extreme breeding which leads to health or welfare issues. It is important to consider the whole animal and its health when interpreting standards. For cats, standards include overall provisions regarding health. At shows, the health aspect is followed up on by a veterinarian, who examines the cats before the judge and awards points based on the health status of the cats.



It is possible to change how a breed standard is interpreted and thus minimise extreme breeding. For example, it is now more common to see a longer bridge of the nose than previously, as in this cat, than was previously common for this breed.

For dogs, however, standards do not include any special provisions regarding health. A requirement *not* to award points to animals with health issues could be introduced in breed standards for dogs as they have been in the breed standards for cats.

Breeding authorisation:

Individual clubs have the option of only allowing offspring to be included in the breed register if their parent animals have been awarded points. In general, it should be obvious to breeders that animals with inherited disorders should *not* be used for breeding. For breeds with extensive health issues, specific requirements may be stipulated, e.g. that a breeding animal's hips are to be assessed via x-rays to rule out hip dysplasia. Where it is possible to identify carriers of an inherited disorder, such tests should therefore be required if there is any suspicion of an inherited disorder in the breed. However, not all clubs have such requirements. Where requirements about specific examinations are introduced, their effect will clearly depend on how they are applied in breeding work. For example, the prevalence of hip dysplasia in a breed will not be reduced if animals used for breeding have a slight tendency of hip dysplasia. The requirements for breeding authorisation from such a test should therefore be sufficiently strict to ensure that the test has an effect in practice regarding the breeding out of the disorder.

In addition, requirements can be made to the animal's functional capacity, i.e. the animal must be able to breathe normally, to give birth naturally

or to move about without difficulties. To ensure uniform assessment of animals, a "health index" can be introduced. This can then be accompanied by a practice of only allowing breeders to breed from animals that score above a certain level or above the average for the breed. Finally, requirements can be made regarding temperament and traits. Here, the clubs have a huge responsibility, of which they should be reminded.

Breeders can have puppies or kittens neutered if the animals are assessed to be unfit for breeding. Similarly, if an inherited disorder is detected, this can be included in the animal's records in the breed register, thereby barring the animal from breeding. Clubs can also require that any surgical correction and diagnosis of inherited disorders be included in the animal's records in the breed register (or some other document that follows the animal). Such a requirement should be followed up by the veterinary practitioners to ensure a uniform approach to such registrations.

The points system:

For most breeders, breeding dogs and cats is primarily a hobby and not a profession. Central to this hobby are the shows, at which breeders meet and compete. How the animals rank at these shows is very important for their value as a breeding animal. The question is whether the parental animals' ranking at shows based on an assessment of their physical structure and appearance is the best foundation for breeding work. Today, animals are judged based on their appearance and show ability on the day of the exhibition. The awarding of

points at a show is relevant in the context of a competition, just as in all other types of sport, but it is not a solid foundation for selecting breeding animals. The animal may have hidden flaws, and even though the animal may be a healthy and beautiful breeding animal with a good temperament, it may also be a carrier of genes that will give rise to problems in offspring.

Assessment of breeding potential:

Many breeders only focus on the qualities of a breeding animal. However, when assessing an animal's inherited traits, it is equally important to assess the quality of parental animals, siblings and any offspring. By exclusively focusing on the breeding animal, there is a risk of passing on "bad" genes to the next generation; this is because even though the animal appears to be healthy, it may in fact be a carrier of inherited disorders that will be expressed with a certain frequency in its offspring.

In comparison, cattle breeding, where there are greater financial interests, uses a much more rational approach. In addition to assessing the quality of the animal itself and both the parent animals, the offspring of the bull are carefully assessed. Before a bull can be used for breeding purposes, test breeding is conducted, and the quality of the offspring from the test breeding determine whether the bull can be used. Obviously, the number of offspring in the breeding of production animals is greater than in the breeding of cats and dogs. However, the principles behind the practice of testing the animal's genetic potential and not just the animal itself

can be transferred to smaller-scale breeding of cats and dogs.

To ensure that only the most healthy animals are used for breeding, the animal's ranking could thus be supplemented with registration and checking of all offspring, as well as an assessment of the breeding animal's genetic background, i.e. parents and littermates. The quality of these, e.g. regarding health, can then be used to assess whether the animal is suited for breeding. As an example of this strategy, the Danish Kennel Club has introduced a breeding index for hip dysplasia, which also includes offspring and other family members. All breeds with more than 50 annual hip dysplasia photos can be included in the index.

6. Who is responsible?

Judges:

The most important element in selecting breeding animals is how they are assessed by show judges. Judges can refrain from awarding points to overtyped animals and animals with other visible issues, and at the same time explain why the animal was given a lower ranking than anticipated. Therefore, judges should participate in courses or receive information on the most recent trends within extreme breeding and inherited disorders for the breeds they judge. They should also develop the ability to spot signs of disease in show animals. Judges can request to see the animal moving around to assess it for shortness of breath on exertion and to assess whether its

movements are healthy. A veterinarian can also examine a dog before its physical structure and appearance is assessed, and the results of this examination can be included in the final assessment, as is already common practice at cat shows. Alternatively, a veterinarian can be asked to examine animals that have been awarded so many points that they are likely to be used as breeding animals. Finally, judges have a huge responsibility in helping to shape breeders' attitudes and e.g. contact kennel clubs if they detect anything that gives rise to suspect problems.

Breeders:

Except for the requirements for becoming an authorised breeder, breeders are free to decide how they want to breed their animals. Because they may be strongly influenced by prevailing standards, it is crucial that they have the best knowledge basis about how breeding work affects the health of animals. Education and information should therefore be made available to breeders, e.g. through courses offered by kennel clubs. Breeders who participate in such courses could be awarded a special status. It should be obvious to breeders that they should only breed from animals that have no inherited health issues (e.g. respiratory, mobility or birthing) and that have undergone a thorough examination revealing no signs of inherited diseases. When breeding utility dogs, breeders are often also aware of the dog's functional qualities e.g. as a hunting dog. Certain breeders of hunting dogs even select

dogs for breeding based on their functional traits and a well-functioning structure and appearance. As a result, their breeding animals look different from conventional representatives of their breed and will not score well when compared to the breed standard. On the other hand, such dogs will have traits that make them better able to perform the functions desired by the dog owner.

Regardless of what other functions a dog or a cat serves for its owner, e.g. as utility or show animal, almost all cats and dogs live closely together with people and possibly also with other animals of the same or a different species. It is therefore extremely important that the animal is of good mental health, is well-functioning and is not nervous or aggressive. Regardless of whether a breed is intended for a certain function, e.g. hunting or shows, breeders should therefore not only focus on the animal's physical structure and appearance or functional traits. The animal's temperament should also be given important weight when selecting a breeding animal, because most offspring will become family pets.

The breeder is responsible for informing the buyer of a kitten or puppy about the traits of the breed and about any problems related to inherited disorders or extreme breeding. In addition to general information about how much space a pet requires, potential buyers should also be informed about how active the breed is and what kind of temperament it has. Such information should be in writing, e.g. in the form of a pamphlet prepared by the kennel club.

Kennel clubs:

Kennel clubs have the most and best knowledge about the breed in question. It is important that kennel clubs seek out information about the problems the breed is known to have, and actively communicate this information to breeders. Similarly, kennel clubs should offer courses for breeders about breeding and the problems related to breeding. Finally, kennel clubs should monitor the status of "their" breed and intervene, e.g. with breeding restrictions, in the event of any problems.

Buyers of puppies and kittens

Most offspring from breeding animals become pets. The choice of breed is often based on the animal's physical appearance because the animal's registration in the breed register is often taken as a guarantee that the animal is healthy. And all breeders of pedigree cats and many breeders of pedigree dogs *do* make sure their kittens/puppies are given a health check by a veterinarian before they are offered to potential buyers. However, the veterinarian can only assess the animal's general health condition and not necessarily whether the animal has any inherited disorders. Even though breeders are morally obligated to inform owners about any problems the animals they sell may have, individuals looking to buy a kitten or a puppy should also seek as much information as possible about any problems and the temperament of the breed they are

thinking about getting, so as to ensure as far as possible that their new pet meets their expectations. This will also prepare them better for placing demands on breeders and kennel clubs.

Veterinarians:

Veterinary practitioners have an important role. They are often in close contact with breeders in matters concerning diseases, and they can and should report to kennel clubs if they see an increase in the incidence of diseases within a specific breed. As opposed to show judges, who only see potential breeding animals, veterinarians see the entire spectrum of offspring, i.e. both breeding animals and animals that never will be used for show or breeding purposes. When training to become a small animal practitioner, focus is primarily on the treatment of individual animals. That is, there is no tradition for small animal veterinarians to advise on breeding matters. This area should be given higher priority, e.g. by offering further and continuing training to practitioners so they are better prepared to advise breeders. Veterinarians involved in research about inherited disorders in dogs and cats can also prove to be very useful in this regard. Research in this area should be prioritised to generate more knowledge about the mode of inheritance and so that problem animals can be identified more easily.

One initiative for documenting the scope of hereditary problems is to register defects. For a period of two years, together with the Danish Kennel

Club and the Danish Veterinary Association, vets have registered diagnoses and dog breeds at 40 veterinary practices. Unfortunately, this study was too small to draw solid conclusions. Nonetheless, in collaboration with the other Nordic countries, the Danish Veterinary Association will continue to register such data, and since it is essential to know the scope of the problems in order to solve them, the veterinarian should actively take part in these registration efforts.

7. Summary of the Council's recommendations

Recent trends in cat and dog breeds indicate a preference for increasingly pronounced breed characteristics. This preference has led to problems in some breeds, because, when taken to extremes, their specific characteristics can result in impediments or suffering in the animals. In addition, such targeted breeding with specially selected animals has resulted in the spread of certain specific inherited disorders in some breeds. The Danish Animal Ethics Council considers it ethically unacceptable to carry out breeding likely to give rise to a pain-causing disease, significantly reduced functional capacity or other problems with a negative impact on the animals' quality of life.

The Council acknowledges that the leading kennel clubs have already taken important steps to reverse this trend. However, a lot remains to be done. To

promote a positive development in the area, the Council recommends that:

- When interpreting breed standards, show judges should focus on the animal's health. For example, judges can ask to see the animal move and should also strive to ensure that animals with inherited health or welfare problems are not awarded a high point score.
- Kennel clubs should require breed animals to be tested for diseases, if the breed is known to suffer from a specific disorder, and if such tests are possible. An animal can be the carrier of an inherited disorder, even if it does not show signs of the disorder itself.
- Breeding animals should not be selected solely on their point score from shows. The quality of their parents, siblings and possibly also previous offspring should also be assessed to obtain a more informed picture of the animal's breeding potential. Moreover, the animal's temperament should be given high priority.
- Breeders should have the best possible knowledge about breeding and the consequences hereof. This information can be obtained from kennel clubs, through courses in genetics and inherited disorders, etc. Breeders should also educate future buyers of kittens and puppies about the breed, including its temperament and any problems regarding extreme breeding or inherited disorders.

- Judges, breeders and vets should keep abreast of any problems in the different breeds and intervene as soon as possible if a breed is showing signs of extreme breeding or inherited disorders.
- Before acquiring a puppy or kitten, potential buyers should seek out as much information as possible about any problems in the breed they are considering, as well as about its temperament, to ensure that their future pet meets their expectations.

8. Annex: Council activities in relation to the statement

The Council addressed the breeding of dogs and cats at five meetings in the period from August 1998 to March 1999. The following individuals presented their experiences and perspectives at meetings held with the Danish Animal Ethics Council: Mogens Aalund, veterinary practitioner; Helle Friis Proschowsky, PhD student; Ole Staunskjær, head of DKK's exhibition committee and committee of judges; Flemming Kristensen, senior associate professor at the Royal Veterinary and Agricultural University; and Aase Nissen, chair of Felis Danica and DARAK.

Photos have kindly been lent by Ole Staunskjær, Aase Nissen, Flemming Kristensen and Marianne Wiberg. Flemming Kristensen's photos have been reproduced with authorisation from the authors of the book "Atlas of Skin Diseases in Dogs and Cats", second

edition, Flemming Kristensen and Leena Saijmaa-Koulumies.

Stine B. Christiansen, veterinarian, served as technical secretary.